

PD-AAP-159

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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

PANAMA

PROJECT PAPER

AGRICULTURAL COOPERATIVE MARKETING

AID/LAC/P-171

Loan Number: 525-T-055
Project Number: 525-0222

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT DATA SHEET		1. TRANSACTION CODE <input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete	Amendment Number _____	DOCUMENT CODE 3
2. COUNTRY/ENTITY PANAMA		3. PROJECT NUMBER <input type="text" value="525-0222"/>		
4. BUREAU/OFFICE Latin America/Caribbean <input type="text" value="05"/>		5. PROJECT TITLE (maximum 40 characters) <input type="text" value="Agricultural Cooperative Marketing"/>		
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <input type="text" value="06"/> <input type="text" value="30"/> <input type="text" value="89"/>		7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4) A. Initial FY <input type="text" value="84"/> B. Quarter <input type="text" value="3"/> C. Final FY <input type="text" value="86"/>		

8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY <input type="text" value="84"/>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	2,400	1,700	4,100			8,200
(Grant)	(600)	(-0-)	(600)	(2,300)	(-0-)	(2,300)
(Loan)	(1,800)	(1,700)	(3,500)	(2,500)	(3,400)	(5,900)
Other U.S.						
Host Country	-0-	150	150	-0-	3,350	3,350
Other Countries Coops	-0-	150	150	-0-	1,140	1,140
TOTALS	2,400	2,000	4,400	4,800	7,890	12,690

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) EN	130	140	140					2,300	5,900
(2)									
(3)									
(4)									
TOTALS								2,300	5,900

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)	11. SECONDARY PURPOSE CODE
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)	
A. Code	Coop
B. Amount	

13. PROJECT PURPOSE (maximum 480 characters).

To strengthen Panama's agricultural cooperative system to better serve an expanded membership with a wider range of services, especially product marketing.

14. SCHEDULED EVALUATIONS	15. SOURCE/ORIGIN OF GOODS AND SERVICES
Interim MM YY MM YY Final MM YY	<input checked="" type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify) _____
Interim <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="8"/> <input type="text" value="6"/> Final <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="8"/> <input type="text" value="6"/>	

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY	Signature <i>Robin L. Gomez</i>	Date Signed MM DD YY <input type="text" value="0"/> <input type="text" value="1"/> <input type="text" value="8"/> <input type="text" value="4"/>	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY
	Title Robin Gomez Director USAID/Panama		

1
UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523

PROJECT AUTHORIZATION

Name of Country:	Panama
Name of Project:	Agricultural Cooperative Marketing
Number of Project:	525-0222
Loan Number:	525-T-055

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Agricultural Cooperative Marketing project for Panama involving planned obligations of not to exceed Five Million Nine Hundred Thousand United States Dollars (\$5,900,000) in loan funds ("Loan") and Two Million Three Hundred Thousand United States Dollars (\$2,300,000) in grant funds ("Grant") over a five (5) year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project.

2. The project ("Project") consists of assistance to strengthen Panama's agricultural cooperative system through: (i) support to the Institute of Panamanian Cooperatives (IPACOP), the Federation of Agricultural Cooperatives (COAGRO) and the Agricultural Development Bank (BDA) to increase cooperative membership and improve marketing services provided to cooperative members, and (ii) the establishment of a Marketing Credit and Infrastructure Fund to provide marketing credit to cooperatives to finance marketing infrastructure and equipment and working capital for marketing activities.

3. The Project Agreement, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority, shall be 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. Interest Rate and Terms of Repayment

The Cooperating Country shall repay the Loan to A.I.D. in U.S. Dollars within twenty (20) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to A.I.D. in U.S. Dollars interest from the date of first

disbursement of the Loan at the rate of (i) two percent (2%) per annum during the first ten (10) years, and (ii) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

b. Source and Origin of Commodities, Nationality of Services (Loan)

Commodities financed by A.I.D. under the Loan shall have their source and origin in Panama or in countries included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services financed by A.I.D. under the Loan shall have Panama or countries included in A.I.D. Geographic Code 941 as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Loan shall be financed only on flag vessels of Panama or countries included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing.

c. Source and Origin of Commodities, Nationality of Services (Grant)

Commodities financed by A.I.D. under the Grant shall have their source and origin in Panama or in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services financed by A.I.D. under the Grant shall have Panama or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Grant shall be financed only on flag vessels of the United States, except as A.I.D. may otherwise agree in writing.

d. Conditions Precedent to Execution of Project Agreement

Prior to the date of execution of the Project Agreement, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish, in form and substance satisfactory to A.I.D., evidence that:

(a) it will guarantee COAGRO's external financing during the period of the project.

(b) it has replenished the Cooperative Development Revolving Fund in the BDA for long-standing delinquent subloans under the Rural Cooperative Development Project (525-T-041).

(c) long standing delinquent subloans under the Rural Cooperative Development Project (525-T-041) have been declared bad debts by the BDA.

e. Condition Precedent to First Disbursement

Prior to any disbursement, or the issuance of any commitment document under the Project Agreement to finance any Project activity except for the contracting of technical assistance to assist IPACOOOP in development of materials to meet conditions precedent, for short term technical assistance to assist in pre-implementation organization, or as A.I.D. may otherwise agree in writing, the Cooperating Country shall furnish, in form and substance satisfactory to A.I.D., evidence that it has repaid COAGRO the entire outstanding balance of \$1.0 million in delinquent debts.

f. Condition Precedent to Disbursement for Lending Under the Marketing Credit and Infrastructure Fund

Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance lending activities under the Marketing Credit and Infrastructure Fund, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish in form and substance satisfactory to A.I.D., evidence that COAGRO is taking measures to restructure its organization in order to improve its financial management and general operations, to include revising its cost accounting system to establish cost/profit centers.

g. Covenants

The Cooperating Country shall covenant that, unless A.I.D. otherwise agrees in writing:

(i) it will cause COAGRO to provide an adequate reserve for bad debts reflected in its 1985 financial statements and thereafter.

Marshall D. Brown
Marshall D. Brown
Acting Assistant Administrator
Bureau for Latin America
and the Caribbean

Marshall D. Brown 3/5/84
Date

Clearances:

LAC/DR:DBJohnson [Signature] date _____
LAC/DR:ILevy [Signature] date _____
GC/LAC:RBMeighan [Signature] date 2/22/84
LAC/DR:SSmith [Signature] date 3/2/84
LAC/CEN:JRiley [Signature] date _____
LAC/DR:AVelasquez [Signature] date 2/27/84

AGRICULTURE COOPERATIVE MARKETING PROJECT PAPER

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ANNEX I. STANDARD ATTACHMENTS

- Exhibit A. Director's 611(e)
Certification
- Exhibit B. Statutory Checklist
- Exhibit C. Draft Project Authorization
- Exhibit D. Borrower Loan Request
- Exhibit E. PID Guidance Cable

ANNEX II. TECHNICAL EXHIBITS

- Exhibit A. Logical Framework
- Exhibit B. Financial Plan
- Exhibit C. Time Phased Implementation Plan
- Exhibit D. Technical Assistance Schedule
- Exhibit E. Scopes of Work for Long Term
Technical Assistance
- Exhibit F. Economic Analysis
- Exhibit G. Marketing Analyses of Commodities
- Exhibit H. Detailed Financial Analysis
of COAGRO
- Exhibit I. Social Soundness Analysis
- Exhibit J. Environmental Analysis

ACRONYMS

- AGR - Office of Agriculture, USAID/Panama
- AID - United States Agency for International Development
- ACDI - Agricultural Cooperative Development, International
- Asentamientos - Government of Panama sponsored and supported farming communities
- CDSS - Country Development Strategy Statement
- COAGRO - Federation of Agricultural Cooperatives
- COFINA - National Finance Corporation
- COLAC - Latin American Federation of Credit Unions
- CLUSA - Cooperative League of the U.S.A.
- DENACOOP - National Department of Cooperatives
- FECOLAC - Training Branch for the Latin American Federation of Credit Unions
- FECOPAN - National Federation of Consumer Cooperatives
- FEDPA - National Federation of Credit Cooperatives
- GOP - Government of Panama
- IAF - Interamerican Foundation
- IDB - Interamerican Development Bank
- IDIAP - Institute for Applied Agricultural Research
- IMA - Agricultural Marketing Institute
- INCAE - Central American Institute of Business Administration
- IPACOOOP - Autonomous Institute of Panamanian Cooperatives
- MIDA - Ministry of Agricultural Development
- MIPPE - Ministry of Planning and Economic Policy
- PACD - Project Activity Completion Date
- PRODECOOP - Special Projects Office (for Cooperatives) in MIDA
- TECHNOSERVE - U.S. - based Private Voluntary Organization (PVO)
- VDC - Volunteer Development Corps

I. SUMMARY AND RECOMMENDATIONS

A. Recommendations

USAID/Panama recommends authorization of a \$5.9 million loan and \$2.3 million grant to the Government of Panama (GOP) to help strengthen and expand the country's agricultural cooperative movement. The loan will be incrementally funded as follows: FY 1984 \$3.5 million; FY 1985 \$1.0 million; and FY 1986 \$1.4 million. The grant will also be incrementally funded as follows: FY 1984 \$.6 million; FY 1985 \$.8 million; and FY 1986 \$.9 million. Loan terms include a ten year grace period, ten year repayment schedule, and an interest rate of 2 percent during the grace period and 3 percent thereafter on the outstanding disbursed balance. The loan and grant are to be fully disbursed within 60 months from the date of fulfillment of the conditions precedent to the first disbursement.

B. Borrower and Executing Agencies

The Borrower will be the Government of Panama (GOP). The Autonomous Institute of Panamanian Cooperatives (IPACOOOP), the Federation of Agricultural Cooperatives (COAGRO), and the Agricultural Development Bank (BDA) will be the major implementing agencies with primary responsibility for project coordination assigned to a Project Manager under the supervision and direction of the Director of IPACOOOP.

C. Summary Project Description

Panama's agricultural cooperative movement today represents one of the most organized and effective channel for participation of small and medium farmers in the country's market economy. At present, the movement consists of approximately 30 primary cooperatives, 8-10 pre-cooperatives (^{1/}) and approximately 8,000 affiliated farm members supported by a national level Federation of Agricultural Cooperatives (COAGRO). Two other national institutions directly associated with the agricultural cooperative movement are the Autonomous Institute of Panamanian Cooperatives (IPACOOOP) and the Agricultural Development Bank (BDA). To date, cooperatives have primarily assisted their members through the supply of production inputs including credit, fertilizer, seed and farm implements. However, relatively few cooperatives have thus far become successfully involved in marketing their members' production for the following reasons: (1) lack of timely and accurate marketing information; (2) inadequate facilities for collection, packaging, storage and transport of farm production; (3) limited managerial, technical and financial expertise with which to design and implement sound marketing activities; and (4) inadequate credit to finance these marketing activities. These key constraints must be overcome if Panama's agricultural cooperative sector is to expand and develop the entrepreneurial expertise which will

^{1/} Pre-cooperatives are distinguished from cooperatives in that they have not yet been legally chartered.

permit both a greater return of the market price to member producers, and increase the margin of profit to cooperatives from the sale of production inputs.

The purpose of this project is to strengthen Panama's agricultural cooperative movement to better serve an expanded membership with a wider range of services, especially in the area of product marketing. This purpose will be accomplished largely through the coordinated efforts of IPACOOOP, BDA, COAGRO and its member cooperatives supported by AID funded financial and technical assistance. The project will further develop their respective capacities to identify and carry out marketing services for producer members, to help secure financing from a Marketing Credit and Infrastructure Fund to be established in the BDA to provide marketing credit to producers through cooperatives, and to obtain appropriate facilities and equipment related to those marketing activities. Over the five year life of the project the managerial and financial management capabilities of COAGRO will be upgraded to effectively service an expanded cooperative marketing system.

Strengthening the cooperative marketing system directly supports the broader GOP effort underway in Panama which is to pay closer attention and allocate more resources to the private sector. Following the 1968 revolution and until very recently the GOP relied heavily on the asentamientos (collective farms) to meet the basic food and fiber requirements of the country. In fact, the Ministry of Agricultural Development's (MIDA) efforts over the past 13 years have, to a large extent, been focussed on the asentamientos. Overall production by these units, however, has fallen considerably short of GOP expectations and increased food imports have been required to offset local production shortfalls in order to meet Panama's growing consumer demand. There are strong indications, not the least of which is its support for this project, that the GOP is prepared to reorient its thinking and devote a greater portion of its scarce financial resources to the private sector in order to increase local food production.

Cooperatives were selected over other institutions or approaches (1) because they were determined to be a reasonably effective channel for reaching farmers in relatively large numbers; (2) because of the likely impact on the important marketing constraint now hindering both the cooperatives and Panama's agriculture sector overall; and (3) because of the potential offered to further strengthen the private cooperative movement.

By the end of the project, it is expected that the number of producer members involved in marketing activities in agricultural cooperatives will have doubled, and that sound financial policies will be in effect at all levels of the participating agricultural cooperative system, including a tightening of financial procedures, an increase in member equity, and establishment of adequate depreciation and a bad debt reserves account. Further, a number of primary cooperatives will have consolidated their efforts as they extend assistance and services to smaller ones, and/or pooling arrangements are developed among cooperatives marketing similar agricultural products.

D. Summary Project Strategy

This project represents follow-on USAID assistance to the earlier Rural Cooperative Development loan completed in 1980. Based on the success of the previous project, especially in increasing cooperative membership and productivity of affiliated cooperative farmers through the provision of production credit and inputs, this project will address an equally important set of constraints to establishing an effective marketing system to accommodate expanded and diversified cooperative output.

Panama's agricultural cooperative sub-sector is currently characterized by several relatively large, efficient and financially sound organizations, and many more smaller, less efficient ones. This project will capitalize on the strengths of the larger, more successful enterprises to facilitate a consolidation of assistance and services on a regional basis and/or along commodity lines. For example, a strong primary cooperative may operate through a series of outlets in a region, with all members directly affiliated to the one cooperative. In other areas a strong primary cooperative may take on a hybrid role of a secondary level cooperative, extending multiple services not only to its direct membership, but also to existing smaller cooperatives in surrounding areas.

An additional variation will exist in certain marketing activities as pooling arrangements are developed which may integrate marketing of specific products of several cooperatives from different regions under the overall management of one key cooperative. The potential for developing this type of pooling arrangement can already be observed in the initiatives of a successful regional vegetable marketing cooperative in the western province of Chiriqui. This large cooperative is consolidating marketing activities with other cooperatives along the main transportation route extending from Chiriqui to the central market in Panama City. During implementation it is planned that some of the larger cooperatives will help to upgrade personnel in smaller neighboring cooperatives and to have these smaller operations become integrated into a larger network of services over a period of time.

Under this project, IPACCOOP, will have the role of upgrading administrative and financial management capabilities of participating primary cooperatives. IPACCOOP's participation in the project will ensure that it's traditional role in cooperative promotion and assistance to new cooperatives is consistent with a consolidation strategy directed toward the primary cooperatives, and does not contribute to further proliferation of small, non-viable cooperatives.

In order to further upgrade existing operations and facilitate plans for expansion along economically viable lines, however, the majority of these cooperatives will require additional management and marketing assistance beyond the existing capabilities of their national federation, COAGRO, the BDA, IPACCOOP and other government agencies. This project provides that assistance through its institution building and credit components. The project promotes a reorientation of cooperatives as private enterprises whose

long run viability and effectiveness are dependent upon sound financial policies and profitable operations. This commercial reorientation will replace GOP and, in some instances, private sector promotional strategies and development assistance which have fostered paternalism and heavy heavy subsidization. This reassertion of the true nature and role of agricultural cooperatives presumes that social goals may still be a by-product of efficiently operated, economically viable cooperative enterprises, but not represent the primary objective, as the cost is likely to be greater than the private sector cooperative movement can support.

E. Summary Financial Plan

AID loan and grant funds and host country counterpart contributions will be allocated as follows:

<u>Summary Financial Plan</u> (US \$000)					
<u>COMPONENTS</u>	<u>DL</u>	<u>AID</u> <u>DG</u>	<u>GOP</u>	<u>CO-OPS</u>	<u>TOTALS</u>
<u>A. Institutional Development</u>					
1. <u>COAGRO and Affiliates</u>	<u>405</u>	<u>725</u>	<u>-</u>	<u>190</u>	<u>1,320</u>
a. Marketing Development Center	405	600	-	190	1,195
b. Administrative Restructuring		125	-	-	125
2. <u>IPACOOOP</u>	<u>445</u>	<u>490</u>	<u>600</u>	<u>100</u>	<u>1,635</u>
a. Project Coordination Office	80	-	104	-	184
b. Baseline Data and Evaluation	100	-	-	-	100
c. Management Development Center	265	490	496	100	1,351
3. <u>BDA</u>	<u>50</u>	<u>285</u>	<u>250</u>	<u>-</u>	<u>585</u>
a. Cooperative Credit Dept. Upgrading	50	285	250	-	585
<u>B. Marketing Credit and Infrastructure Revolving Fund</u>					
1. <u>BDA</u>					
a. Infrastructure and Equipment	2,000	-	1,250	450	3,700
b. Marketing Credit Working Capital	3,000	-	1,250	400	4,650
<u>C. Project Management/Support</u>					
	<u>-</u>	<u>800</u>	<u>-</u>	<u>-</u>	<u>800</u>
GRAND TOTALS	<u>\$5,900</u>	<u>\$2,300</u>	<u>\$3,350</u>	<u>\$1,140</u>	<u>\$12,690</u>

F. Summary Findings

The Project Review Committee has reviewed all aspects of the proposed Agricultural Cooperative Marketing project and finds that it is financially, economically, technically and socially sound, and consistent with both the development objectives of the GOP and those of USAID/Panama as set forth in USAID/Panama's FY 1984 CDSS. The Project Review Committee has further determined that COAGRO, IPACOOOP and the BDA are institutionally capable of administering the project in the coordinated fashion discussed in the Project Paper.

G. Project Development Committee

USAID/Panama

Frank Miller, ODR
Ben Severn, ODP
John Champagne, AGR
Tomas Ugarte, AGR
Thomas Walsh, CONT

AID/Washington

Karen Peake - LAC/DR

CLUSA

John Sandbach, Team Leader
Gene Ott
Wes Weidemann
Antonio Richa

ACDI

David Fledderjohn, Team Leader
William Merrill,
Earl Downing
Cesar Amoren
Edgard Baldizan
Douglas Norwell

Project Review Committee

Robin Gomez, Director
John Lovaas, Deputy Director
D. Gale Rozell, Chief - AGR
Tom Cox, Chief - ODP
Mike Hacker, Chief - ODR
Richard Harger, Controller

IPACOOOP

Euclides Tejada, Executive
Director
Oscar Monteza

COAGRO

Rodrigo Marciacq, President
Orlando De Vicente

II. BACKGROUND

A. Panama's Agricultural Sector

Agriculture's contribution to Panama's economy is more important than its current share of GNP indicates. Although the agricultural sector accounts for less than one-fifth of GNP it employs nearly 27 percent of the labor force and generates about one-half of all merchandise exports. Many of the country's most important industries depend directly on the processing and marketing of farm products.

During the 1960's total agricultural output increased at an annual rate of almost 5 percent per annum. The major source of this growth was export crops, particularly bananas. Production for domestic consumption grew at about half the total rate or about 2.5 percent per annum. This sluggish supply growth, combined with increased domestic demand, resulting from rapid population growth and an expanding urban sector, was partly responsible for increases in both food prices and food imports.

Output growth for both export crops and crops for domestic consumption declined during the 1970's. This was largely due to a reduction in banana exports; government policies which discouraged private investment in the agricultural sector and channelled substantial government resources for credit, technical assistance, and other services to state supported farming communities like the asentamientos, agrarian reform units etc.; low international prices for several major export products; and unfavorable climatic conditions.

As a result of the low agricultural growth and a decline in per capita farm incomes during the 1970's the rate of rural to urban migration increased. Overall population in the agricultural sector also declined from 37 percent to 29 percent of total population between 1970 and 1980. This resulted in a decline in the absolute number of persons employed in agriculture as well as contributed to an increase in urban unemployment and underemployment. Improvements in rural incomes and economic conditions generally will have to take place if the rate of rural to urban migration is to be reduced.

Despite a sluggish agricultural sector, Panama has maintained an overall positive balance of agricultural trade over recent decades on the basis of its exports of sugar, bananas, coffee and cacao. Sugar exports increased substantially in the late 1970's due to the expansion of processing capacity stimulated by the high international sugar prices in the early 1970's. Current depressed prices for sugar worldwide have caused a cutback in Panama's exports.

Panama's principal food imports are fruits and vegetables (23%), cereal products (22%), fats and oils (14%), milk products (12%) and meat products (12%). Nearly 69 percent of the food imports are processed foods such as canned meats and powdered milk. Of the remaining 31 percent with

little or no processing the most important are wheat, corn, beans, onions, and non-tropical fruits such as apples, grapes and pears. The import substitution potential for many of these food products is limited. Many are products which Panama cannot produce economically or are highly processed with very narrow domestic markets. The products for which some local substitution is possible are meat and dairy products, onions, beans, corn and oils.

The bulk of the sugar and banana exports is produced on large farms owned and operated by the Government of Panama or by private companies. These plantation-type farms provide significant employment for both small farmers and landless farm workers. Small and medium scale farmers could play an important role in increasing exports of coffee and cacao, increasing production of import substitution items such as meat and dairy products, vegetables, beans and corn, and meeting specialized local demands for items such as oriental vegetables.

Small farmer productivity in Panama traditionally has been low. Relatively poor soils, the lack of improved technology and mechanisms to disseminate improved technology and practices, and inadequate market opportunities all have contributed to the problem. Up to recent years, the Ministry of Agricultural Development (MIDA) has not given adequate attention to individual small and medium producers, but rather concentrated on asentamientos and other such groups. However, with the emphasis being placed on research, the development of a new extension service and new availabilities of agricultural credit, we see the potential for significant improvements in small and medium farm productivity. Assistance to the cooperative movement will strengthen efforts to reach small and medium farmers. More specifically, assistance for cooperative marketing enterprises will give small and medium commercial producers new and more secure outlets for increased production.

B. Current Agricultural Price Policy

Since the early 1970's, price policy in the agricultural sector has centered on basic grains, livestock and milk both at the producer and retailer level. Fruits and vegetables have not been included. Under the current price system for basic grains, MIDA officials establish a "reasonable" price that the producers should receive for a particular product. The Office of Price Regulation then determines "reasonable" profits for middlemen and arrives at a "just" price for the consumer.

The "reasonable" grain price established by MIDA is based on costs of production experienced by medium and small farmers. These costs are generally higher than those incurred by larger, more efficient farmers. The decision to use the higher cost figures flows from the GOP's dual desire to help middle and small scale farmers increase their agricultural income, and simultaneously to reduce dependence on imports by increasing domestic production and consumption of basic foodstuffs in the average Panamanian diet. Such a strategy, while it tends to stimulate production, obviously guaranties excess profits for the more efficient, usually larger farmers, and assures that the urban consumer subsidizes the agricultural sector by

establishing prices which are higher than world market prices. During the mid-late 1970's, those farmers using fertilizers and pesticides - generally the larger, more efficient farmers earning excess profits as a result of the pricing policy - suffered through a classical cost/price squeeze as the GOP held the line on final product prices, ostensibly in order to soften the blow of the recession affecting the country at that time. Smaller farmers who were not using imported inputs were not affected.

Price policy in the agricultural sector appears to have had a positive impact on production of basic foodstuff since the early 1970s. There has been, however, a negative impact on livestock and milk production. In these two product areas, price policy has been the reverse of that for grains - maintaining domestic prices below world market prices and insisting that domestic demand be met at the lower price before the surplus could be exported.

While the existing price policy has had a tendency to foster rather than thwart production, when relative prices reach a certain differential and farm land can support more than one type of product, undesirable results can occur, whereby farmers produce more of one product and less of another than comparative advantage tenets would normally dictate. For example, under the current pricing policy regime, the price of rice which, as of late 1983, was way above the world market price, has risen so much relative to that of livestock -- the one Panamanian agricultural product which can compete on the world market -- that some ranchers are converting their grazing land into rice fields.

In other words, while price policy as practiced by the GOP probably has stimulated production, it may have led to misallocation of some agricultural land resources. Recently, there has been evidence that the GOP wants to move toward a free market system, with government intervention limited to a stabilization program whose sole function is to eliminate peaks and troughs resulting from the normal fluctuation of those elements which affect the agricultural sector.

Current agricultural price policies will not have any significant impact on the project because most of the products handled by participating coops are commodities not subject to GOP price controls. Only those marketing activities connected with corn, sorghum and onion will involve price-controlled products, and current support prices for these crops are highly favorable to the producer. Discussions with economic policy makers in the Ministry of Planning indicate that the GOP is seriously considering moving towards a free market system. If this occurs, corn and sorghum producers will be given ample warning of pending price policy changes so that an orderly switch to other crops can occur, if the price change so dictates.

If the GOP eliminates restrictions on onion imports and accepts the world market price, a potential structural loss could result from planned coop investments in the installation of an onion dryer. We believe, however, that before such a move will occur, the GOP Institute for Applied Research (IDIAP), together with technical assistance being made available through the AID

Technology Transfer project and other donor loans, will produce a variety which can compete with imports. Failing that, we believe the dryer will be adaptable to other crops.

C. Evolution of Panama's Agricultural Cooperative Sector

1. The Role of Cooperatives in Agriculture

The legal framework for Panama's cooperative movement was established in the National Constitution of 1946. In 1963, the new Agrarian Code encouraged the organization of agricultural cooperatives to serve as the institutional framework for channeling credit and other input services to small producers. Initially, the cooperative movement developed slowly. During the 1950's, there were only seven credit unions, one agricultural cooperative and one consumer cooperative. During the 1960's cooperative development began a period of steady growth. The number of registered cooperatives grew from nine in 1956 to 168 in 1968 and membership grew from 1,500 to 20,000. With assistance from several AID loans starting in 1969, membership in cooperatives grew substantially from 20,000 in 1968 to 40,000 in 1972 and 74,000 in 1982.

Within the overall cooperative movement, agricultural cooperatives have a total membership of approximately 11,000 farmers. The majority of these cooperatives belong to one of two national federations, the National Federation of Agricultural Cooperatives (COAGRO) or the National Federation of Credit Cooperatives (FEDPA) ^{2/}. COAGRO and FEDPA currently have a farmer membership of 8,000 and 3,000, respectively. In addition, there are 30 or so independent farmer associations and pre-cooperatives with a combined membership of 3,000. Cooperatives make up about 12 percent of the country's total farmer population, estimated at 92,000, and constitute 21 percent of the 52,000 or so small-medium producers which represent the principal target group under USAID/Panama's current agriculture assistance strategy. In 1981, cooperative farmers' production was valued at \$81.6 million or 18.2 percent of the agricultural sector GNP. Today, the agricultural cooperative movement represents a dynamic and growing force which is having an increasing impact on the agriculture sector as a whole.

2. Panamanian Institutions Working with Agricultural Cooperatives

There are three major national institutions, two governmental and one private, that provide direct assistance to Panamanian agricultural cooperatives and their members. These institutions are:

^{2/} COAGRO serves as a source of production inputs particularly fertilizer, agrochemicals and animal feed and, on a more limited basis, also provides marketing assistance. FEDPA serves, principally, as a credit union and provides supervised credit to an agricultural membership of less than ten percent of the Federation's 35,115 members.

a. The Autonomous Institute of Panamanian Cooperatives (IPACOOOP)

The GOP first gave serious attention to cooperatives in the early 1960's with legislation which provided for the establishment of the National Department of Cooperatives (DENACOOOP), within the Ministry of Agricultural Development (MIDA), to provide assistance to agricultural cooperatives. In its early years, DENACOOOP was a small operation consisting of some 12 employees. In the 1970's, largely with AID assistance, DENACOOOP was upgraded in importance and staff so that by 1980 DENACOOOP had organized three regional offices and assumed expanded responsibilities which were carried out by newly created Departments for Auditing, Statistics and Evaluation and Education. Also during this growth period, a Special Projects Office (PRODECOOP) was established within MIDA to coordinate and monitor the implementation of activities under the AID Cooperative Development Loan (525-T-041), for which DENACOOOP was primarily responsible.

By 1979, under the guidance of a new, dynamic director of PRODECOOP, the Special Projects Office was supplying major services and technical assistance to agricultural cooperatives. In July 1980, under the leadership of this same director, the Autonomous Institute of Panamanian Cooperatives (IPACOOOP) was created. This independent cooperative agency assumed the responsibilities of DENACOOOP, which was dissolved soon thereafter.

The leaders of the cooperative movement lobbied hard for an independent institution that did not depend on MIDA for budget support or policy assistance. IPACOOOP's policies and general operations are now monitored by a Board of Directors composed of four GOP and three private sector cooperative representatives. While MIDA does provide modest technical (extension) support to cooperatives, the private sector plays the strongest role in terms of the policy guidance and overall direction it gives to the movement.

The principal activities now being carried out by IPACOOOP are as follows:

- (1) Public relations: The Institute plays a major role in representing cooperatives' general interests.
- (2) Organization: The Institute provides organizational assistance to pre-cooperatives during their start-up period.
- (3) Legal assistance and registry: Charters and other matters related to legal registration of cooperatives are handled by IPACOOOP. It also maintains a registry of all cooperatives and assists in the development of cooperative legislation.
- (4) Accounting: IPACOOOP has developed various accounting systems for different types of cooperatives. It

assists in the installation of these systems and in the training of cooperative bookkeepers.

- (5) Promotion: IPACCOOP maintains a staff specializing in promotion of the cooperative movement.
- (6) Technical assistance: As developed under AID's 041 loan, the Institute provides some technical assistance in the preparation of cooperative loan applications for submission to the BDA and other financial institutions. The Institute also makes arrangements with MIDA to obtain extension agents to assist cooperatives in production planning and agricultural credit supervision.
- (7) Auditing: IPACCOOP also provides auditing services for those cooperatives which are unable to finance external audits.

b. The Federation of Agricultural Cooperatives (COAGRO)

In 1969, the Federation of Agricultural Cooperatives (COAGRO) was organized to vertically link individual cooperative members to services and activities beyond the capacity of their local organizations. COAGRO began operations in 1971, serving eight cooperative affiliates and 2,762 individual farmers with imported wholesale-priced fertilizer, other production inputs, and related technical assistance. During the following twelve years the Federation expanded its operations by adding affiliates and undertaking direct sales of production inputs through a system of seven regional warehouses. In 1975, COAGRO leased a feed mill from MIDA under a lease-purchase agreement. Title to this facility has now been transferred to COAGRO. In 1980, COAGRO constructed a fertilizer blending plant with a capacity to produce over half of Panama's fertilizer requirements. Currently, COAGRO is providing fertilizers, feed, pesticides and veterinary supplies through 30 cooperative affiliates, representing over 8,000 member farmers located in the principal agricultural regions of the country. In addition, growth in sales outside of its system of affiliates has grown in recent years as COAGRO has become a major supplier of agricultural inputs to the asentamientos and large private sector enterprises and individuals. Through aggressive sales practices COAGRO's annual sales reached \$11,752,000 in 1981. Of this total, about 20 percent was sold to COAGRO's affiliates, 33 percent to GOP programs and the remainder to private sector agricultural enterprises and individual producers.

c. Agricultural Development Bank (BDA)

The Agricultural Development Bank (BDA) was created by the GOP in 1973 to finance the agricultural credit programs established by MIDA. It is the major source of agricultural credit to the Panamanian small and medium farmer. Prior to AID's Rural Cooperative Development Loan (525-T-041),

signed in 1974, the BDA did not have a lending program specifically to support cooperatives. Lending was done to individual and group borrowers, but the latter consisted predominantly of asentamientos.

With AID assistance, this situation has changed considerably. A special window now exists in BDA for lending to cooperatives. A revolving credit fund was established and represents ten percent of the BDA's outstanding loan portfolio (totalling about \$72.0 million in 1981) and 32 percent of its entire lending to group borrowers. Formerly a section of the Group Loans Division within the BDA, the Cooperative Credit Program has been elevated to the status of a separate Department.

3. Previous AID Assistance to Cooperatives in Panama

AID assistance to Panama's cooperative sector began in 1964 with modest grant funding for technical assistance, equipment and credit. It was not until the late 1960's, however, that major AID resources were provided to support the expansion of cooperatives in Panama. These resources were channelled through the following loans:

a) AID Loan 525-L-034

In 1969, AID and the GOP signed Loan 034 (Small Farmer Improvement) which included a credit component of \$400,000 for the then newly organized COAGRO and its eight affiliated cooperatives. Loan 034 was successful in expanding COAGRO's input distribution and marketing system, and in increasing production among its affiliated producers.

b) AID Loan 525-T-037

Loan 037 (Federation of Credit Unions) was signed in 1971 and provided a \$1.9 million line of credit to the National Federation of Credit Cooperatives (FEDPA) and its 75 affiliated credit unions. The loan was disbursed entirely within two years, with agricultural recipients accounting for approximately 25 percent of the sub-loans. Over the life of the project FEDPA membership grew from 12,000 to nearly 19,000 while savings of rural members (including agricultural and non-agricultural groups) rose to \$2.1 million.

c) AID Loan 525-T-041

In 1974, Loan 041 (Rural Cooperative Development) was signed for \$8.1 million of which \$6.75 million was used to capitalize a revolving fund in the BDA to provide sub-loans to rural producers and cooperatives affiliated with the three major cooperative federations, FEDPA, COAGRO and FECOPAN. The remaining \$1.35 million was earmarked for institutional development, intended mainly to strengthen (i) COAGRO's input marketing and distribution system; (ii) FEDPA's agricultural production credit and small rural enterprise development programs; (iii) FECOPAN's ability to provide consumer goods to its affiliates at wholesale prices; and (iv) within MIDA,

DENACOOB's ability to provide cooperatives with needed support services such as agricultural technical assistance and management training.

Loan 041 was evaluated as "a highly successful development undertaking". ^{3/} The following are some of Loan 041's more noteworthy accomplishments based on a survey of 24 of the 46 participating cooperatives and of the implementing agencies:

- A majority of participating farmers were able to raise production by 50 percent or more, and 30 percent moved into more sophisticated and profitable field crop production.
- Although a lack of baseline data precludes a conclusive estimate of growth in farmer income, crop and livestock summaries suggest that Loan 041 enabled hundreds of rural households to secure increased yield and income opportunities which otherwise would have been unavailable to them. In high value crops such as potatoes, onions and tomatoes, net income per hectare ranged from \$1,200 to \$2,200, an achievement partially explained by the availability of credit made possible under the Loan.
- Availability of credit enabled many small producers to undertake profitable livestock operations (principally cattle and swine) which generated new income of between 27 and 61 cents for every dollar invested. Very few deficit operations in livestock were observed.
- Membership in agricultural cooperatives increased by 76 percent, with the greatest increase among small producers.
- Between 1976 and 1980 the total assets of cooperatives increased by 119 percent, member savings by 96 percent, net profits by 81 percent and patronage refunds by 35 percent.
- Total loan disbursements to cooperatives from the revolving loan fund reached \$11.7 million by the end of the project, indicating some \$4.5 million in lending from reflows.
- The BDA estimated a total delinquency rate of less than three percent of loan repayments by recipient agricultural cooperatives under the project.

^{3/} Impact Evaluation of Panama's Rural Cooperative Development Loan (525-T-041), prepared under AID Contract 525-0187-C-00-10006, dated June 1981, by Rural Services of New York, N.Y.

Largely due to the above successes, substantial progress has been made by Panama's agricultural cooperatives. In recent years, they have demonstrated the capacity, unique in Panama, to effectively reach small farmers with inputs, credit and technical assistance.

Their effectiveness is amply demonstrated by the increase in small farmers now involved in the market economy. In contrast to the 1970 Agricultural Census that reported only one tenth of Panama's farms sold over \$500 of produce on the market annually, virtually all of the small farm respondents to the 041 Evaluation sample survey reported substantial use of fertilizers, pesticides and improved seed with corresponding increases in product sales. The net result of involvement in the market economy has been increased production and income for many small farmers who had been subsistence farmers with little or no income from the sale of their crops.

D. Current Status and Principal Constraints of Agricultural Cooperatives

Statistical indicators and studies have demonstrated impressive progress by agricultural cooperatives overall in recent years. However, given the varied origins, product emphases, geographic settings and sociological characteristics of Panama's farm population, the country's agricultural cooperatives represent a diverse group of local organizations at different stages of development.

Of the 30 COAGRO cooperatives, eleven are well established and have the potential to expand their services into the area of marketing. However, they have reached a plateau in their growth and service capability and will progress very slowly until they gain access to additional financing and technical assistance. Three of these eleven have already started limited marketing operations which have had some success. Moreover, these cooperatives have expanded into provision of services such as bookkeeping, accounting, and administration in order to assist smaller, less developed cooperatives in their regions. These cooperatives have also taken the first steps towards integration and consolidation within the cooperative movement, whereby stronger cooperatives provide expanded services to smaller, weaker ones. One result of this long-term process will likely be cooperative mergers along regional and/or commodity lines.

Of the remaining 19 cooperatives, four are large supply operations for highly specialized dairy and cattle producers. Another nine are small volume operations that may have to enter into pooling arrangements with larger cooperatives in order to advance into marketing activities. Another cooperative is in receivership and two more are inactive. Another two cooperatives provide input supplies and some production credit to members who produce industrial tomatoes on contract with Nestle, and onions which are marketed almost exclusively with the GOP Institute of Agriculture Marketing (IMA). These two cooperatives were assessed as having weak management and financial systems, and need assistance in these areas. With corrective measures in the management and financial areas, plus changes in the nature of production from industrial to table tomatoes in the case of one coop, and

improved varieties of onions in the case of the other, these two cooperatives should be able to participate in marketing activities within three or four years. The last of the thirty cooperative's is a highly specialized plantation and processing facility for African palm oil, with financing requirements beyond the scope of current BDA funding.

At the federation level, COAGRO has become the key private sector institution within the agricultural cooperative movement. Its 8,000 farmer members represent 9 percent of the country's farmers and 15 percent of Panama's small and medium size farmers. Also, COAGRO and its affiliates do business with individual non-members and non-member cooperatives. Its fertilizer sales in 1981 represented 67 percent of all fertilizer sold in Panama, excluding that applied to bananas and sugar cane. Thus, the actual number of farmers served by COAGRO and its affiliates is far larger than the 9 percent of the country's farmers who are members. At present, a large number of farmers, who live within the service area of COAGRO or its affiliates, are doing business with a cooperative. However, if the COAGRO cooperatives are able to offer significantly improved services as a result of this project, many new farmers in the service areas should be attracted to join the COAGRO system.

In addition to its input supply services, COAGRO has also been effective in representing the agricultural cooperative movement in issues relating to broader Panamanian agricultural development. Furthermore, it has entered into purchasing agreements with member cooperatives to purchase grain for producing animal feed which is then sold to other member cooperatives who produce poultry and hogs. Due to the above-cited existing service coverage of the farm population and because of the potential for expanded participation, further assistance efforts to develop the potential of the cooperatives sector should be channeled through this federation as well as directly to COAGRO to improve its capabilities to provide services to its affiliates and their members. This project addresses several major constraints to further development within the agricultural cooperative movement, at both the primary cooperative and federation level.

1. Lack of Secure Marketing Outlets for Products

The most difficult and risky undertaking for agricultural cooperatives is marketing member production. To date, few Panamanian cooperatives have been successful in expanding their operations into direct product marketing. Past AID and other donor assistance has been focussed mainly on increasing production, credit and membership expansion. The expanded production resulting from this assistance, as well as from IDB and AID financed rural road projects, is placing large demands on inadequate government (e.g., IMA) and ad hoc private marketing services that now exist.

Discussions with agricultural cooperative leaders indicate that future cooperative growth will be constrained unless a marketing service infrastructure is developed to more effectively handle coop production. Improved marketing operations should enable the cooperative movement to

capture a larger share of the margin between prices paid to producers for their output and charged to consumers which, in turn, will benefit member producers. Therefore, rational strategy for raising small farmer incomes must take into account the marketing constraints and incentives.

A significant number of GOP officials also believe that private sector cooperatives have proven more efficient in providing marketing services than have state agencies, particularly in the areas of vegetable marketing. USAID supports this assessment given IMA's spotty performance and the promising progress made to date by the few private cooperatives which have expanded into marketing. Securing markets for cooperative production requires that the following deficiencies be corrected:

- insufficient and often inaccurate market information;
- limited marketing credit;
- limited marketing skills;
- inadequate facilities for the collection, packing, storage, and transport of agricultural production; and
- nonexistent or limited grading standards.

These weaknesses in the marketing system have led to production losses and waste which have had a negative impact on cooperative and producer incomes, agricultural prices and consumer acceptance. This project will directly respond to these constraints through the following activities: (1) performing feasibility studies of potential marketing opportunities; (2) developing pertinent marketing information directly related to sub-projects to be financed under this loan; (3) financing of infrastructure and working capital needs required by cooperatives to expand into marketing activities; and (4) providing technical assistance to improve administrative and financial management capabilities of participating cooperatives.

2. Weak Financial and Managerial Skills at the Cooperative Level

While a number of cooperatives have capable leadership with experience in serving producer members, many others lack the managerial and the other business skills necessary to expand cooperative services into the relatively high risk area of marketing. Cooperative accounting systems are frequently deficient and financial analyses are seldom incorporated into the management/decision-making process. Departmental budget and operating statements are not used for the control of "profit centers." Personnel systems are rudimentary; long-term planning is generally absent; and evaluation systems are lacking. Generally speaking, inventory controls are satisfactory but procedures for controlling supply credit are inadequate. As cooperatives expand in terms of the volume and complexity of their operations, the lack of sound business management skills and practices could well become crippling.

These bottlenecks will be addressed by providing the critical technical assistance and training required to put these enterprises on a path of growth and profitability without sacrificing the essential characteristics

of member participation and service motivation which make cooperatives unique institutions here and elsewhere.

3. Weak Financial Position at the Federation (COAGRO) Level

A study of the National Federation of Agricultural Cooperatives (COAGRO) revealed that the organization's current financial status is in a tenuous position. COAGRO's history of operations also revealed inadequate policy guidance and action in such critical areas as sales expansion, participation in competitive bidding for importation of commodities, pricing policies, expansion of credit and adoption of a "profit center" approach to overall operations similar to that applied to its fertilizer plant and feed mill.

Burdened with high inventories and financed by commercial credit obtained at high interest rates, COAGRO must increasingly sell to non-members simply to meet its accounts payable. This situation is compounded by the sporadic repayment performance of its affiliates and inadequate growth in member equity. At present, COAGRO is over-indebted to outside creditors and, in the absence of adequate medium to long-term credit, is largely dependent on short-term, high interest loans and lines of credit which claim a larger share of COAGRO's operating expense budget.

COAGRO requires refinancing of its external debt and improved mobilization of member equity. Unless the latter measure is vigorously pursued, debt restructuring will provide only temporary relief. The GOP, can provide some relief to the Federation through prompt settlement of an outstanding debt of approximately \$1.0 million to COAGRO and refinancing assistance through the BDA. Under this project, technical assistance will be provided and tight controls established to assist COAGRO in reorienting itself toward sound business practices, capital formation and gradual expansion of services to affiliates over the long term. A sense of urgency for this reorientation and assistance is shared by COAGRO's Board of Directors, senior management and GOP officials, and is reflected in recent changes which have taken place within the organization. Partially as a result of diagnostic studies of COAGRO conducted during the earlier intensive review of this project, the Federation has adopted some tough measures to improve its financial position. These include major personnel shifts and reductions, formulation and approval of a reorganization plan, redefinition of credit policies, elimination of its Cooperative Education Department, and planned expansion of COAGRO's computer programming capacity to manage the Federation's accounts receivable and inventories (See Annex II, Exhibit H for details on recent improvements within COAGRO).

4. Marketing Credit

At present, COAGRO and its affiliates are extremely short of both investment credit to fund marketing facilities and working capital for marketing operations. Given the anticipated expansion into marketing services over the next five years, this credit shortage is expected to become even more

acute. Furthermore, while many of the marketing activities identified for individual cooperatives will require fairly small amounts of investment, most would involve high risks for commercial banks. While BDA has made a few loans for marketing proposals, it lacks the funds to significantly expand its financing of marketing activities.

This project directly responds to these constraints through the establishment of a revolving Marketing Credit and Infrastructure Fund within the BDA. The Fund will be initially capitalized with \$5 million in AID resources and \$ 2.5 million in GOP counterpart. This project will also finance technical assistance for BDA's national and regional level staffs to improve their capability to administer this Fund, and analyze and supervise cooperative loan requests for marketing activities.

E. Relationship of Project to USAID Program Objectives

1. Relationship to FY 1985 CDSS Update

This project directly complements USAID/Panama's agricultural program strategy as presented in the FY 1985 CDSS Update. As stated, the agriculture strategy is to help change perceptions and policies and to help promote a commercially efficient agriculture responsive to market forces. More specifically, the AID strategy will focus on promoting non-traditional and other products which Panama can grow economically and on expanding the agro-industrial base of the country. The principal target group of USAID's efforts in agriculture is the private sector which includes the cooperative movement as the best organized and dynamic force among small and medium scale farmers. This focus signifies a growing recognition and conscious acceptance not only by AID but by the GOP of the vital role played by the private sector in Panama's development process.

As stated earlier, the GOP has, over the last decade or so, mainly directed its energies toward development and support of asentamientos and similar groups. Today, this program is still heavily subsidized (absorbing the major portion of MIDA's annual operational budget) but represents only about four percent of the farming population. Therefore, not only does this project directly complement USAID's CDSS strategy in terms of purpose and target group orientation, but its presentation at this time is appropriate in light of renewed GOP interest in seeking private sector alternatives to the unsuccessful asentamientos strategy.

2. Relationship to Other USAID Projects

Current in the early stages of implementation in the District of Soná, Veraguas Province, the \$9.7 million Integrated Rural Development project (Loan 525-T-046) offers a potential locus for establishment of a regional agricultural services cooperative during the life of the project. As farmers in this area find it more feasible and beneficial to undertake small-scale commercial production they may seek services and farm supplies from private firms or establish a cooperative to provide such inputs. This is similar to

the pattern of development observed in the history of the highly successful cooperative, "Juan XXIII", which serves the Santiago area of Veraguas and is one of COAGRO's largest affiliates.

This project will also be complemented by the activities currently being funded under the Grains and Perishables Marketing project (525-T-042) which is providing \$6.2 million to IMA for the construction of three grain storage facilities in three of the country's major production areas, and for technical assistance to strengthen IMA's marketing and management capabilities. Panama's agricultural cooperatives will benefit from this project to the extent that they find it advantageous to market their output through IMA channels or can negotiate with IMA to rent storage space in newly constructed silos for their own marketing activities. However, due to IMA's scarce financial resources and serious cash flow problems, farmers are being paid late (up to 3-6 months after delivery), thus cooperatives are anxious to expand their operations to develop their own marketing system as an alternative to what is widely regarded as an unresponsive public sector network. An improved cooperative marketing system would also enable participating cooperatives to capture a larger share of the profit margin currently gained by IMA and other marketing middlemen. The \$10 million Rural Growth and Service Centers project (525-T-047) is supporting the development of agri-business operations, transport terminals and other facilities in three secondary towns in Panama to strengthen their role as linkages between farmers and major markets; and the \$10 million Rural Access Roads project (525-T-048) will create a network of all-weather farm-to-market roads and an institutional capacity within the Ministry of Public Works to relate future road building programs to production marketing and related economic needs.

Finally, coordination with lending activities to agricultural cooperatives through the reflows from the Revolving Credit Fund established in the BDA under the Rural Cooperative Development project (525-T-041) will be developed. Further use of the 041 reflows for working capital loans to finance cooperatives' supply purchases from COAGRO on a cash rather than a credit basis will free up COAGRO's own working capital and allow it to expand its operations. As discussed in Section II-C, "Previous AID Assistance to Cooperatives in Panama", the experience gained under Loan 041 has provided a number of valuable lessons learned which were incorporated into the design of this follow-on cooperative marketing effort.

F. Other Donor Assistance to Agricultural Cooperative Development

1. Inter-American Development Bank (IDB)

In December 1981, the Inter-American Development Bank (IDB) signed a \$29.5 million loan with the GOP for the provision of agricultural production credit to small and medium farmers, to be channelled through the BDA. The project seeks to benefit some 5,000 small and medium size coop and livestock producers. Special attention will be given to the cultivation of new crops such as fruits and vegetables to help diversify production, as well as modernization of production methods for traditional crops such as rice,

sorghum, beans and livestock operations such as dairy and beef cattle. The increased output resulting from this large production credit program should help create expanded demand for improved marketing facilities in the private sector. The proposed cooperative marketing project will provide improved marketing services and facilities at a propitious time in support of the IDB project.

In addition, the IDB has finalized a direct loan of \$500,000 to COAGRO to upgrade and expand its facilities and operations at the Midarina feed mill. It is anticipated that working capital beyond the \$350,000 programmed will be needed during the life of this project to increase inventories and to allow the plant to operate at full capacity.

2. The Interamerican Foundation IAF

The Interamerican Foundation IAF is currently supporting a three-year program for the development of accounting systems, training of accountants and installation of standardized documentation of accounting data for computer processing at the cooperative level. This is being done solely with COAGRO affiliates to provide them access to the computer installed at the Federation's main office. This assistance is aimed at improving the accounting capability of affiliates, providing more timely reports for managerial and director decisions and complementing, on a selective basis, IPACOP's activities to improve the accounting practices of cooperatives.

3. Volunteer Development Corps (VDC)

The Volunteer Development Corps (VDC) has provided specialized technical assistance to cooperatives in Panama for several years. Drawing from a pool of experienced volunteers from the U.S. cooperative movement, VDC has helped COAGRO evaluate and redesign its management and organizational structure, and made recommendations for improving cost-accounting procedures by production centers (such as the fertilizer plant, feed mill and regional sales operations) and for revising sales policies. These recommendations are currently being reviewed by COAGRO's Board of Directors. Most recently, VDC provided technical assistance to the Horticola cooperative in Boquete and their recently established Panama City packing and cold-storage operations.

4. TECHNOSERVE

TECHNOSERVE, a U.S.-based Private Voluntary Organization supported by an AID centrally-funded grant, has entered into an agreement with two of the largest cooperatives, Juan XXIII and Horticola, to provide short-term technical assistance in the areas of business management and marketing. Based on the success of this initial assistance, additional agreements may be developed with these and other COAGRO member cooperatives.

III. DETAILED PROJECT DESCRIPTION

A. Project Goal and Purpose

The goal of this project is to increase the income and productivity of Panama's small and medium farmers. The project purpose is to strengthen Panama's agricultural cooperative movement to better serve an expanded membership with a wider range of services, especially product marketing.

B. End of Project Status

By the end of the project, the following conditions should exist indicating that the project purpose has been achieved:

1. a strengthened and expanded cooperative marketing system enabling producer members to more fully profit from the sale of their output;
2. a doubling of the number of active producer members of agricultural cooperatives participating in marketing credit activities under this project;
3. a full line of marketing services available to participating cooperatives and their members on a timely basis;
4. a doubling of member equity capital both in those agricultural cooperatives participating in project supported marketing activities and in COAGRO, with an established plan for continuing growth of member equity in each;
5. reorganization and redirection of COAGRO into a solid, profitable cooperative wholesale supply and marketing organization;
6. institutionalized capability within COAGRO to provide marketing development assistance to its affiliates including the identification and analysis of potential marketing opportunities;
7. existence of stronger individual agricultural cooperatives with improved internal financial management and administrative capabilities;
8. institutionalized capability within IPACOOOP to provide business and management skills training to primary cooperatives and COAGRO; and
9. improved capability within the BDA to review and process loan applications for cooperative marketing subprojects in a timely fashion, and to supervise these loans to ensure proper disbursement of funds.

C. Project Rationale and Strategy

The rationale for this project, as for the previous Rural Cooperative Development project, is to develop and strengthen a mechanism

through which small and medium farmers can more fully participate in Panama's agricultural economy. Both the GOP and USAID/PANAMA have identified the rural cooperative movement as the most appropriate organizational mechanism through which to achieve this objective. During the design of the earlier Loan 041, the lack of production credit was identified as a major constraint to small farmer participation in the agricultural economy. As evidenced by the 041 final evaluation, significant progress was made during the life of that project to integrate the target group into the market economy as a result of the provision of production credit.

Given improved access to production credit under Loan 041 and the tentative steps taken by a select group of cooperatives to become involved in marketing and other services for its members it was determined that the most critical area for improvement was not production but the marketing end of the process. The best way to increase farmer member incomes, therefore, is to provide them with secure markets for their produce. Building upon the success of Loan 041, this project will strengthen and expand agricultural cooperative operations by providing marketing credit and infrastructure to benefit producer members.

The strategy chosen to extend the services of agricultural cooperatives into marketing is twofold. The project will (1) strengthen the agricultural cooperative sector financially and administratively from the individuals farm to the national level, and (2) provide financing for marketing credit, infrastructure and equipment. As in countries like the United States, with strong, efficient and profitable cooperatives, this project will promote a strategy of consolidation along geographic and/or commodity lines. Implicit in the project is a reorientation away from a heavily subsidized, paternalistic approach to cooperative development, towards a view of cooperatives as private businesses which must be financially sound to survive and prosper. This project promotes this fundamental entrepreneurial orientation and seeks to strengthen the overall financial status of the agricultural cooperative sector by implementing major reforms in financial operations and policies and improving the business skills of managerial personnel at all levels in the cooperative network. The expanded service potential for these cooperatives, through the marketing activities to be developed under the project, provides the pragmatic stimulus for this reorientation and the related management upgrading which will be measured in economic returns to the cooperative membership.

In summary, this project provides a prime opportunity to demonstrate the positive impact which the private sector can have on advancing agricultural sector goals in an area that has proven difficult to penetrate effectively through government intervention. Panama's agricultural cooperative sub-sector is becoming stronger, and an outgrowth of that strength has been a progressive development within the sector toward a full range of services in addition to their original role as suppliers of producer inputs. This project acknowledges progress made to date and aims to facilitate further development through various institution building activities and the provision of marketing credit.

D. PROJECT COMPONENTS

This project will contribute to building a stronger foundation of local cooperatives through the coordinated efforts of IPACOOOP, COAGRO and the BDA by strengthening their management capabilities, assisting in developing programs to market cooperative production, and providing funds needed for post production marketing activities. These efforts are to be carried out by establishing a Management Development Center at IPACOOOP, a Marketing Development Center at COAGRO, and a Marketing Credit and Infrastructure fund within the BDA. These programs are described more fully in the following sections.

1. Project Management and Support

The GOP entity responsible for overall coordination and administrative management of project implementation will be IPACOOOP. A Project Management Office will be established within IPACOOOP staffed by a Project Management Officer and two administrative/financial analysts. This office will report directly to the Director of IPACOOOP. Project funds will be utilized to partially finance the salary of the Project Manager, as well as for procurement of a vehicle, office equipment and supplies. The Project Management Office will have the following responsibilities:

- a) coordinate overall project activities;
- b) monitor and evaluate project activities;
- c) produce the annual operational plan(s) for project activities in coordination with the participating institutions;
- d) exercise budgetary control over participating institutions;
and
- e) coordinate the preparation of and forward all project reporting and disbursement requests to AID.

A Project Coordinating Committee will be formed, with representation by the principal institutions participating in the Project and responsible for direct implementation of specific project activities: IPACOOOP will be represented by the Director of IPACOOOP (who will be the chairperson of the Committee) and the Project Management Officer; COAGRO will be represented by the Chairman of the Board of Directors and the General Manager; and BDA will be represented by the Executive Manager of Group Lending and the Chief of the Cooperative Credit Department.

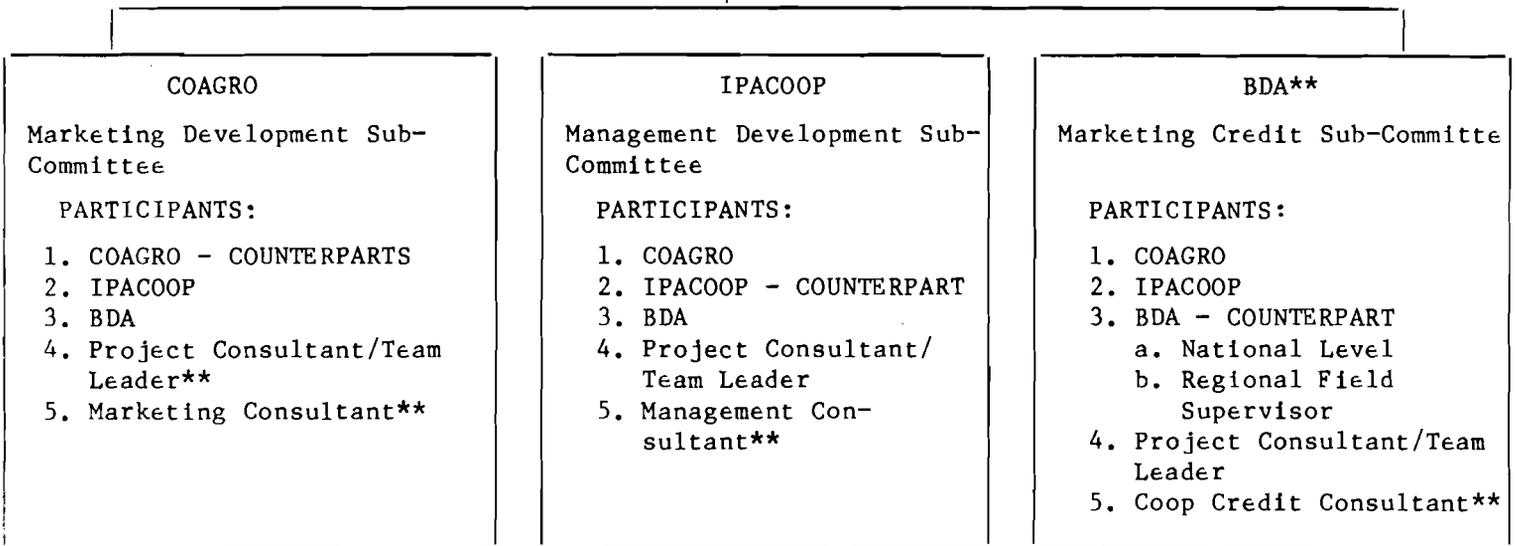
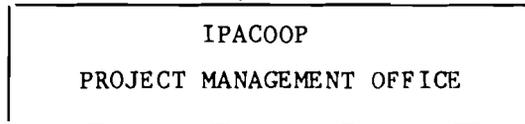
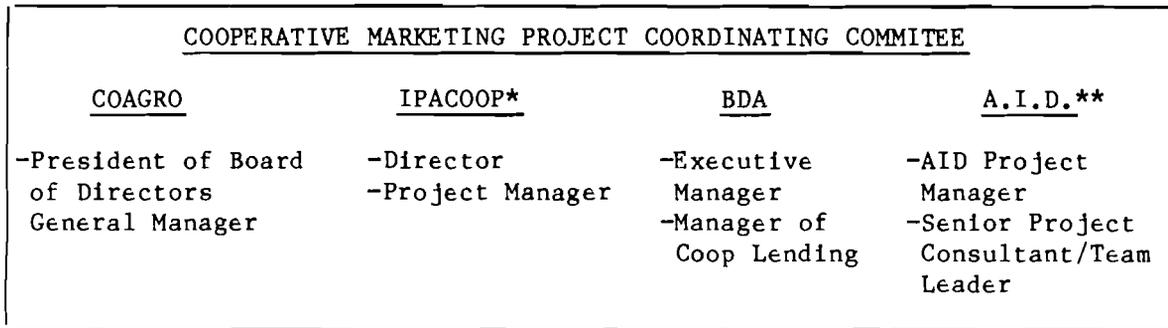
The Coordinating Committee will be assisted by a grant funded Senior Project Consultant/Technical Assistance Team Leader, who will be contracted for 54 person months to assist IPACOOOP, COAGRO and BDA in developing implementation plans and budgets, and to provide overall project monitoring and other assistance during the five year implementation period of the activity. At a second level of coordination, each of the three agencies will host monthly sub-committee meetings to discuss and monitor implementation of activities for which they are directly responsible, and to resolve specific

problems as they arise. Each of these meetings will be attended by a representative from the other two agencies as well as the Senior Project Consultant (in an ex officio status) to ensure regular coordination and interchange of ideas among all parties.

The Senior Project Consultant will also provide support for the overall administrative restructuring process being undertaken by COAGRO and assist the COAGRO Board Chairman in developing scopes of work for up to 12 p/m of grant funded short-term consultants to work on the financial and operational aspects of restructuring COAGRO's business operations.

The organizational relationships among the three agencies participating in the project are shown in the following chart:

ORGANIZATIONAL CHART



* IPACOO will chair the Coordinating Committee.

** Ex officio members

*** BDA will also conduct monthly coordination meetings at the regional level with local IPACOO and COAGRO field staff.

2. Management Development Center

This component will establish the capability in IPACOOOP to develop a strategy and appropriate training materials to carry out an intensive program of upgrading cooperative personnel in the areas of business and financial management which are critical to the expansion of services provided by cooperatives. The primary training methodology to be established will be the case study approach. A library of case studies will be developed from analysis of the cooperatives participating in the project. This "hands on" approach will directly involve coop members and staff in thinking through and developing solutions to their own problems. Training courses will be designed for phased upgrading of participants, in areas of business management and financial planning. Course and materials development will address areas such as budget preparation, cash flow planning, inventory controls, and pricing policy formulation. Special courses and materials will be developed for boards of directors in areas such as interpretation of financial statements, and the use and value of budgetary review in evaluating management performance and planning future operations.

A special unit of IPACOOOP will be established as a Cooperative Management Development Center. The unit will be staffed and operated separately from IPACOOOP's regular programs, but will be responsible to the organization's Director. The establishment of the unit, the development of curriculum and materials, and the carrying out of training programs with follow-up visitation, will be assisted by a grant funded long-term (36 p/m) consultant. This unit will be monitored by a Management Development Sub-Committee of the project Coordinating Committee. The membership of this sub-committee will be composed of the unit's staff and the technical consultant (ex-officio member) as well as working level representatives of the BDA and COAGRO. Participation by all three agencies will ensure that the training materials and courses developed are practical in design, meet the upgrading requirements of the cooperatives involved in marketing activities, and are developed and conducted on a timely basis. A major responsibility of this Sub-committee, which will meet monthly, will be to ensure that the training courses and materials developed: (1) reflect priority needs of the cooperatives involved in marketing activities under this project; (2) are complementary to the marketing development technical assistance to be provided through the Marketing Development Center in COAGRO; and (3) are designed to resolve weaknesses in financial management skills that might negate eligibility for borrowing from the Cooperative Marketing and Infrastructure Fund to be created in the BDA.

Personnel from COAGRO's and the BDA's central and regional offices will be trained with special courses tailored to upgrade management and other skills. In addition, training materials developed by the Center will be made available to COAGRO and the BDA for direct use or adaptation to other training which those organizations might carry in connection with specific project activities. IPACOOOP may also expand the use of the materials and methodology by applying them to training efforts undertaken by IPACOOOP units working with other cooperative organizations. The Center is expected to

have additional influence in helping to carry out IPACCOOP's overall mandate to provide technical assistance to cooperatives in Panama.

The Center will establish contact with the Central American Institute of Business Administration (INCAE) which has extensive experience in developing specialized training materials/courses for cooperatives. A branch of INCAE has been established in neighboring Costa Rica which should facilitate collaboration. The Center will also coordinate closely with the Latin American Federation of Credit Unions' (COLAC's) training branch in Panama, FECOLAC, which has a resource library, training materials and conducts training courses for credit unions throughout Latin America.

The Management/Consultant will be responsible for developing the case study training materials, as well as training of counterpart personnel in the development and use of materials. This consultant will also be responsible for developing an overall curriculum which includes periodic, on-the-job follow-up training. Loan funds will be utilized to cover salaries for two counterparts to the consultant in the first year. These salaries will be assumed by the GOP on a gradual basis over the life of the project starting with 20 percent the second year and increasing to 40 percent, 60 percent and 100 percent in succeeding years. Loan funds will also cover administrative costs relating to establishing the unit, and for development of the "library" of training materials. The required level of loan funding will gradually decline over the life of the project as IPACCOOP's regular operating budget absorbs an increasing share of the costs of operating the Center. In part, these costs will be recovered through tuition payment by trainees. A total of six vehicles will be purchased with loan funds for use by the Center and regional training officers in the field.

3. Marketing Development Center

Under the project a Marketing Development Center will be established within the agricultural cooperative federation, COAGRO. This Center will not involve COAGRO directly in marketing operations in the sense of buying and selling production of member cooperatives. Rather, the Center will operate as the central point to which all of its affiliates look for a variety of marketing assistance, including coordination of certain services among cooperatives in the same geographic area or along similar product lines. COAGRO has provided this coordinating role over the years in the procurement of production inputs, for example, buying seed potatoes for member cooperatives in Chiriqui Province. COAGRO's location in Panama City, its telex facility which is capable of direct international communication with potential suppliers, and its access to commercial banks, has prompted affiliates to assign this vital coordinating role to the federation. As stated, the cooperatives do not look to COAGRO to sell their production nor to become involved in financing such sales. Increasingly, however, they are turning to COAGRO for assistance in expanding their market contacts, both in the metropolitan area of Panama City, the high volume markets of the Canal Area generally, and in exploring of international markets where development

of contacts is more easily facilitated from Panama City than from the interior of the country.

The Marketing Development Center will be established as an operating unit working out of the COAGRO headquarters . Project grant funds will provide for one long-term (46 p/m) marketing consultant and partial funding for hiring new counterpart technical personnel. Over the life of the project the services provided by this unit will be expected to recover an increasing portion of the cost of maintaining the Center. Loan funds will be used to partially fund three new COAGRO professionals (marketing specialist, agricultural economist, and financial analyst) and one secretary on a declining basis - 100 percent for the first three years, 50 percent for the fourth year and full funding by COAGRO by the fifth year. We anticipate that by the fourth year of the project, the operations of the Center will not require the full time services of an agricultural economist. Loan funds will also finance a modest amount of equipment and supplies. It is assumed that by the end of the project, COAGRO's financial situation will be sufficiently improved so that its operating budget can absorb the cost of maintaining the Center. Finally, it is assumed that the type of services this Center will provide will demonstrate the direct and indirect economic return on investment in marketing research and analysis, and, further, that COAGRO and its members will ensure adequate financing under a combination of budget allocations and service charges to maintain the Center as an integral part of COAGRO's organization.

The Center will respond administratively to the COAGRO General Manager. Under the project, a Market Development Sub-committee will be established which will incorporate representatives of the BDA, IPACOOOP, the Senior Project Consultant and the technical consultant to the Marketing Development Center - the latter two as ex-officio members. This Sub-committee will meet monthly, and maintain close coordination with the other project sub-committees, especially the BDA Marketing Credit and Infrastructure Fund Sub-committee. Oversight and coordination between the various sub-committees is considered essential to assure that the marketing development technical assistance responds directly to needs of the cooperatives for identification, analysis and preparation of individual marketing proposals. Once such financing packages are prepared, the Center will assure that processing of loan applications is handled in a timely manner, and that lending procedures incorporated in the financing packages are both adequate and appropriate for the activities in question.

The Marketing Development Center will concentrate on three major areas of activity: a) identification and feasibility analysis of marketing projects proposals; b) assistance in preparation of loan applications and support documents to finance marketing activities; and c) technical and training assistance for marketing activities of member cooperatives.

a) Identification and Feasibility Analysis of Marketing Subprojects.

Preliminary identification during project development of the types of marketing activities to receive assistance from this Center and to be

funded by the Marketing Credit and Infrastructure Fund to be created in the BDA, include the following illustrative activities:

The cooperative Horticola de Boquete is the Panamanian cooperative most active in the marketing of fresh fruits and vegetables. During the project design, a marketing specialist estimated that Horticola could increase its present volume of marketing, as well as assume the key role in organizing pooling arrangements with smaller fruit and vegetable cooperatives, by investing in infrastructure and expanding its working capital.

The cooperative La Libertad de El Valle, is a prime example of a small horticultural cooperative which would profit from involvement in a pooling arrangement with Horticola de Boquete. Currently, only 50 cooperative members are producing vegetables. It is expected that neighboring small farmers would join the cooperative and production would increase if investments were made in renovating some existing facilities, and in securing markets for expanded output of new and current members.

The cooperative Juan XXIII of Santiago, is the largest COAGRO affiliate providing multi-services to over 1,400 small farmer members. With assistance from this project, the co-op could dramatically expand its marketing operations by upgrading its processing and marketing facilities for poultry, hogs and cattle.

The Agricultural Cooperative La Santeña is one of the country's largest grain producing cooperatives. The organization could greatly expand its production and begin marketing producer output if storage requirements and working capital needs were met.

The cooperatives, Union Agricola de Chitre and Union de Anton, are much smaller grain producing cooperatives than the above-mentioned. Potential feed grain marketing volume for each is estimated at 10,000 cwt. per year. Both of these coops would benefit from the expanded marketing outlets stimulated by the Santeña subproject.

The cooperative Apicola, illustrates the kind of impact which a relatively small investment can have on the development of an effective marketing system. Apicola is a beekeeping cooperative composed of 70 members disbursed throughout the country. The cooperative primarily coordinates the distribution of beekeeping supplies nationwide. The purchase of some processing equipment and marketing working capital would enable Apicola to expand into major marketing operations to the benefit of the entire industry.

Detailed descriptions of the above sub-projects are contained in Annex II, Exhibit G.

b) Assistance in Preparation of Loan Applications and Support Documents to Finance Marketing Opportunities.

To the degree warranted, Marketing Development Center staff will direct and assist cooperatives in preparing proposals for financing consideration by the BDA and other potential lenders. The development of this expertise within the Center and eventually within the coops themselves, is critical to the timely and orderly review and approval of loan requests by the BDA.

Under Loan 041, by default, the BDA became directly involved in the design and preparation of funding proposals from the cooperatives; many of which required major revisions. For the most part, the cooperatives lacked experience in preparing and presenting quality proposals for BDA review. Likewise, the BDA did not have the expertise to review and improve many of the proposals submitted. As a result, there were extensive delays in processing and reviewing loan applications, as well as considerable and often inappropriate changes in the proposals by the time final approval was granted.

Having learned from this previous experience, the proposed project assigns direct responsibility to the Marketing Development Center for providing assistance to the cooperatives in the preparation and presentation of marketing proposals. In turn, BDA loan analysts will concentrate on evaluating the financial soundness of each proposal and the capabilities of the intended borrower, leaving proposal design and preparation work to the Center. This arrangement should result in more efficient allocation of responsibility and ensure better, more timely service to the cooperatives.

c) Implementation Assistance for Marketing Activities of Member Cooperatives.

The third major area of the Marketing Center activities will be implementation assistance. Once investment, market entry and financing decisions are made, the cooperatives will need specialized implementation assistance. The Center's staff will provide continuing help in this area, both on the production end, by advising on quality controls, appropriate packaging, and coordination of joint shipments; and on the market end, with market ideas, contacts, contracting, and evaluation of results. Six to eight months of short-term commodity and processing specialists will be contracted with loan funds to assist with the design, installation, and initial operation of needed facilities and for "trouble shooting" during the early operational phases of new marketing ventures.

In addition, the Marketing Development Center will provide advisory assistance in techniques for development and dissemination of market information but will not attempt to establish a centralized service for gathering or providing such information directly. For example, the Horticola vegetable marketing cooperative in Boquete has an office and receiving station in Panama City which gathers daily price and demand information for commodities which the cooperative sells. This information is transmitted

twice daily to the Boquete home office by telephone. Whereas, the Marketing Development Center may assist the cooperative in interpreting this information, the Center would not assume a direct marketing role on a routine basis. However, in the development of production strategies to extend market supply seasons and improve cooperative member shares in such markets the Center may become directly involved in analyzing supply, demand and price trends of the commodities in question.

4. Marketing Credit and Infrastructure Fund

A Marketing Credit and Infrastructure Fund will be created within the BDA with \$5 million of project loan funds and \$2.5 million in GOP counterpart contributions. The Project Coordinating Committee will ensure resource maximization of these funds and those existing in the related Cooperative Development Revolving Fund established under AID Loan 041 for COAGRO and the cooperatives participating in the new marketing project by complementing and coordinating lending from both sources. Techniques being considered to maximize use of these resources for working capital financing include increasing the use of purchase orders for inputs bought by cooperatives from COAGRO, with payment transferred directly from the BDA to COAGRO, thereby avoiding direct involvement by cooperatives in the payment transaction.

Additionally, the BDA will review other resources (from AID or other donors) available to the BDA for production credit financing. Success of the production credit lending activities under Loan 041 has increased both the number of cooperative member producers and the level of demand for production credit per producer. The emphasis of this marketing project will be on market related aspects of the cooperatives' service activities including, where appropriate, direct COAGRO assistance in marketing.

The Marketing Credit and Infrastructure Fund will make medium and long term credit available to cooperatives and their member producers, who normally are ineligible for alternative financing from commercial banks, due to the risks perceived by many financial institutions in lending to small and medium-size farmers. The Fund will finance new facilities and equipment for marketing and processing of member production, and provide working capital in support of marketing activities. Up to \$ 3.25 million will be provided to finance new facilities and equipment over the life of the Project. Facilities and equipment eligible for financing will include, but not be limited to:

- (a) product storage facilities, including driers and coolers;
- (b) materials handling equipment such as grain augers, hand trucks and roller conveyers;
- (c) field assembly, grading, washing and sacking stations;
- (d) refrigerated trucks and other mobile equipment; and

- (e) processing equipment/facilities for products such as coffee and animal feed.

Up to \$ 4.25 million of the Marketing Credit and Infrastructure Fund will be used for working capital loans related to marketing activities. The types of marketing credit operations eligible for financing from the fund will include but not be limited to:

- a) financing of advance payments and/or purchase of products, such as grains for holding inventory in storage to take advantage of price fluctuations during non-growing seasons;
- b) financing of advance payments on perishables including a minimal transaction gap between time of sale and receipt of payment by producers;
- c) financing of expanded working capital for products such as poultry which are not directly marketable in the form received from the producer, but must go through one or more processing phases; and
- d) financing of expanded working capital where activities related to the processing operation itself may require holding large quantities of the raw product in inventory to take advantage of price fluctuations and also ensure adequate inventory of processed materials for orderly servicing.

In instances like those cited above, the cooperative would not make direct purchase of the products, but would provide the producer with an advance payment equal to approximately 60 to 75 percent of the estimated final sale price. Adjustments would be made periodically, discounting from payments to producers those costs applicable to handling, processing, storage and transportation. In addition, it is anticipated that most cooperatives will discount some percentage or fixed amount per unit or weight of product for capitalization of the cooperative's own marketing credit fund.

In the development of marketing systems for some products such as poultry and swine, marketing credit will incorporate financing of some of the producers' initial investment in facilities and inputs (broiler houses, pig pens and feeder pigs) necessary to bring the chickens and pigs to market weight. Such financing becomes necessary and is appropriate when the cooperative itself is involved in the processing stage of the marketing cycle. Financing arrangements for these types of investments will involve contractual commitments by the producers to deliver total production to the cooperative for processing and subsequent marketing.

Loans for new facilities will be available on terms and conditions appropriate to the expected life of the facilities being financed, ranging from three years for cooling equipment to as long as 15 years for buildings and similar facilities. Repayment schedules will include appropriate grace periods to permit the development of adequate income flows

from investments in such facilities. In general, mortgage requirements beyond liens on the facilities or commodities being financed will not be demanded in order to maximize the cooperative's ability to borrow so as to meet its other financing needs. However, cooperatives will be required to establish procedures for increasing member equity in the cooperative and in the cooperative's own marketing fund, where appropriate, in an amount equal to an established percentage of the credit loan. Loans should also include a covenant that patronage refunds will not be paid by the cooperative in cash to the producer member until the cooperative's membership capital base and other special accounts such as marketing funds reach levels equal to from 10 to 25 percent of the cooperative's external financing requirement.

The Fund will extend loans to cooperatives at a cost equal to current market rates of interest in the agricultural sector. The allocation of interest points within the spread, between an established administrative cost to the BDA as administrator of the fund and the stated rate at which the funds are to be loaned, will include designation of some percentage points for capitalization of special funds to be established for strengthening specific aspects of the cooperative system. Therefore, the Fund itself within the BDA will not retain all of the interest income to be received by application of market rates of interest, but a certain amount will be transferred to a special capitalization fund within COAGRO and the cooperatives.

By lending at market rates of interest for marketing subprojects (13% in December 1983), the spread between an established BDA administrative cost and the stated market rate will be considerably greater than under the Loan 041 Revolving Fund in which a five percent interest spread had been applied. It is considered more critical for strengthening the cooperative sub-sector to establish capitalization and other funds within COAGRO and within the participating cooperatives, than to allocate the full interest spread to increasing the capitalization of the fund itself. Strengthening the financial base of cooperatives over the life of the project should have a greater impact on their financial stability as well as their ability to borrow from sources other than the BDA.

AID will negotiate an administrative charge of 2 percent with the BDA. Beyond this administrative charge, a one percentage point bad debt reserve, plus a maximum of four percentage points will be set aside for further capitalization of the fund. The remaining points will be allocated to the capitalization funds within COAGRO and the cooperatives.

a. Capitalization Fund

Member capitalization in cooperatives and the capitalization by those cooperatives in COAGRO, are generally weak and contribute to the disproportionate levels of external funding required by the sector for expansion and strengthening of member services. The modest level of member equity contributions, in turn, has made most commercial banks reluctant to lend to cooperatives, since the clients of private sector lending institutions are expected to demonstrate significant owner/member equity and direct

participation in the financing of any activity proposed for external financial assistance. Most cooperatives have low initial membership capital requirements, and beyond that additional capitalization is usually tied to a percentage of sales and a percentage of net profits. Most cooperatives retain that portion of net profits which would be available for distribution to members as patronage refunds proportionate to the member's use of the cooperative's services, with such retentions applied to capitalization in the name of the individual member.

Private sector banks which lend to cooperatives usually require borrowers to add to their member capital shares a specific percentage of the value of each loan. Since this fund will be established in a government bank which is not the property of the borrowers, the cooperatives cannot be expected to capitalize the fund. However, lending operations from the fund can be directed to assist and strengthen capitalization of the cooperative system, both at the level of the primary cooperatives which borrow from the fund and at the federation level.

Up to three percentage points of the interest charged at market rate to primary cooperatives for market credit and for financing of infrastructure and equipment will be transferred by the Fund to COAGRO for subsequent transfer to individual cooperatives under pre-established conditions, and subject to COAGRO supervision and reporting to the Project Coordinating Committee. The funds will be assigned to a special capitalization account in the cooperative.

Additionally, up to three percentage points would be transferred by the Fund to COAGRO for capitalization by borrowing cooperatives, in COAGRO. Amounts transferred to COAGRO under this concept would be assigned to the borrowers' membership capital shares in COAGRO.

b. Technical Assistance for BDA

Analysis of loan applications to the Marketing Credit and Infrastructure Fund will be based on an assessment of (1) the proposal's technical and financial feasibility; (2) the borrower's financial stability; (3) the risks involved; and (4) the borrower's capability to manage the proposed investment. This procedure applies to both requests for fixed capital and working capital loans. At present, BDA staff have limited experience in loan appraisals requiring the degree of specialized technical analysis contemplated under the project. The BDA also has limited experience with the types of working capital lending including lines of credit and infrastructure investment lending planned for this project for marketing-related activities. To be effective, lending must be timely, and repayment conditions and schedules tailored to the cash flow requirements of the proposed investments.

A grant funded long-term (22 p/m) technical consultant will be financed under the project to train staff assigned to administering the Fund. Training courses will be given in financial analysis, lending concepts

and repayment scheduling. The BDA counterpart to the long-term consultant will be the Assistant Manager for Group Credit who is responsible for all cooperative credit programs, including the management of reflows from the Cooperative Development Fund established under Loan 041. Project loan funds will be utilized to purchase one vehicle for BDA's Cooperative Credit Department in Panama and three vehicles for the regional cooperative credit personnel in the field.

A Marketing Credit Sub-committee will be established under the Project Coordinating Committee to provide guidance in the proper use of the Fund, and to coordinate its financing with the two other major project components, Marketing and Management Development. The Credit Sub-committee will include representatives from COAGRO and IPACCOOP as well as the Senior Project Consultant and the technical consultant to the BDA, since a primary objective of the Sub-Committee will be to assure that loan applications to the Fund are processed in a timely manner. The AID consultant team will serve as ex-officio members. The Sub-Committee will meet once a month, unless a backlog of loan applications requires more frequent meetings. Technical advisors to the Marketing Development Center and the Management Development Center may be invited to participate in Sub-Committee meetings as additional resource persons. BDA regional credit supervisors assigned to work with the Fund will be invited to report to the Sub-Committee in session at least four times a year. In addition, in each geographic region where the BDA has cooperative credit supervisors assigned, a working committee will be formed by the credit supervisor, COAGRO's regional manager, and the IPACCOOP regional training staff person. These committees will review field level operations and coordination on a monthly basis.

IV. PROJECT ANALYSES

A. Institutional Analysis

Implementation of this project will be the responsibility of IPACOOOP, COAGRO and the BDA. Each of these institutions has received previous assistance from USAID/Panama and is receiving continued support from the GOP for its activities. IPACOOOP receives 95 percent of its budget from the GOP to carry on its coordination and promotional activities. The GOP also provides a guaranty for short-term external financing to COAGRO. The BDA is the GOP-sponsored financial institution responsible for providing agricultural credit to small and medium size farmers, including cooperatives.

Each of these three institutions directs assistance to cooperatives and their members. IPACOOOP assumes responsibility for providing assistance in organizing, lobbying, accounting, auditing, legal matters, promotion and technical assistance. COAGRO distributes input supplies, mixes feed, manufactures fertilizer, and provides limited marketing assistance to some member cooperatives. The BDA has a Cooperative Credit Program which provides agricultural credit to cooperatives and, in some cases, lends directly to individual coop members through their cooperatives.

Cooperatives were selected as the organizations best able to utilize project assistance aimed at strengthening the agricultural marketing system. This is largely because of the important progress made by cooperatives in the agricultural sector by recent years as well the fact that 12 percent of Panama's farmers are members of cooperatives. This constitutes the largest institutional grouping of producers in agriculture. As previously stated cooperative farmer production is presently estimated at \$81.6 million annually or 18.2 percent of the agricultural sector GNP. (See Section II-C-1, The Role of Cooperatives in Agriculture).

Role of COAGRO

COAGRO was selected as the cooperative federation to work with in this project because it is the largest, private, agricultural federation in Panama. The 8,000 farmer members of COAGRO's 30 affiliates represent approximately 9 percent of the countries' farmers. In addition, COAGRO and its affiliates do business with individual non-members and non-member cooperatives. This constitutes approximately 50 percent of COAGRO's total volume of business. Thus, the actual number of farmers served by COAGRO and its affiliates is far larger than the 9 percent of the country's farmers who are members. If COAGRO affiliated cooperatives are able to offer improved marketing services as a result of this project, many new farmers in the service areas are expected to join the COAGRO system.

From its founding in 1970 until the present, COAGRO's sales volume has steadily increased to its present level of almost \$12 million annually. Almost all of its sales are farm supplies which it sells through its three regional offices and their associated warehouses. COAGRO now sells two-thirds

of the fertilizer in the country, excluding that applied to bananas and sugar cane. The farmer members of COAGRO cooperatives are involved in the production of virtually every major agricultural commodity produced in the country. Some COAGRO cooperatives are already involved in limited marketing of their members output such as poultry, pork, beef, grain, coffee, cocoa, fruits and vegetables. Building on the strengths of the existing COAGRO system is viewed as a more cost-effective method of strengthening the agricultural marketing system, than either starting a new organization or providing additional assistance for Panama's principal public sector marketing organization, IMA, to expand its marketing operations into non-grain crops.

However, COAGRO has deficiencies which will have to be remedied before it can qualify as a strong agricultural marketing service institution. The most obvious problem is its weak financial condition. Because of a lack of a clear policy on extension of credit, inadequate collection of accounts receivable and the tendency of cooperatives to use the supply credit on purchases from COAGRO as a substitute for working capital, COAGRO continues to have severe cash flow problems. (See Annex II, Exhibit H, Detailed Financial Analysis of COAGRO).

A new board of directors, installed in April 1982, has initiated studies directed both at remedying COAGRO's immediate cash flow problem and its broader organizational problems. Administrative areas which are under review by COAGRO's board and management include pricing policies, credit policies, collection procedures, purchasing policies, inventory control, personnel realignment, staff reductions, restructuring of the federation, reorganization of operations and establishing profit centers. Technical assistance was secured through the Volunteer Development Corps, ACDI and CLUSA project design teams, and the board is now reviewing recommendations made for improving COAGRO's internal operations.

Discussions with the COAGRO directors and general manager during the project design period led to the conclusion that prompt remedial action and strict monitoring of future operations are required. Some corrective steps have already been taken to deal with the situation. A recent personnel realignment resulted in a 16 percent reduction in COAGRO staff. An ineffectual Cooperative Education Department has also been eliminated. Further personnel cuts may result from a management study being conducted on operations.

Under this project a Marketing Development Center will be established at COAGRO to assist cooperative affiliates in the marketing of their commodities. This will supplement and strengthen the service role COAGRO has been filling in providing market contacts, coordinating sales, providing documentation, etc. The Marketing Development Center will initially be subsidized from project funding for new counterpart technical personnel. Over the life of the project COAGRO will gradually assume responsibility for maintaining the Center. By expanding and improving services COAGRO and its affiliates are expected to attract new members.

The administrative and organizational changes which are underway and or being considered within COAGRO are expected to significantly improve the financial and managerial condition of COAGRO to a point where the organization can assume financial responsibility for the Center. The Senior Project Consultant will be available to assist COAGRO during its reorganization and restructuring.

The Role of the BDA

The BDA is an independent agency established in 1973 for the purpose of financing the credit policy designed by MIDA for the agricultural sector. It is empowered to grant financing for agriculture, livestock and agroindustrial activities to small and medium-scale producers, farm organizations and cooperatives. It is effectively the only financial institution in the country which disburses any significant volume of credit to small farmers. The BDA is the organization which administered the revolving fund under the AID-financed \$8.1 million Rural Cooperative Development Loan (041). During the previous project a special loan window was opened and staff added to work with cooperatives. This window was later raised to the level of a Cooperative Credit Department.

In the agricultural sector short-term commercial credit comes from a small number of private banks (Bank of America, Chase Manhattan Bank, Banco Fiduciario and Banco de Colombia). These banks prefer to lend amounts greater than \$200,000. Loans are generally for large scale commercial production, processing and marketing of such crops as sugarcane, rice, coffee, and livestock. Commercial banks generally require substantial collateral for their loans. Medium and long-term credit is supplied almost exclusively by the official development banks, the BNP and BDA. The BNP is serving as the main conduit for World Bank agricultural sector loan funds, and is loaning to medium and large scale farmers for livestock, coffee, cocoa, oil palm and bananas.

The BDA was selected as the financial institution for this project for several reasons. It is the largest financial organization which lends to small farmers on a major scale. In 1981, over 90 percent of the loans granted were for amounts less than \$10,000. Through its Cooperative Credit Department field staff the BDA has established close working relationships with cooperatives at the regional and local level. AID experience in working with the BDA on the Rural Cooperative Development project was generally favorable and the attitude of the officers of BDA has remained constructive. In 1981, it was estimated that the delinquency rate for loans under Loan 041 was less than 3 percent.

The BDA is currently lending about \$48 million per year including about \$2 million which is being channelled to cooperatives through 041 loan reflows. Approximately 25 percent of the BDA loans are granted to groups, including cooperatives and asentamientos.

The staff of BDA comprises about 750 persons of whom approximately 460 are attached to regional and local branch offices. The Cooperative Credit Department has a professional staff of 20, including analysts and field supervisors.

Functions within BDA which will have to be improved in this project are the slow pace of loan processing and the overly strict repayment schedules required on some loans. Technical assistance will be provided to the BDA under the Marketing Project to upgrade the skills of the Cooperative Credit Department within the Group Lending Division. Skills to be refined include lending concepts and criteria related to marketing activities, analysis of applications, and credit supervision. The 20 staff members of the Cooperative Credit Department will receive this training.

A secondary benefit of this technical assistance is anticipated to accrue to the BDA Group Lending Division's extensive lending program to the asentamientos. Over the years these GOP-sponsored settlements have been receiving subsidy support and thus have been subject to different lending criteria than the cooperatives. However, the GOP has begun to emphasize that investment programs to asentamientos be both financially viable and recuperable. Some such settlements have even been encouraged to become cooperatives, however, it is not anticipated that many new cooperatives will be formed among asentamientos during the life of this project. The project will reinforce a more business-like approach to all future BDA lending.

It is expected that the BDA will be able to successfully manage the loan portfolio under this project. The project funded credit consultant and other short term technical assistance will provide the necessary input for the BDA to integrate project funds into its cooperative portfolio, and to finance the cost of administering these funds beyond the end of the project with a reasonable interest spread.

The Role of the Autonomous Instituto Panameño de Cooperativas (IPACOOOP)

From the period of initiation of AID Loan 041, the government's Cooperative Department of MIDA, then DENACOOOP, has expanded to the level of an autonomous Institute, IPACOOOP, with a staff of approximately 140 persons operating from a central office in Panama City and four regional offices.

In addition to IPACOOOP's legal, registry and audit responsibilities for all cooperatives, and the more general responsibilities of representing the cooperative sector within the government's planning mechanism, IPACOOOP also has a responsibility for promotion (organizational assistance to new cooperatives and cooperatives-in-formation), training and technical assistance. IPACOOOP maintains accounting and training personnel in all of its regional offices.

With the evolution of IPACOOOP from a department within MIDA to the status of an autonomous institute, a change directly sought by the

agricultural cooperatives and cooperative credit unions, the cooperatives also accepted the financial obligation to support the institution's annual operating budget in the amount of 5 percent of net profits. With this direct "tax" on their own operations, the cooperatives now expect increased, more effective services from IPACOOOP, especially in areas of accounting, audits and management training.

Demand for IPACOOOPS's services will increase because COAGRO has terminated its former education department. COAGRO will continue some on-going assistance in accounting upgrading of cooperatives with grant funding from the Interamerican Foundation. This assistance, in combination with IPACOOOP assistance in accounting and audits, is providing more effective training in this important area than was possible in the past.

In general, the business skills of both management and staff throughout Panama's cooperative movement are being over-taxed by the rapid expansion of cooperative operations. Before most agricultural cooperatives can effectively expand their line of services, business skills will have to be improved in the areas of strategic planning, evaluation, accounting, scheduling, personnel management, finance, supervision etc. IPACOOOP is presently providing assistance to agricultural cooperatives in these areas but these programs have been developed for cooperatives that provide only limited services such as supervised credit and/or input marketing. IPACOOOP's training programs and support services will need to be upgraded in order to meet increased future training and support needs of agricultural cooperatives.

This Loan activity will create an improved capacity in IPACOOOP to train and support agricultural cooperatives in the following areas: a) developing plans and evaluation systems; b) improving cost accounting and inventory control systems; c) improving financial reporting, credit analysis and control systems; d) developing mechanisms to promote capital formation; and e) developing the administrative and financial management skills of cooperative directors and committee members to enable them to carry out their supervisory responsibilities.

The project emphasis on training materials development (case study method) and training methodology, supported by external technical assistance (three person/years), is expected to create a capacity in IPACOOOP to carry on this more advanced level of training beyond the life of the project, replacing the less business-oriented, less effective training now being conducted.

Coordination Among Institutions

Overall coordination and direction for the project will be the responsibility of the Project Coordinating Committee. (See Section III-D Project Components). Representatives of IPACOOOP, COAGRO, BDA and AID will coordinate activities through the Coordinating Committee and Sub-Committees concerned with marketing, management and credit. Day to day coordination and administrative management of the project will be the responsibility of a project management office established in IPACOOOP. The head of this office

will report directly to the Director of IPACOOOP who is the chairperson of the Project Coordinating Committee.

B. Financial Analysis

The financial viability of COAGRO and the individual cooperatives must be considered since COAGRO will be expected to assume responsibility for the recurrent costs of the Marketing Center by the end of the project. Individual cooperatives will take on direct marketing responsibilities which will be facilitated by loan funds. Loan funds will be disbursed by the BDA and guaranteed by the GOP. Since the loan funds are guaranteed the ability of the BDA to analyze projects, disburse funds, supervise loans and collect accounts receivable is of prime importance. Similarly, IPACOOOP's budget is underwritten by the GOP so its ability to administer and support a Management Development Center is critical to this project.

COAGRO

COAGRO continues to suffer from cash flow problems as a result of accumulated delinquent accounts receivable and undercapitalization. The board of directors has ordered a complete evaluation of COAGRO's policies and operating practices (see Section IV-A Institutional Analysis) and is taking steps toward correcting the problem. In November 1982 the GOP made a payment of \$1 million for accounts overdue which were the result of government programs. An additional \$1 million is due to be paid and negotiations are underway to reach settlement in the first semester of 1984.

An analysis of COAGRO's financial position (See Annex II, Exhibit H) shows short term debt and interest payments accelerating rapidly in the last few years and this, by itself, is sufficient to account for the cash flow problem. Recent declines in interest rates which COAGRO has been charged on external financing are allowing COAGRO to increase its profit margin and, in 1983, to also increase the allocation to the bad debt reserve.

COAGRO's long term financial viability however, depends on restructuring and reorganizing aimed at producing long term savings and profitability. As an integral piece of COAGRO's plan for restructuring the federation, the board chairman has agreed, in consultation with AID and the project design team, to establish a special oversight committee at the level of the board of directors which will include representatives from the various institutions whose financial and other support are vital to the rehabilitation of COAGRO. This will include representatives from the BDA; from IPACOOOP (representing the GOP as guarantor for COAGRO's external credit); from AID; and various private sector banks. The oversight committee would meet periodically (perhaps once a quarter) to review progress on specific aspects of COAGRO's restructuring and on-going operations. The committee would also provide COAGRO's board and management with access to additional high calibre management expertise not presently available to the board in its normal deliberations.

AID will further assist the COAGRO restructuring process with grant funding of 12 person months of external technical assistance over the life of the project. This funding will permit the COAGRO board chairman, together with the oversight committee and the general manager to receive highly specialized short-term assistance to analyze and advise on management, financial and operational aspects of the restructuring, and the anticipated expansion of COAGRO's business operations.

As a result of reforms presently being undertaken or contemplated by the COAGRO board and management, it is expected that COAGRO's income and balance statements will improve considerably during the project, as is shown in tables in Annex II, Exhibit H. It is expected that COAGRO will easily be able to assume the recurring costs associated with continuation of the Marketing Development Center.

BDA

The BDA would be responsible for granting loans on terms and conditions decided by the Project Coordinating Committee, made up of representatives of COAGRO, IPACOP, BDA and AID. (See Section III-D, Project Components). These terms and conditions must be put into force by the BDA before the first disbursement of AID loan funds.

Under AID Loan 041, BDA demonstrated its capacity in designing and executing work plans, as well as promoting and appraising credit applications through its branches, regional offices and headquarters. However, because marketing loans have not been administered through the Cooperative Credit Department, training and upgrading of skills will be required as part of the project.

The BDA has a good record in recovering loans made under the 041 loan program. In mid-1981, at the time of the final evaluation of loan 041, less than 3 percent of loans extended under the credit program were delinquent. In the overall portfolio past due accounts have been consistently held to less than 10 percent of the total portfolio. Accordingly, the conclusion is that the delinquency rate of the BDA amounts to a level that can be considered better than normal in an LDC financial institution.

Loan funds to be provided under this project represent approximately 6 percent or less of the BDA's loan portfolio at any time. In terms of loans made during any given year, funds from the Marketing Project are not expected to be more than 10 percent of the value of new loans.

The number of persons required to analyze and supervise the marketing loans is expected to be small. This is because the Marketing Development Center in COAGRO will be assisting and supervising the analysis and preparation of individual marketing project applications. Having well conceived and prepared loan applications will reduce the administrative burden on the BDA. Because the loans are to be extended to cooperatives instead of to individuals the average size of loan will be larger and require less

administration and oversight on a per dollar basis. It is expected that the number of cooperatives receiving loans will not exceed 15 during the project and the number of loans disbursed during the life of the project is not expected to exceed 45. Based on previous performance of the average number of loan approvals per staff member in the BDA, administration of marketing funds is not expected to require more than 5 additional staff members. This additional administrative cost is expected to be well below one percent of the marketing loans outstanding at the end of the project. This administrative cost will place no undue burden on the resources of the BDA.

LOANS APPROVED BY THE BDA

<u>YEAR</u>	<u>NUMBER OF APPROVALS</u>	<u>AMOUNT (\$000)</u>	<u>NUMBER OF STAFF</u>
1973	N.A.	16,208	N.A.
1974	N.A.	30,127	N.A.
1975	N.A.	27,678	N.A.
1976	N.A.	32,050	N.A.
1977	N.A.	20,868	605
1978	5,610	23,039	629
1979	6,307	31,683	676
1980	8,274	47,886	761
1981	N.A.	21,913	N.A.

IPACOOOP

IPACOOOP will be responsible for assuming the recurrent costs of the Management Development Center at the end of this project. Since the budget for IPACOOOP is largely underwritten by the GOP, the financial viability is not as much a question as is the ability of IPACOOOP to provide management services which are sufficiently beneficial for the GOP to accept responsibility for their costs.

The evaluation of the Rural Coopertative 041 loan concluded that IPACOOOP is being run by a highly qualified Executive Director who has surrounded himself with a group of dedicated and talented staff. A decentralization process which is underway is intended to establish closer working relationships between IPACOOOP and the cooperatives. The activities planned under this project are designed to complement the strengths of IPACOOOP and upgrade their training program. The program is designed to be application-oriented, with extensive on-the-job training to fit the needs of cooperatives.

The establishment of the Management Development Center in IPACOOOP will receive project funding on a declining scale over the life of the project. During the fifth year IPACOOOP will assume 100 percent of the recurrent expenses. A significant portion of the expenses of maintaining the Center is expected to be recovered at this stage through tuition charges. The additional cost to IPACOOOP of the Management Development Center is expected to

be negligible since it will be upgrading the skills of existing personnel, replacing existing personnel by attrition and replacing existing training programs. Therefore, it is expected that IPACCOOP will be able to assume financial responsibility for the Management Center beyond the life of the project.

Selected Agricultural Cooperatives

The financial statements of several cooperatives which are already involved in marketing activities and cooperatives which are well positioned to enter marketing were examined during the intensive design analysis. The results of a ratio analysis are presented below. Several other cooperatives were eliminated from immediate consideration because of unfavorable financial statements.

RATIO ANALYSIS OF THE FINANCIAL POSITION OF SELECTED COOPERATIVES

	Cooperativa Juan XXIII	Cooperativa Hortícola de Mercadeo	Cooperativa de P. y S.M. Agrope- cuaria Santeña	Cooperativa de Cacao Bocatoreña
1. Liquidity ratios:				
a) Current ratio:	2.22	1.05	1.23	2.31
(<u>Current assets</u> (Accounts Receivable)				
b) Days sales in accounts Receivable:	14 days	29 days	89 days	402 days
<u>Accounts Receivable</u> sales - 365				
2. Solvency:				
a) Member equity to total assets:	47%	33%	28%	66%
(<u>Member equity</u> (Total assets)				
3. Profitability:				
a) Net profits to total sales:	3.5%	-2%	7%	-3%
(<u>profits</u> (sales)				
4. Efficiency:				
a) Inventory turnover:	6.25 turnovers	5.6 turnovers	6.3 turnovers	1.64 turnovers
(<u>cost of sales</u> (inventories)				
b) Gross Margin to Sales:	13%	6%	17%	52%
(<u>gross profit</u> (sales)				
c) Operating Expenses to Sales:	10%	9%	11%	54%
(<u>operating expenses</u> (sales)				
5. Volume:				
Annual Sales:	B/.4,276,337	B/.2,193,356	B/.1,019,637	B/. 2,358,819

	Cooperativa S.M. La Esperanza de los Campesinos	Cooperativa de P. y S. M. Unión Agrícola de Chitré	Cooperativa de la Unión de Antón
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1. Liquidity ratios:

a) Current ratio: (<u>Current assets</u>) (Accounts Receivable)	2.76	7.5	0.92
b) Days sales in accounts Receivable: (<u>Accounts</u>) (<u>Receivable</u>) sales - 365	5 days	70 days	143 days

2. Solvency:

a) Member equity to total assets: (<u>Member equity</u>) (Total assets)	71%	58%	13%
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3. Profitability:

a) Net profits to total sales: (<u>profits</u>) (sales)	2.4%	10%	2.5%
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4. Efficiency:

a) Inventory turnover: (<u>cost of sales</u>) (inventories)	7.8 turnovers	12.45 turnovers	5.1 turnovers
b) Gross Margin to Sales: (<u>gross profit</u>) (sales)	13%	14%	8%
c) Operating Expenses to Sales: (<u>operating expenses</u>) (sales)	12%	4%	19%

5. Volume:

Annual Sales:	B/.540,864	B/.158,768	B/.125,282
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As the above charts indicate Cooperativa Juan XXIII shows a very sound financial position with all current obligations covered by over 200 percent and very low accounts receivable. Member equity is very high and could safely be leveraged with outside financing.

Cooperativa Horticola de Mercadeo is liquid and solvent. The board has made a decision to keep all of their money working and avoid idle reserves, thus resulting in a lower current ratio. The net operating loss for (the first loss in ten years) the year shown is the result of inexperience in setting prices to be paid to farmers for produce marketed directly by the cooperative. The cooperative recently began direct marketing of fruits and vegetables and its pricing policies have been changed to assure profitable operations. Horticola's low operating expenses are evidence of a tightly managed organization.

Cooperativa de Cacao Bocatoreña reflects a special situation. World market prices for cocoa dropped drastically at the same time that fungus infestation cut production by one-third. The operating loss is the result of a deliberate decision to partially decapitalize the cooperative to cushion the financial blow to members. This situation should be monitored.

La Esperanza de los Campesinos shows an extremely strong financial position and evidence that it is being managed very well. Union Agricola de Chitré is tightly managed, profitable and solvent. Union de Antón is profitable and well run, but the financial situation is not as strong as is desirable.

The general conclusion is that there are several cooperatives which are financially viable and positioned to effectively utilize loans from the Marketing Project. Other cooperatives will require training, technical assistance and in some cases restructuring before they will be able to participate in marketing loans.

C. ECONOMIC ANALYSIS

1. Methodological Procedure Used

This project consists of three basic elements: establishment and operation of a Management Development Center in IPACCOOP for providing management skills training; establishment and operation of a Marketing Development Center in COAGRO for identifying and analyzing the feasibility of specific market activities; and creation of a Marketing Credit and Infrastructure Fund within BDA for both infrastructure equipment and working capital needs.

The project's three main elements were first analyzed separately and then as a group to ensure that each was properly designed and could be justified on its own merit as well as to capture and justify the interrelationship of all three components.

The economic analysis was divided into two parts. The first part examined, from a macro perspective: (1) IPACOOOP separately, to determine whether or not the expenditure would stand alone based on improving returns to existing cooperative activities; (2) COAGRO separately, to determine whether or not the expenditure could stand alone based on improvements in COAGRO's management and services to member cooperatives; and (3) the working capital fund to determine its impact on cooperative incomes.

The second part of the analysis then shifted to the micro level where pre-feasibility studies were conducted on several illustrative marketing activities, to assure there were a sufficient number of potential marketing opportunities to justify the project.

With the IPACOOOP and COAGRO elements already justified as independent components, the potential marketing activities normally would be analyzed on the assumption that IPACOOOP already had improved the individual cooperatives' management capabilities and that COAGRO's capabilities already had been upgraded. On that basis the only additional costs to those normally associated with initiating a specific marketing activity would be those associated with improving the BDA. Using the project design team's estimate that approximately twenty marketing activities would be started during the project's five year period, one-twentieth of the BDA costs then would be allocated to each marketing activity analyzed, spread-over a five year period. With the exception of this additional cost data, each potential marketing activity would be analyzed in the usual cash flow manner to determine if the investment obtained as a credit from the BDA would create enough benefits to generate an acceptable rate of return.

Recognizing, however, that the most conservative approach would be to assume that the elements were not independent and that all benefits from the project would derive from the twenty marketing activities alone, one-twentieth of all project costs, spread over a five year period, were apportioned as an additional cost element to those costs normally associated with each marketing activity. If details of twenty specific activities were known and had had cost estimates for the changes contemplated, it would not have been necessary to obtain an average cost figure. However, since the specific activities will not be chosen until the project begins, a formula applying the average cost figure for the total project was used. While the assumption that the other elements will create benefits beyond the twenty activities does attribute too many costs to each project, it provides for a more conventional analysis and allows one to be reasonably confident (assuming positive results) that each activity analyzed will provide more than just acceptable rates of return.

2. Benefits Resulting from the Project

IPACOOOP. Services will be upgraded to provide assistance to help cooperatives improve their business and financial management practices. The monetary impact of the improved management skills is expected to result from cash savings realized from such improvements as better inventory

controls, more accurate more up-to-date records used in setting prices, and from increased staff technical skills.

COAGRO. The Federation will acquire the capability of conducting marketing research and analysis which will be used to help cooperatives identify, analyze and prepare financial proposals for viable marketing activities. For COAGRO the improved services will produce increased revenues to finance its operations. In addition, COAGRO's general efficiency will be increased by the technical assistance. This improved efficiency should lead to lower costs of existing operations and hence to more profits.

Marketing Activities. One immediate benefit for several of the potential activities will be the capturing of earnings normally going to middlemen such as truckers. Thus, part of the project's benefit will be derived from a transfer or redistribution of income from middlemen to the cooperatives and their small and medium farmer members. Another redistributive effect will occur in those instances where cooperatives are able to hold inventory in storage to take advantage of higher prices during the non-growing season. No attempt is made in this analysis to determine the impact of such redistributive effects on the economy.

Those activities which include some form of improved processing, handling or storage which will increase the amount of production for sale through reduction in losses due to damage and spoilage, and through increased production as cooperative members realize that crop losses are minimized.

By far, one of the most important impacts of the marketing activities to be undertaken will be the increased quality of agricultural products reaching the consumers. While there surely will be a simple transfer of income from some consumers who pay for higher quality produce without increasing overall consumption, the increased quality and guaranteed supply of the produce is expected to increase sales to specialty markets such as restaurants, hospitals, and ship chandlers, and should create additional demand within the general population for fresh, local produce.

To summarize, marketing benefits should accrue to the economy of Panama over time in at least three ways: (a) increased supplies of perishable foods of improved quality, including higher food value, available to consumers and greater profits to food wholesalers and retailers; (b) the cooperative's or middleman's ability to market increased supplies at better quality will result in higher prices paid to the producers; (c) the higher prices received by the producers not only should enhance their incomes directly, but also should stimulate increased production; and (d) this increased production should at the very least prevent prices from rising over time as fast as they otherwise would have.

Ultimately, the success of the marketing activities should stimulate the rate of improving production methods faster than otherwise would have occurred. This phenomenon should result in further increases in producer

incomes from larger production at lower costs, the benefits of which will be shared by the rest of the economy.

The feasibility analysis conducted for each of the marketing activities will examine the supply-demand issue for the products involved to be certain that increased production can be marketed profitably. Studies conducted by the design teams and the IDB indicate that demand will not be a binding constraint for the types of marketing activities anticipated under the project.

3. Results of Economic Analysis

Following the procedures discussed in detail in the preceding sections, the results of the economic analysis are presented under the four headings -- IPACOOOP, COAGRO, Working Capital Fund, and Marketing Activities.

a. IPACOOOP

CLUSA's examination of the state of management practices in the Panamanian cooperatives and its experience worldwide with management improvement activities similar to those contemplated in this project indicate that improved management skills such as those described earlier can increase cooperative net profits by at least 5-10 percent of the value of production. At just one and a half percent and, considering only the cooperative farmers' production which is marketed through the cooperatives (approximately \$16.4 million of \$81 million), such an investment would produce a 29 percent internal rate of return. The Mission is thus satisfied that income benefits accruing to the cooperatives as a result of better financial management of existing operations alone justify expenditures planned for this activity.

b. COAGRO

As with the IPACOOOP element, CLUSA personnel examined the current state of COAGRO's management efficiency and concluded that the set of technical assistance, equipment and personnel support planned for improving COAGRO's management capabilities would produce cost savings of at least 5 percent on the existing operations alone. The economic analysis indicates that at only a 2 percent reduction in costs of current operations, the planned investment on this element will produce an internal rate of return in excess of 100 percent. At this high value the Mission is satisfied that the cost savings on existing operations alone will justify the expenditures for this activity.

c. Working Capital Fund

While the working capital fund will have many uses, its potential use for renting storage facilities to take advantage of higher product prices later in the year illustrates how the private sector can replace a government agency function, while increasing farmers' profits.

The case study on the proposed grain marketing plans of the Cooperative Agropecuaria Santana, R. L. (COAS) illustrates the point. The cooperative proposes to rent storage facilities for some 9000 tons of corn which it plans to market by 1985. The estimated farm value of this corn is \$2.34 million and the expected market value after five months of storage is \$2.76. This is equal to an 18 percent difference between the farm gate and final market prices of the corn over the five month period. Storage and handling costs excluding interest payments are estimated to be about \$160,000. This leaves a margin of \$260,000.

If the cooperative pays its farm members immediately for their production and stores the goods for 4 months, at a 14 percent annual rate of interest, the cooperative's interest costs would be about \$109,000 ($\$2,340,000 \times 14\% - 12 \times 4$). This leaves a net profit of \$151,000 which is equal to a 6.5 percent increase in the value of the farmers' corn (i.e. 6.5% of 2.34 million). From the farmer's viewpoint, the value of immediate payment versus the usual 90 day delay experienced with IMA is estimated to be about 3.5 percent (3 months at 1.17% per month = 3.5%). At present, farmers who need cash immediately usually have to sell their corn at about 10 percent under IMA's support price. This is consistent with what would be expected based on the above analysis. In short, the total effect of a working capital loan to COAS would be to increase farmers' real margins on corn sales by nearly 10 percent. If the cooperative retains the profits (\$151,000), the average members equity in the cooperative would increase by nearly \$300 (\$151,000 divided by 500 coop members).

It seems reasonable to expect working capital loans to increase effective marketing margins by at least 5 percent on the average. If the total amount of \$4.25 million is continuously loaned out one and one-half times each year, cooperative member incomes would be increased by about \$320,000 annually. Using a total of 11,000 agricultural cooperative and pre-cooperative members, this amounts to \$29 per member per year. However, it is more likely that the working capital loans will be of greatest benefit to roughly 2,000 to 3,000 farmers in the more established cooperatives and would increase their incomes by at least 5 percent annually.

While such a rate of return may seem a little low to justify the use of funds for such purposes, the long-run political benefits of the government reducing its involvement in the private sector are immeasurable, yet surely large.

d. Marketing Activities

During the design and development stages of the project, the Mission applied technical, financial, and economic pre-feasibility analyses to several possible marketing activities. From these pre-feasibility analyses a list of twelve marketing activities have been assembled as strong candidates for financing under the project. Although these marketing activities are only illustrative at this point, there is every indication that a significant number of them will indeed survive the scrutiny of more detailed analysis and,

command a portion of the monies assigned to the credit fund. Supplementing the estimated demand for marketing credit funds will be what the project designers perceive as a flood of marketing activity proposals once the IPACOOOP Management Improvement Center and COAGRO's Marketing Center begin to function.

Under the high cost model which has each market activity bearing one-twentieth of all the project costs, on the assumption that the development of new marketing activities would not be possible without the IPACOOOP Management and COAGRO Marketing Centers and on the unrealistic but analytically simplifying corollary assumption that these two centers do not provide any services to any other activities during or after the project disbursement period, the pre-feasibility economic analysis of the twelve potential marketing activities produces internal rates of return (IRRs) greater than 15 percent for all of them and a range of IRR values from 19 percent to 130 percent.

Based on the high rates of return obtained in the economic analysis for the project elements individually and as a whole, the Mission concludes that there is clear economic justification for the investment in the project as described in this document. See Annex II, Exhibit F for details on the pre-feasibility economic analysis for various illustrative marketing activities.

D. Technical Analysis

A technical team composed of Cooperative League of the United States (CLUSA) and AID staff visited selected cooperatives to determine which organizations would be best able to exploit improved product marketing services and other agribusiness opportunities. Prior consultations with officials of IPACOOOP, BDA, COAGRO and AID narrowed the list to 16 promising cooperatives selected for on-site visits. In the process, the team identified those commodities which showed the greatest market potential and performed pre-feasibility calculations of their financial viability. The team also carried out institutional and organizational analyses which helped determine the relative strengths and weaknesses of each of the cooperatives.

The general conclusion which emerged from these analyses is that inadequate marketing systems are constraining the production and distribution of selected commodities. Incomes of farmers who are producing these commodities could be increased by increasing the efficiency of the marketing system and certain agricultural cooperatives are positioned to contribute to this process. Another conclusion reached is that there is sufficient need for marketing assistance to justify the use of the resources proposed in this project. It was concluded that the economic and financial returns to investments in marketing activities are high enough to be considered as a worthwhile investment. The type of technology being considered is appropriately suited to local conditions and takes into account factor prices, organizational weaknesses and administrative capabilities. There are anticipated externalities that will extend beyond the agricultural

cooperatives targeted, resulting from efforts planned to strengthen COAGRO, the BDA, IPACOOOP, particularly in upgrading managerial skills.

Establishing Marketing Credit Demand

Of the 30 COAGRO cooperatives, eleven were identified as having potential for participation in marketing development activities under the proposed project. The financial statements of ten of those eleven cooperatives were reviewed and subjected to ratio analysis to establish a series of comparisons as to the financial capability of the cooperatives to undertake expanded marketing service operations which would involve additional external financing. (One of the cooperatives is a recently organized to COAGRO affiliate but has not yet produced an operating statement.)

Of the remaining 19 cooperatives, four are large supply operations for highly specialized producers, such as dairy and cattlemen. Nine others are small operations and will have to enter into pooling arrangements with larger cooperatives in order to advance into marketing activities. (One such case is anticipated by the second year of the project). One cooperative is in receivership and two are inactive. Two cooperatives provide input supplies and some production credit to members who produce industrial tomatoes on contract with Nestle, and onions which are marketed almost exclusively with IMA. These two cooperatives have experienced serious management and financial difficulties which would have to be overcome before they could be considered eligible for marketing credit under this project. A favorable combination of these corrective measures, plus changes in the nature of production from industrial to table tomatoes, and improved varieties of onions, could bring these two cooperatives to a preliminary stage of participation in the Marketing Fund by the end of the project. However, this eventuality is not projected in the demand chart. The final cooperative operates a highly specialized plantation and processing facility for African palm oil, with financing requirements beyond the intended scope and objectives of this project.

A chart was prepared showing the estimated demand for financing for marketing credit, equipment and infrastructure over the five year life of the project. The demand chart also includes estimates of marketing credit requirements for the COAGRO feed mill (MIDARINA). The feed mill operation represents an integral part of a coordinated grain marketing program supported by a number of COAGRO member cooperatives.

Total existing demand estimated during this survey was \$6,729,000 over the five years of the project. It is anticipated that additional cooperatives will be upgraded during the project life, through management improvement efforts by IPACOOOP, to the point where they will be prepared to undertake preliminary marketing activities for members and thus be eligible for credit. The demand chart also demonstrates phased entry into processing activities for several commodities such as coffee, which signifies that those cooperatives would be prepared for more advanced stages of financing,

especially for infrastructure and equipment, as the Marketing Credit and Infrastructure Fund moves into its sixth year and beyond.

Annex II, Exhibit G presents commodity analyses of several potential marketing sub-projects which would be undertaken during the early stages of the project. The team found that cooperative expansion into marketing activities would in many instances develop along pooling lines with specific commodities. For example, marketing activities in fresh fruits and vegetables could result in one cooperative coordinating the pooling of production from other cooperatives in a combined marketing operation. In grains, COAGRO's MIDARINA plant will represent a central purchasing point for grains produced by various member cooperatives, and also serve as a common negotiator for storage and/or marketing arrangements with IMA, again representing a group of member cooperatives.

It is expected that four to six sub-projects will be developed for financing with five cooperatives during the first year of the project, plus initial marketing credit for grains marketing related to the COAGRO Midarina feed mill. During the second year of the project, six to seven additional cooperatives would receive financing for new sub-projects, while sub-projects initiated during the first year would require additional financing for expanded marketing and infrastructure. By the third year several of the smaller cooperatives would be eligible for individual marketing credit loans to finance participation in pooling operations with larger cooperatives, and at least one cooperative currently receiving COAGRO management assistance will have been "turned around" sufficiently to become eligible for financing for carefully supervised marketing operations. During the fourth year on-going sub-projects will again receive expanded marketing credit financing, and significant financing of infrastructure and equipment for storage and processing facilities.

During the fourth and fifth years of the project additional cooperatives will have become COAGRO affiliates, and existing smaller cooperatives will have been upgraded and/or integrated for marketing and other services with larger regional-type cooperatives, for a total of at least fifteen cooperatives participating in marketing sub-project financing from the Fund, plus COAGRO with the Midarina milling plant.

PROJECTED CAPITAL REQUIREMENTS AND CAPITAL DISBURSEMENT BY COOPERATIVE

	<u>YEAR</u> 1	<u>YEAR</u> 2	<u>YEAR</u> 3	<u>YEAR</u> 4	<u>YEAR</u> 5	<u>5 YR TOTAL</u>
<u>JUAN XXII</u>						
POULTRY						
Marketing Capital level	168,000	+24,000	+31,000	+22,000	+25,000	
Equipment & Vehicles (1)	140,000	-0-	-0-	-0-	-0-	
Building (1)	50,000	-0-	-0-	-0-	-0-	
Total New Disbursements	358,000	24,000	31,000	22,000	25,000	460,000
BEEF						
Marketing Capital Level	-0-	30,000	+30,000	+30,000	+30,000	
Total New Disbursements	-0-	30,000	30,000	30,000	30,000	120,000
PORK						
Marketing Capital Level	224,000	+22,000	+25,000	+28,000	+29,000	
Total New Disbursements	224,000	22,000	25,000	28,000	29,000	328,000
<u>COOPERATIVA HORTICOLA DE MERCADEO</u>						
FRUIT & VEGETABLES						
Marketing Capital Level	80,000	+125,000	+125,000	+65,000	revolves	
Equipment & Vehicles	707,000	130,000	400,000	250,000	400,000	
Building	135,000	-0-	30,000	-0-	-0-	
Total New Disbursements	922,000	255,000	555,000	315,000	400,000	2,447,000
<u>COOPERATIVA DE P. y S.M.</u>						
<u>AGROPECUARIA SANTEÑA</u>						
GRAIN						
Marketing Capital level	200,000	+127,750	+127,750	+127,750	+127,750	
Total New Disbursements	200,000	127,750	127,750	127,750	127,750	711,000
<u>COOPERATIVA DE CACAO BOCATOREÑA</u>						
CACAO						
Marketing Capital Level	205,000	+31,000	+35,000	+41,000	+46,000	
Total New Disbursements	205,000	31,000	35,000	41,000	46,000	358,000

(1) Equipment, vehicles and building investment will be shared with the beef and pork processing program. In this budget total investment is listed only under the poultry operation.

	<u>YEAR</u> <u>1</u>	<u>YEAR</u> <u>2</u>	<u>YEAR</u> <u>3</u>	<u>YEAR</u> <u>4</u>	<u>YEAR</u> <u>5</u>	<u>5 YR TOTAL</u>
<u>COOPERATIVA DE S.M. BLANCA</u>						
<u>FLOR</u>						
COFFEE						
Marketing Capital Level	50,000	+25,000	+25,000	(revolves)	(revolves)	
Processing Equipment	-0-	-0-	400,000	-0-	-0-	
Total New Disbursements	50,000	25,000	425,000	-0-	-0-	500,000
<u>COOPERATIVA S.M. LA ESPERANZA</u>						
<u>DE LOS CAMPESINOS</u>						
COFFEE						
Marketing Capital level	-0-	40,000	(revolves)	(revolves)	(revolves)	
Processing Equipment	-0-	50,000	-0-	-0-	-0-	
Vehicles	-0-	-0-	-0-	40,000	-0-	
Total New Disbursements	-0-	90,000	-0-	40,000	-0-	130,000
<u>COOPERATIVA de P. y S.M.</u>						
<u>UNION AGRICOLA CHITRE</u>						
GRAIN						
Marketing Capital level	-0-	40,000	+39,000	(revolves)	(revolves)	
Total New Disbursements	-0-	40,000	39,000	-0-	-0-	79,000
<u>COOPERATIVA DE LA UNION</u>						
<u>DE ANTON</u>						
GRAIN						
Marketing Capital level	-0-	40,000	+39,000	(revolves)	(revolves)	
Total New Disbursements	-0-	40,000	39,000	-0-	-0-	79,000
<u>COOPERATIVA AGROPECUARIA DE</u>						
<u>S.M. LA LIBERTAD</u>						
FRUIT & VEGETABLE						
Marketing Capital level	-0-	-0-	40,000	+20,000-	(revolves)	
Equipment & Vehicles	-0-	20,000	-0-	-0-	30,000	
Total New Disbursements	-0-	20,000	40,000	20,000	30,000	110,000
<u>AVICOLA DE CHIRIQUI (2)</u>						
POULTRY						
Marketing Capital level	-0-	132,000	+20,000	+15,000	+17,000	
Equipment & Vehicles	-0-	-0-	70,000	-0-	-0-	
Building	-0-	-0-	40,000	-0-	-0-	
Total New Disbursements	-0-	132,000	130,000	15,000	17,000	294,000

(2) Participation by this cooperative in project financing would require a management contract with COAGRO and close coordination by COAGRO and the BDA on working capital financing.

	<u>YEAR</u> 1	<u>YEAR</u> 2	<u>YEAR</u> 3	<u>YEAR</u> 4	<u>YEAR</u> 5	<u>5 YR TOTAL</u>
<u>COOPERATIVA APICOLA</u>						
HONEY AND WAX						
Processing Equipment	-0-	10,000	-0-	-0-	-0-	
Marketing Capital level	-0-	60,000	+12,000	+14,000	+17,000	
Total New Disbursements	-0-	70,000	12,000	14,000	17,000	113,000
<u>COAGRO MIDARINA PLANT</u>						
GRAIN						
Storage Silos	-0-	120,000	-0-	-0-	-0-	
Equipment	-0-	80,000	-0-	-0-	-0-	
Marketing Capital level	500,000	+200,000	(revolves)	(revolves)	(revolves)	
Total New Disbursements	<u>500,000</u>	<u>500,000</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>1,000,000</u>
GRAND TOTAL	2,459,000	1,406,150	1,488,750	652,750	721,750	6,729,000

E. Social Soundness Analysis

So as to better understand the environment within which the marketing project will operate and the target beneficiaries for whom it is principally intended, a sample survey of three cooperatives was carried out during the process of the project design. The main objectives of the field survey were to (1) sketch a broad socio-cultural profile of small and medium size cooperative farmers, (2) evaluate existing marketing systems utilized by cooperative farmers, and (3) ascertain those factors which would support and/or hinder implementation of the marketing project.

The three cooperatives visited were the Cooperativa Hortícola de Mercadeo located in Boquete, Chiriquí Province; the Cooperativa de Servicios Múltiples (Agropecuaria Santeña), located in Las Tablas, Los Santos Province; and the Cooperativa de Producción Rural, at Bejuco-Chame, in Panama Province. These three cooperatives were selected because they offered a variety in terms of overall size (membership), types of production, volume of business and relative viability as commercial enterprises.

The Cooperativa Hortícola de Mercadeo has approximately 175 members and specializes in the production of vegetables (e.g. potatoes, onions, cabbage, lettuce, celery, tomatoes, etc). This cooperative is an autonomous production marketing association of the larger Cooperativa Agrícola Industrial which has roughly 800 members and concentrates its efforts on sale or production inputs. The membership of Hortícola is distributed between larger producers roughly (20%) whose annual sales are \$10,000 or more, and small-medium farmers (80%), whose sales are \$10,000 or less per year. Sales for the cooperative in 1982 were roughly \$2.0 million.

Cooperativa Agropecuaria Santeña currently has 535 affiliated members and specializes in cattle, grain and some wage table production. Here again, the majority of cooperative members (90%) are in the small-medium category. Yearly sales for the cooperative as a whole are on the order of \$2.0 million or approximately \$3700 per member.

The Cooperativa de Producción Rural is the smallest of the three cooperatives, with only 322 members, and specializes in grain production. Total sales in 1981 amounted to less than \$1.0 million or roughly =3,100 per farmer member.

Despite the differences in size and production, the three cooperatives exhibit many similarities. As a result a general picture of the prospective small-medium farmer target group emerged from the field survey. The typical small producer, who constitutes the majority in all three cooperative associations is a man between 40 to 50 years of age, with little formal schooling (2-4 years), and whose family size (5-7 members) compares with the rural average countrywide. Most small producers interviewed could only estimate their yearly income. In the case of the Boquete vegetable cooperative (Hortícola) incomes vary between \$2,500 to \$5,500 per year, which

is substantially higher than that of non-cooperative farmers (\$1,800) and even higher than that for wage laborers in the same area.

Many small producers come from the "minifundista" or small landholding class. Others started as landless laborers or sharecroppers working for larger landowners. The majority (60%) of the vegetable and grain producers own less than 5 hectares of land. Likewise, the majority of cattle producers in the Cooperativa de Producción Rural have less than 50 hectares.^{1/}

When asked their opinions regarding membership in the cooperatives virtually all the farmers interviewed spoke favorably about it. Most viewed cooperatives as the best way to promote their own and general economic and social improvement. By joining the cooperative they are able to obtain production credit, technical assistance and markets for their production. All those interviewed consider that their incomes have risen considerably due to their membership in the organization. Their family well-being has also improved and their children have access to better education. In several cases, cooperativemembership has contributed to upward socio-economic mobility in the community at large.

Farmers and cooperative employees interviewed in Boquete and Las Tablas cited marketing as the principal obstacle to the further economic growth of their organizations (and by inference their own prosperity). Credit availability was another limiting factor cited by farmers and cooperative officials.

An important consideration, given the views of those cooperative members surveyed, will be to tailor project assistance (e.g., credit, training, technical support) to meet the unique needs of each cooperative. While there are many similarities among cooperatives the differences which exist in terms of type of production, scale of operation, management acumen and marketing requirements suggest an approach towards marketing and other improvements which are suited to each organization.

The general conclusion of the social soundness analysis is that there does not presently exist any significant socio-cultural impediments to the proposed activity. Indeed, the socio-cultural environment among cooperative farmers at this time is highly conducive to success of the marketing activities planned. Furthermore, a majority of the activities will involve the direct participation of small-medium producer members first, as recipients of training, marketing credit and other assistance and, subsequently, as the beneficiaries of the increased income and other economic

^{1/} The sample field survey supports conclusions reached in the final evaluation of AID Loan 041 (Hatch-Lanao) mentioned previously namely, that large numbers of subsistence farmers and small landholders have been absorbed into the cooperative movement in recent years and have greatly improved their economic status as a result.

returns which are likely to be generated from the expanded production-marketing operations within their respective cooperatives. For further details see Annex II, Exhibit I.

V. IMPLEMENTATION ARRANGEMENTS

A. Administrative Arrangements

1. Host Country Implementing Agency

Details regarding host country agency management and coordination of cooperative marketing project implementation are provided in Section III. D, 1. Project Management and Support.

2. USAID Monitoring

USAID/Panama will perform routine monitoring and supervision of the Project during implementation through an AID direct hire staff member assigned by the Office of Agriculture. Project Grant funds will be used to finance a contract with one of the U.S. Cooperative Development Organizations (CDOs) for 54 person-months of services of a technical consultant who will be designated Senior Project Consultant. This individual will assume principal responsibility for the direct, day-to-day support and monitoring of the Cooperative Marketing Project. The Senior Project Consultant will maintain an office in USAID and keep the AID Project Officer routinely informed as to the status of implementation, requesting the USAID Project Officer's direct assistance or that of other Mission staff, as needed. The Senior Project Consultant's specific responsibilities will be to maintain close, regular liaison with the IPACOOOP Project Coordinator and other participating local institutions to ensure that implementation plans, schedules and procedures are followed, that problems are identified and resolved promptly and, in general, to supervise project implementation.

The consultant will be expected to brief USAID staff and management periodically on various aspects of the project and to draft or supply the AID Project Officer with the necessary data for preparing Project Implementation Letters, Quarterly Project Reports, briefings and other formal correspondence. The Senior Consultant will function additionally as team leader of the CDO technical group that will be contracted by AID to provide assistance in support of the Management Development Center, the Marketing Development Center, the Marketing Credit and Infrastructure Fund and for the restructuring of COAGRO.

The individual technical consultants will provide direct assistance to coordinate and with counterpart personnel assigned by the participating institutions responsible for implementing each project component; IPACOOOP, BDA and COAGRO. The consultants will also be furnished office space at their respective agencies. As mentioned, the Senior Project Consultant will maintain his principal office at USAID, but will also function as direct counterpart to the Director of IPACOOOP, the Executive Manager of Group Credit at the BDA, and the General Manager of COAGRO. Grant funds will finance a full-time secretary for the period of the senior consultant's assignment. Logistical support including a vehicle for the consultant will also be grant funded, with the vehicle being turned over to IPACOOOP upon completion of the Project.

In addition, the AID staff person will assist the Contract Consultant and the various participating agencies, as needed, in working out solutions to implementation problems which may arise and have not been overcome through their own efforts. As is required by AID regulations, U.S. Mission staff will be responsible for formal commitment of funds under the project as well as for signing official letters (PILs) etc.

a. Reporting Requirements

Various reports will be required to assist the Mission in monitoring the Project. Responsibility for preparation of the reports will lie with the participating institution designated for executing the specific project activity. However, it will be IPACOOOP's overall responsibility, as principal coordinating agent for the Project, to ensure that the reports are received from the originating agency on a timely basis and are responsive to the pre-established content and format requirements.

1) A monthly report on the status of disbursements, recuperations, pending loan applications and commitments, and delinquent accounts for the Cooperative Marketing Credit and Infrastructure Fund. This report will be prepared by the BDA according to a format established by mutual agreement. This report will be a separate requirement from the monthly report on the status of the Cooperative Development Revolving Fund established under AID Loan 041, but the consultations to be undertaken to establish the format for reporting on the Marketing Credit Fund will also consider appropriate revisions in the reporting format of the already functioning Cooperative Development Project Revolving Fund, to ensure maximum coordination of lending under the two programs, and reporting thereon.

2) A quarterly progress report detailing progress and expenditures by component and activity, based on detailed annual implementation plans. This report will include individual reports on the functioning of the Project Sub-Committee, prepared in each instance by the chairperson of the Sub-Committee.

3) An annual summary of Project accomplishments by component and activity during the preceding twelve month period, or as adjusted appropriately to fit the calendar year. These annual reports will form the basis for the joint GOP/AID mid-project and final evaluations.

B. Implementation Plan

A time-phased Implementation Plan is described in Annex II, Exhibit C.

C. Disbursement Procedures

No deviation from established AID disbursement procedures is anticipated. Materials and equipment procured in the United States or other Code 941 countries will be paid using AID's standard disbursement procedures. Disbursement for local currency costs will likewise be made in an established

manner acceptable to AID. These procedures will be transmitted to the host country Project Management Office through Implementation Letter.

D. Procurement Procedures

1. Source, Origin and Nationality

Goods and services procured and their suppliers under the Loan will have their source, origin and nationality, as applicable, in countries included in Code 941 of the AID Geographic Code Book, and Panama.

Goods and services procured under the Grant will have their source, origin and nationality in the United States, Code 000 of the AID Geographic Code Book and Panama.

2. Equipment Procurement and Technical Assistance Contracting

The only procurement of any major consequence will be the purchase of 14 vehicles and technical assistance services. Because of the many public and private institutions involved in this project and the many complexities and inordinate delays involved in host country contracting, the AID Mission and the participating institutions propose that (RCO/Panama or AID/Washington, as appropriate) handle the purchase of vehicles and perform the technical assistance contracting.

With regard to technical assistance, Cooperative Development Organizations (CDO's) have been deeply involved in the design analysis and strategy formulation for the proposed cooperative marketing activity. Moreover, CDO's have been assisting the Panamanian cooperative movement for the past decade and have initiated an important U.S. cooperative federation to Panamanian cooperative federation linkage. The Mission as well as the Panamanian private and public sector institutions collaborating in this project believe that it is important to reinforce this linkage. This mechanism for transferring U.S. technical and managerial know-how is fully in line with AID's Policy Paper on PVO's and Cooperative Development Organizations.

Although the Mission will issue an unlimited request for technical proposals (RFTP) we believe that CDO's are the best source for providing the technical assistance under this project. This belief is based on the unique characteristic of CDO's and the experience that they have developed in fostering the growth of the cooperative movement in Panama for the past decade. We anticipate that several CDO's would have the necessary experience to provide the required technical assistance.

E. Evaluation Plan

The underlying assumption of this project is that the specific institutional and staff improvements proposed i.e., strengthened/expanded marketing services and upgraded administration and management will result in increased production and raised incomes for small-medium size cooperative farmers. It is further assumed that these same improvements will strengthen the position of those cooperatives assisted as commercial enterprises. These basic assumptions will be tested periodically during the course of the project's 5-year implementation, with a final evaluation planned prior to the PACD.

Early on in project implementation arrangements will be made to secure the services of an evaluation planning/design specialist from AID Washington or elsewhere. This individual will collect the preliminary baseline data, and establish evaluation criteria for the subsequent mid-course and final project appraisals. Funding for the estimated 4 weeks of services will come from either the Mission or AID/Washington operating expense budget.

Annual progress evaluations will be carried out by a joint Panamanian (e.g., COAGRO, IPACOP, BDA) and AID (USAID/Panama, Project Consultants) team, beginning one year following satisfaction of conditions precedent, and at approximately 12-month intervals thereafter. Every effort will be made to schedule the annual progress evaluations so that the results can be integrated with preparation of the yearly operational plans and the implementation process itself. Progress evaluations will (1) assess and analyze actual progress made in achieving planned outputs and objectives; (2) examine the timeliness and quality of inputs provided by the participating host country institutions and AID; (3) identify and recommend remedial action for implementation problems encountered; (4) assess the Project's original design in light of the above factors, to determine if it conforms to reality or requires some alteration; and (5) ensure that actions are taken to incorporate evaluation results into the implementation plan.

An in-depth progress evaluation will be undertaken between 18 months and 2 years following satisfaction of conditions precedent. This mid-course assessment will be done by an outside consultant(s) not directly involved in the project. The purpose of this evaluation will be to obtain an independent appraisal of the project's progress and continued validity at such time that there has been sufficient activity to measure as well as sufficient time remaining to effect any course corrections that may be necessary.

The final evaluation will also be carried out by an outside consultant and will (1) assess the degree to which the activity has achieved its planned purpose and outputs; (2) measure what impact the project has had on the various beneficiary groups; and (3) identify lessons learned for possible application on similar projects in Panama or elsewhere. The final evaluation report will be submitted to USAID no later than 30 days prior to the Project PACD for review and discussion with those host country institutions and officials connected with the activity.

A total of \$100,000 from loan funds is programmed for the Agricultural Cooperative Marketing Project evaluations as follows:

<u>Type of Assessment</u>	<u>Source of Technical Assistance</u>	<u>Estimated Cost</u>
1. Baseline Data Collection/ Evaluation Planning	AID/USDH or outside consultant	\$ 3,000
2. Annual Progress Evaluations -- no additional funding anticipated. Associated costs (e.g., reproduction, in country travel etc) will be borne by USAID and the other participating Panamanian institutions	-	-
3. Mid-Course Progress Evaluation	Outside Consultant(s)	\$35,000
4. Final Evaluation	Outside Consultant(s)	\$62,000

F. Conditions, Covenants and Negotiating Status

1. Conditions Precedent to Execution of Project Agreement

Prior to the execution of the Project Agreement, the Cooperating Country shall, except as AID may otherwise agree in writing, furnish, in form and substance satisfactory to AID evidence that:

(a) it will guarantee COAGRO's external financing during the period of the project.

(b) it has replenished the Cooperative Development Revolving Fund in the BDA for long-standing delinquent subloans under the Rural Cooperative Development Project (525-T-041).

(c) long standing delinquent subloans under the Rural Cooperative Development Project (525-T-041) have been declared bad debts by the BDA.

2. Condition Precedent to First Disbursement

Prior to any disbursement, or the issuance of any commitment document under the Project Agreement, except for short term technical assistance to assist in preimplementation organization or as AID may otherwise agree in writing, the Cooperating Country shall furnish, in form and substance satisfactory to AID, evidence that it has repaid COAGRO the entire outstanding balance of \$1.0 million in delinquent debts.

3. Condition Precedent to Disbursement for Lending Under the Marketing Credit and Infrastructure Fund

Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance lending activities under the Marketing Credit and Infrastructure Fund, Panama shall, except as AID may otherwise agree in writing, furnish in form and substance satisfactory to AID, evidence that COAGRO is taking measures to restructure its organization in order to improve its financial management and general operations, to include revising its cost accounting system to establish cost/profit centers.

4. Covenants

The Cooperating Country shall covenant that, unless AID otherwise agrees in writing:

(i) it will cause COAGRO to provide an adequate reserve for bad debts reflected in its 1985 financial statements and thereafter.

5. Negotiating Status

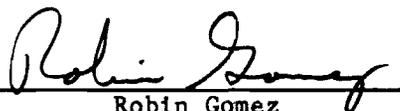
The above specified Conditions and Covenants have been reviewed by and discussed with the participating host country institutions. USAID/Panama is confident that final negotiations can be satisfactorily concluded by allow signing of the Project Agreement during April 1984.

ANNEX I
EXHIBIT A

CERTIFICATION PURSUANT TO SECTION 611(e)
OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Robin Gomez, the principal officer of the Agency for International Development in Panama, having taken into consideration among other factors, the maintenance and utilization of development projects in Panama previously financed or assisted by the United States, do hereby certify that, in my judgment, Panama has the technical capability and the physical, financial, and human resources to utilize and maintain effectively the proposed loan/grant of Eight Million Three Hundred Thousand United States dollars (\$8,300,0000) from the Government of the United States of America to the Government of Panama to strengthen Panama's agricultural cooperative system to better serve an expanded membership with a wider range of services, especially in the area of product marketing.

This judgment is based on the facts presented in this Project Paper and the Mission's previous experience with the cooperative movement in Panama and the implementation experience exhibited by the Autonomous Institute of Panamanian Cooperatives (IPACOOOP), as well as loans to other Government of Panama agencies.


Robin Gomez
Director, USAID/Panama

1/20/84
Date

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5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481; FY 1984 Continuing Resolution. No.
Has it been determined or certified to the Congress by the President that the government of the recipient country has failed to take adequate measures or steps to prevent narcotic and psychotropic drugs or other controlled substances (as listed in the schedules in section 202 of the Comprehensive Drug Abuse and Prevention Control Act of 1971) which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?

2. FAA Sec. 620(c). If No.
assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government?

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3. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No.
4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Libya, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver? No.
5. ISDCA of 1981 Secs. 724, 727 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727 and 730 of the ISDCA of 1981. N/A
6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No.

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7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? No.
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? No.
- (b) If so, has any deduction required by the Fishermen's Protective Act been made?
9. FAA Sec. 620(q); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill appropriates funds? No.
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into Yes.

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Consideration" memo:
"Yes, taken into account
by the Administrator at
time of approval of
Agency OYB." This
approval by the
Administrator of the
Operational Year Budget
can be the basis for an
affirmative answer during
the fiscal year unless
significant changes in
circumstances occur.)

11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No.
12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) Panama is not in arrears in its U.N. obligations.
13. FAA Sec. 620A; FY 1982 Appropriation Act Sec. 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or No.

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abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime?

14. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No.

15. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

No.

16. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Session of the General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed

No.

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to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

17. ISDCA of 1981 Sec. 721. N/A
See special requirements for assistance to Haiti.
18. FY 1984 Continuing Resolution. No.
Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States?

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria. No.
- a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?
2. Economic Support Fund Country Criteria
- a. FAA Sec. 502B. No.
Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such

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b. ISDCA of 1981, Sec. 725(b). If ESF is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.?

N/A

c. ISDCA of 1981, Sec. 726(b). If ESF assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile has made significant progress in human rights; (2) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier?

N/A

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5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT? Yes.

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project;
(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

a) The project was included in the AID FY 1984 Congressional Presentation as a proposed \$6.0 million loan/\$1.5 million grant with an initial obligation in FY 1983.

b) FY 1984 OYB levels had not been received at drafting stage of the project paper.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,00, will there be

-2-

- (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? Yes.
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? N/A
4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.) N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? Yes.

-3-

6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
- No.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
- The project is designed to strengthen Panama's agricultural cooperative system, which will in turn encourage private initiative, competition, and improvement of technical efficiency in agricultural commerce. There will be no impact on free labor unions.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- Project is targeted for Panamanian private sector. U.S. private sector is free to participate with Panamanian cooperatives in joint venture, but this is not expected.
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9. FAA Sec. 612(b), 636(h);
FY 1982 Appropriation
Act Sec. 507. Describe
steps taken to assure
that, to the maximum
extent possible, the
country is contributing
local currencies to meet
the cost of contractual
and other services, and
foreign currencies owned
by the U.S. are utilized
in lieu of dollars.
- Not applicable. The currency
used in Panama is the U.S. Dollar
although it is denominated a
"Balboa". There is no U.S. owned
local currency.
10. FAA Sec. 612(d). Does
the U.S. own excess
foreign currency of the
country and, if so, what
arrangements have been
made for its release?
- N/A
11. FAA Sec. 601(e). Will
the project utilize
competitive selection
procedures for the
awarding of contracts,
except where applicable
procurement rules allow
otherwise?
- Yes
12. FY 1982 Appropriation Act
Sec. 521. If assistance
is for the production of
any commodity for export,
is the commodity likely
to be in surplus on world
markets at the time the
resulting productive
capacity becomes
operative, and is such
assistance likely to
cause substantial injury
to U.S. producers of the
same, similar or
competing commodity?
- No.
13. FAA 118(c) and (d).
Does the project comply
with the environmental
procedures set forth in
AID Regulation 16? Does
- Yes.
- 11

the project or program take into consideration the problem of the destruction of tropical forests?

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N/A

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and

(a) (b) (c) (d) Yes

The rationale for this project is to develop a mechanism through which small and medium size rural farm families can more fully participate in Panama's market economy. The GOP and USAID Panama have identified the rural cooperative system as the most appropriate mechanism through which to achieve this objective.

(e) no effect.

-6-

otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

Yes.

c. FAA Sec. 107. Is emphasis on use of ~~appropriate~~ technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Appropriate technologies that help earn a profit will be employed.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

Yes, Panama's contribution exceeds 25% of the total costs of the Project.

-7-

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character."

No grant funds will be utilized for capital assistance.

f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes.

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage

The Project is based on a comprehensive study of the agricultural cooperative system. It is designed to contribute directly to cooperative members' ability to participate more fully in the market and political processes.

institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Technical assistance and training will directly contribute towards the strengthening of the private and public sector institutions that make up the cooperative system.

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.

USAID review has concluded that the GOP has the capacity to repay the loan.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

N/A

c. ISDCA of 1981, Sec. 724 (c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)?

N/A

3. Economic Support Fund Project Criteria

a. FAA Sec. 531(a). Will this assistance promote economic or political

N/A

stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? N/A
- c. FAA Sec. 534. Will ESP funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? N/A
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? Yes.
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? Panama does not discriminate against the U.S.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be N/A

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financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

5. FAA Sec. 604(g). Will construction or engineering services be procured from firms of countries otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one or these areas? N/A
6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates? N/A
7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Yes.

-3-

Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes.
9. FY 1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used? N/A
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? Yes.

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP)? N/A

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? Yes

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes

4. Will arrangements preclude use of financing:

- a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family Yes

planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes.

c. FAA Sec. 660. ~~To~~ provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

d. FAA Sec. 662. For CIA activities? Yes

e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or Yes

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adjusted service
compensation for military
personnel?

g. FY 1982 Appropriation
Act, Sec. 505. To pay
U.N. assessments,
arrearages or dues? Yes

h. FY 1982 Appropriation
Act, Sec. 506. To carry
out provisions of FAA
section 209(d) (Transfer
of FAA funds to
multilateral
organizations for
lending)? Yes

i. FY 1982 Appropriation
Act, Sec. 510. To
finance the export of
nuclear equipment, fuel,
or technology or to train
foreign nationals in
nuclear fields? Yes

j. FY 1982 Appropriation
Act, Sec. 511. Will
assistance be provided
for the purpose of aiding
the efforts of the
government of such
country to repress the
legitimate rights of the
population of such
country contrary to the
Universal Declaration of
Human Rights? No

k. FY 1982 Appropriation
Act, Sec. 515. To be
used for publicity or
propaganda purposes
within U.S. not
authorized by Congress? Yes

DRAFT PROJECT AUTHORIZATION

Name of Country: Panama
Name of Project: Agriculture Cooperative Marketing
Number of Project: 525-0222
Loan Number: 525-T-054

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Agriculture Cooperative Marketing Project for Panama involving planned obligations of not to exceed Five Million Nine Hundred Thousand United States Dollars (\$5,900,000) in loan funds ("Loan"), and Two Million Three Hundred Thousand United States Dollars (\$2,300,000) in grant funds ("Grant") over a five (5) year period from date of authorization, subject to the availability of funds in accordance with the AID OYB/allotment process, to help in financing foreign exchange and local currency costs for the project.

2. The project ("Project") consists of assistance to strengthen Panama's agricultural cooperative system through: (i) support to the Institute of Panamanian Cooperatives (IPACOOOP), the Federation of Agricultural Cooperatives (COAGRO) and the Agricultural Development Bank (BDA) to increase cooperative membership and improve marketing services provided to cooperative members, and (ii) the establishment of a Marketing Credit and Infrastructure Fund to provide marketing credit to cooperatives to finance marketing infrastructure and equipment and working capital for marketing activities.

3. The Project Agreement, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with AID regulation and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as AID may deem appropriate.

a. Interest Rate and Terms of Repayment

The Cooperating Country shall repay the Loan to AID in U.S. Dollars within ten (10) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to AID in U.S. Dollars interest from the date of first disbursement of the Loan at the rate of (i) two percent (2%) per annum during the first ten (10) years, and (ii) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

b. Source and Origin of Goods and Services (Loan)

Commodities financed by AID under the Loan shall have their source and origin in Panama or in countries included in AID Geographic Code 941, except as AID may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services financed by AID under the Loan shall have Panama or countries included in AID Geographic Code 941 as their place of nationality, except as AID may otherwise agree in writing. Ocean shipping financed by AID under the Loan shall be financed only on flag vessels of Panama or countries included in AID Geographic Code 941, except as AID may otherwise agree in writing.

c. Source and Origin of Goods and Services (Grant)

Commodities financed by AID under the Grant shall have their source and origin in Panama or in the United States, except as AID may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services financed by AID under the Loan shall have Panama or the United States as their place of nationality, except as AID may otherwise agree in writing. Ocean shipping financed by AID under the Grant shall be financed only on flag vessels of the United States, except as AID may otherwise agree in writing.

d. Conditions Precedent to Execution of Project Agreement

Prior to the execution of the Project Agreement, the Cooperating Country shall, except as AID may otherwise agree in writing, furnish, in form and substance satisfactory to AID evidence that:

- (a) it will guarantee COAGRO's external financing during the period of the project.
- (b) it has replenished the Cooperative Development Revolving Fund in the BDA for long-standing delinquent subloans under the Rural Cooperative Development Project (525-T-041).
- (c) long standing delinquent subloans under the Rural Cooperative Development Project (525-T-041) have been declared bad debts by the BDA.

2. Condition Precedent to First Disbursement

Prior to any disbursement, or the issuance of any commitment document under the Project Agreement to finance any Project activity except for the

contracting of technical assistance to assist IPACOOOP develop material to meet conditions precedent, except for short term technical assistance to assist in preimplementation organization or as AID may otherwise agree in writing, the Cooperating Country shall furnish, in form and substance satisfactory to AID, evidence that it has repaid COAGRO the entire outstanding balance of \$1.0 million in delinquent debts.

f. Condition Precedent to Disbursement for Lending Under the Marketing Credit and Infrastructure Fund

Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance lending activities under the Marketing Credit and Infrastructure Fund, Panama shall, except as AID may otherwise agree in writing, furnish in form and substance satisfactory to AID, evidence that COAGRO is taking measures to restructure its organization in order to improve its financial management and general operations, to include revising its cost accounting system to establish cost/profit centers.

g. Covenants

The Cooperating Country shall covenant that, unless AID otherwise agrees in writing:

(1) it will cause COAGRO to provide an adequate reserve for bad debts reflected in its 1986 financial statements and thereafter,

Assistant Administrator
Bureau for Latin America
and the Caribbean

Date



República de Panamá

Ministerio de Planificación y Política Económica

1 de diciembre de 1983
DPEyS/DPIyNP-260

Señor
Robin Gómez
Director de la Agencia Internacional
para el Desarrollo (AID)
E.S.D.

Señor Director:

Desde hace un tiempo el Gobierno ha venido gestionando ante la AID un financiamiento para la ejecución de un proyecto de Mercadeo Cooperativo para el Instituto Panameño Autónomo Cooperativo (IPACOOOP).

En razón de dificultades surgidas en la economía del país, el Gobierno ha retrasado su decisión de continuar las gestiones de financiamiento del mencionado proyecto a la espera de ajustar su política económica a la nueva situación.

Es así, que una vez analizado el proyecto, estamos en condiciones de solicitar a usted la continuación de dichas gestiones con las recomendaciones siguientes: que se elimine de las condiciones previas de este préstamo, la cláusula que dice "el Banco de Desarrollo Agropecuario de los recursos de recuperación del préstamo 525-T-041 debe prestar a COAGRO para capital de trabajo unos B/.2.0 millones.

Estamos seguros que este proyecto contribuirá al fortalecimiento de las cooperativas agropecuarias del país, por lo cual apreciáramos la participación del AID en el mismo.

Atentamente,

J. MENALCO SOLÍS B.

Ministro

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E.O. 12265: N/A
TAGS:
SUBJECT: DAFC REVIEW OF PANAMA AGRICULTURAL COOPERATIVE
MARKETING PID

ON MARCH 31, 1982, THE DAFC REVIEWED AND APPROVED SUBJECT
PID. THE FOLLOWING GUIDANCE IS PROVIDED FOR PP PREPARATION.

1. PROJECT STRATEGY: COOP PRODUCTION PROSPECTS AND THE
WORKINGS OF THE EXISTING MARKETING SYSTEM SHOULD BE DE-
SCRIBED IN DETAIL TO ASSURE THAT THE PROBLEM IS DEFINED
ACCURATELY. ALTERNATIVE SOLUTIONS TO THE MARKETING CON-
STRAINT SHOULD BE EXAMINED DURING INTENSIVE REVIEW INCLUD-
ING: (A) IMPROVEMENTS IN THE ALREADY EXISTING SYSTEM; AND
(B) THE CREATION OF ONE OR MORE PUBLIC OR PRIVATE ENTITIES
TO HANDLE ALL OR PART OF THE MARKETING FUNCTIONS PROPOSED-
FOR COAGRO'S MEMBER COOPS. IF COOPS ARE SELECTED AS THE
MECHANISM TO UNDERTAKE MARKETING ACTIVITIES, THE PP SHOULD
DEMONSTRATE THAT EFFECTIVE DEMAND FROM THE COOPS EXISTS
FOR MARKETING CREDIT.

2. POLICY CONSTRAINTS (A) GOP RICE POLICY CHANGES,
SPECIFICALLY CONTROLS ON RETAIL/FOOD PRICES, WERE DISCUSSED
DURING MINAG ORANGES' VISIT HERE WITH AA RETCE SEVERAL
MONTHS AGO. PRICE CONTROLS COULD BEAR ON THE ACHIEVEMENT
OF THE INCOME GOAL OF THIS PROJECT. THE PP SHOULD ANALYSE
THE DEGREE TO WHICH THESE CONTROLS MAY BEAR ON THE CROPS
LIKELY TO BE PRODUCED BY THE COOPS, AND DESCRIBE GOP AND
AID ACTIONS, SUCH AS THE PROPOSED AG PLANNING PROJECT,
WHICH WILL ADDRESS THIS ISSUE. (B) GOP INTEREST RATE
POLICIES ARE SUBSIDIZING BORROWERS AT THE PROPOSED 13 PER-
CENT SUBLENDING RATE TO COOPS.

THE INTENSIVE REVIEW SHOULD ESTABLISH WHAT
"REAL" INTEREST RATE TO FINAL COOP BORROWERS MIGHT BE,
AND IF OTHER THAN "REAL" RATES ARE TO BE USED, THE PP
SHOULD INCLUDE THE ANALYSIS SUPPORTING THIS DECISION, AND
SHOULD DESCRIBE WHAT MEASURES WILL BE TAKEN TO PREVENT
DECAPITALIZATION OF THE MARKETING CREDIT FUND AS A CON-
SEQUENCE OF THIS SUBSIDY. IN ANY CASE WE ARE INTERESTED
IN SEEING THAT THE MAXIMUM INTEREST RATES ALLOWED UNDER
LOCAL LAW ARE USED, AND THAT IF THE LEGAL LIMIT IS RAISED,
THE PROJECT INTEREST RATES BE LIKEWISE INCREASED. (C) THE
PP SHOULD DISCUSS THE PROBLEM OF UNDERCAPITALIZATION OF
COAGRO AND THE MEMBER COOPS AND DESCRIBE HOW EVALUATION
RECOMMENDATIONS PERTAINING TO SURVIVAL RECIPIENTS CAPITAL--

Best Available Document

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ING COAGRO THROUGH CAPITAL SUBSCRIPTIONS RELATED TO THEIR
SUELOANS WILL BE CARRIED OUT.

3. PROJECT COMPONENTS: (A) COAGRO - THE PID INDICATED
THAT COAGRO WILL MOVE INTO CREDIT OPERATIONS AS A BORROWER
FROM BPA SUELENDING TO MEMBER COOPS, AND MAY SET UP A PRO-
DUCE MARKET PRICE INFORMATION SYSTEM. THE RATIONALE FOR
THIS CREDIT AGENCY'S ROLE WAS QUESTIONED. THE PP SHOULD
DESCRIBE COAGRO'S ROLE IN THE SUELENDING PROCESS ANDS WHAT
IS GAINED; BY HAVING COAGRO ACT AS A MIDDLEMAN AND SUELOAN
GUARANTOR BETWEEN BPA AND THE COOPS. THE PP SHOULD ALSO
DESCRIBE HOW COAGRO WILL CARRY OUT MARKET REPORTING, THE
COSTS TO COAGRO OF PERFORMING THIS SERVICE, AND WHY COAGRO
WAS SELECTED RATHER THAN A MIDA AGENCY. IN THE INSTITUTION-
AL ANALYSIS OF COAGRO, THE PP SHOULD DESCRIBE COAGRO'S
PROPOSED CAPABILITY TO HANDLE THE COMPLEX TASKS IT WILL
ASSUME. COAGRO'S FINANCIAL PROSPECTS AND UTILITY TO ITS
MEMBER GROUP WITH AND WITHOUT THE PROPOSED PROJECT SHOULD
ALSO BE DISCUSSED.

(B) INFRASTRUCTURE - WHILE THE CONSTRUCTION PROPOSED SEEMS
RELATIVELY SIMPLE, IN LOCATIONS WHERE THE CHOICE EXISTS
RENTAL MAY OFFER ADVANTAGES TO THE COOPS: MORE RAPID
STARTUP, THE POSSIBILITY OF INCREASING OR DECREASING SPACE
ACCORDING TO NEED, AND AN IMPROVED CASH FLOW AND BALANCE
SHEET. THE LENDING CRITERIA FOR SUELOANS SHOULD INCLUDE A
ANALYSIS OF RENT VERSUS BUY/BUILD.

(C) TECHNICAL ASSISTANCE - GIVEN THE PROBLEMS WITH THE
ACCEPTANCE OF TECHNICAL ASSISTANCE, THE INTENSIVE REVIEW
SHOULD INCLUDE A FULL DISCLOSURE TO THE GOP OF THE TECHNICAL
ASSISTANCE PLAN AND ITS ESTIMATED COSTS. THE PP SHOULD
INCLUDE ASSURANCES OF THE ACCEPTABILITY OF LOAN-FINANCED
TECHNICAL ASSISTANCE TO THE PANAMANIANS. THE PP'S
IMPLEMENTATION PLAN SHOULD SET OUT STEP BY STEP THE CON-
TRACTING PROCESS, AND THE TIME REQUIRED FOR EACH STEP, IN
A FORMAT WHICH WILL ENABLE PROJECT MANAGERS (AID, GOP,
IPACOP, COAGRO, ET AL) TO TRACK THE PROCESS AND REACT
QUICKLY TO SNAFUS. THE ROLES OF IPACOP AND COAGRO AS TA
CONTRACTING AND TRAINING AGENTS, AND THEIR CAPACITIES TO
CARRY OUT THESE TASKS, SHOULD BE DESCRIBED.

(D) ROLE OF IMA - IN LIGHT OF THE MINAG'S LOAN APPLICATION,
THE ROLE OF IMA SHOULD BE MADE EXPLICIT IN THE
PP.

4. INTENSIVE REVIEW STUDIES: AT SOME POINT WITHIN THE
SEVEN PROPOSED STUDIES THE INTENSIVE REVIEW SHOULD IDENTIFY
AND EXAMINE THE GOP POLICY CONSTRAINTS RELEVANT TO THE
OPERATIONS AND GOAL OF THIS PROJECT; AND SHOULD PRESENT
PRODUCTION FORECASTS FOR COAGRO'S MEMBER COOPS AS PART OF

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THE DEFINITION OF THE PROBLEM.

ANNEX I
EXHIBIT E
Page 3

5. THE PP SHOULD ANALYZE THE EXTENT TO WHICH THE PROPOSED AGRICULTURAL INCENTIVE LAW MAY IMPACT ON THIS PROJECT, AND COMMENT ON ITS PROSPECTS FOR PASSAGE.

6. FYI: ALL LAC MISSITON PID APPROVALS ARE NOW SUBJECT TO BUREAU RE-EVALUATION IF THE POST-PID PROJECT DEVELOPMENT PROCESS EXTENDS BEYOND ONE YEAR. EAGLEBURGER

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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.)

ANNEX II
EXHIBIT A

Life of Project:
From FY 84 to FY 89
Total U.S. Funding \$8.2 million
Date Prepared: December 23, 1983

Project Title & Number: AGRICULTURAL COOPERATIVE MARKETING/525-0222

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>A. GOAL:</p> <p>To increase the income and productivity of Panama's small and medium size farmers.</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> Increases in small and medium farm production and yield by 20% or more. 	<ol style="list-style-type: none"> Census and national statistics 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> The GOP will continue to assign priority to development and growth of Panama's agricultural sector.
<p>B. Project Purpose:</p> <p>To strengthen Panama's agricultural cooperative system to better serve an expanded membership with a wider range of services, especially product marketing.</p>	<ol style="list-style-type: none"> A strengthened agricultural cooperative movement including a stronger national federation together with a consolidation of member cooperatives on a regional and/or commodity basis. A doubling of the number of active producer members of agricultural cooperatives participating in marketing credit activities, with full line of marketing services available to them on a timely basis. 	<ol style="list-style-type: none"> Project evaluations AID Project files Records of COAGRO, IPACOO, BDA Field inspections 	<ol style="list-style-type: none"> COAGRO takes necessary structural and financial corrective measures recommended in C.P.'s and throughout life of the project. GOP commitment to private agricultural cooperative sector is reaffirmed by extension of the government guaranty for external financing for COAGRO. GOP improves its payment performance on debt owed to the cooperative sector. External creditors are receptive to rescheduling COAGRO's current outstanding debt with these institutions.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

ANNEX 11
EXHIBIT A
Life of Project: _____
From FY 84 _____ to FY 89 _____
Total U.S. Funding \$8.2 million
Date Prepared: December 23, 1983

Project Title & Number: AGRICULTURAL COOPERATIVE MARKETING/525-0222

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 3. A doubling of member equity in those agricultural cooperatives participating in marketing activities and in COAGRO, with an established plan for continuing growth of member equity in both primary coops and COAGRO. 4. Reorganization and redirection of COAGRO into a well managed, profitable cooperative wholesale supply organization. 5. Strengthened and expanded cooperative marketing system enabling farmer members to profit more fully from the sale of their production. 6. Established capability within COAGRO to provide marketing development assistance to its affiliates. 7. Strengthened individual agricultural coops with improved management and financial systems. 		<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 5. Credibility of COAGRO and its affiliates farmers is sustained. 6. IPACCOOP and BDA provide the necessary institutional and staff support to achieve project objectives.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: AGRICULTURAL COOPERATIVE MARKETING/525-0222

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p>	<p>Magnitude of Outputs:</p> <p>8. Established capability within IPACOOOP to provide business and management skills training to primary coops and COAGRO.</p> <p>9. Improved capability within the BDA to review and process loan applications.</p>		<p>Assumptions for achieving outputs:</p>
<p>OUTPUTS:</p> <p>1. Management Development Center established and operating within IPACOOOP.</p> <p>2. Marketing Development Center established and operating within COAGRO.</p>	<p>1. Training materials developed:</p> <ul style="list-style-type: none"> - short-term management and other courses designed and scheduled to be taught in the field. - curriculum library operating. - follow-up, on-the-job training being carried out. <p>2. Marketing sub-project proposals identified and analyzed by center personnel.</p> <ul style="list-style-type: none"> - Assistance provided to in preparing coops loan applications and support documentation. Assistance provided to coops in the implementation of marketing activities including advice on quality control, packaging, shipping, contracting, etc. 	<p>1. Center's files and records:</p> <ul style="list-style-type: none"> - Management Dev. Sub-Committee meeting minutes. - Project Coordinating Committee meeting minutes. - Consultant reports. - Project Manager's records. <p>2. Center's files and records.</p> <ul style="list-style-type: none"> - marketing sub-committee meeting minutes. - project coordinating committee meeting minutes. - consultant reports. - Project Manager's records. 	<p>1. IPACOOOP is able to assume partial financial responsibility for additional personnel to staff this unit during the life of the project, and total responsibility thereafter.</p> <p>2. Marketing Center is able to collect a service fee for assistance to coops to finance operating costs.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

ANNEX II
EXHIBIT A
Life of Project: _____
From FY 84 to FY 89
Total U.S. Funding \$8.2 million
Date Prepared: December 23, 1983

Project Title & Number: AGRICULTURAL COOPERATIVE MARKETING/525-0222

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Inputs:</p> <p>3. Marketing Credit and Infrastructure Funds created within the BDA.</p> <p>4. Establishment of sound financial policies within COAGRO and primary cooperatives.</p>	<p>Implementation Target (Type and Quantity)</p> <p>3. - funds being disbursed for marketing activities including financing for working capital loans, infrastructure and equipment.</p> <p>4. Member Coop equity capital in COAGRO increased. - Farmer member equity in Coops increased. - Coops able partly to self-financed marketing development services. - Financial risk from bad debts reduced.</p>	<p>3. - BDA financial records - Credit Sub-Committee minutes. - Project Coordinating committee meeting minutes. - Field visits to participating coops. - Credit Oversight Committee meeting minutes.</p> <p>4. - COAGRO and Coop records. - Project Evaluations. - Field visits to COAGRO and individual coops.</p>	<p>Assumptions for providing inputs:</p> <p>3. BDA establishes and operates the Marketing Credit and Infrastructure Fund effectively.</p> <p>4. Negotiated percentage points of interest spread applied to marketing loans financed by the Marketing Credit and Infrastructure Fund within the BDA allocated to stated funds.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY 84 _____ to FY 89 _____
Total U.S. Funding 58.2 million
Date Prepared: December 21, 1983

Project Title & Number: AGRICULTURAL COOPERATIVE MARKETING/525-0222

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS				MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status.					Assumptions for achieving purpose:
	A.I.D. (\$000)	G.O.P.	Coops			
	<u>Loan</u>	<u>Grant</u>				
<u>INPUTS:</u>						
1. Technical Assistance					1. GOP, IPACOO, COAGRO and BDA annual budget and implementation plans.	1. C.P.'s met as established in Pro Ag.
a) Long-term b) Short-term	-	2,100 200	-	-		
2. Credit	5,000	-	2,500	850	2. Accrued expenditure and other financial reports.	2. Technical Assistance contracts signed on timely basis.
3. Training	120	-	75	100	3. Project evaluations.	
4. Vehicles	163	-	270	50	4. Reimbursement requests.	
5. Equipment/Materials	62	-	5	25		
6. Personal Support	455	-	500	115		
7. Evaluations	100	-	-	-		
Totals	5,900	2,300	3,350	1,140		

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TABLE 1

Financial Plan
(US \$000)

<u>COMPONENTS</u>	<u>DL</u>	<u>AID</u>	<u>DG</u>	<u>GOP</u>	<u>CO-OPS</u>	<u>TOTALS</u>
<u>A. Institutional Development</u>						
1. <u>COAGRO and Affiliates</u>	<u>405</u>	<u>725</u>		<u>-</u>	<u>190</u>	<u>1,320</u>
a. Marketing Development Center	405	600		-	190	1,195
b. Administrative Restructuring		125		-	-	125
2. <u>IPACOOOP</u>	<u>445</u>	<u>490</u>		<u>600</u>	<u>100</u>	<u>1,635</u>
a. Project Coordination Office	80	-		104	-	184
b. Baseline Data and Evaluation	100	-		-	-	100
c. Management Development Center	265	490		496	100	1,351
3. <u>BDA</u>	<u>50</u>	<u>285</u>		<u>250</u>	<u>-</u>	<u>585</u>
a. Cooperative Credit Dept. Upgrading	50	285		250	-	585
<u>B. Marketing Credit and Infrastructure Revolving Fund</u>	<u>5,000</u>	<u>-</u>		<u>2,500</u>	<u>850</u>	<u>8,350</u>
1. <u>BDA</u>						
a. Infrastructure and Equipment	2,000	-		1,250	450	3,700
b. Marketing Credit Working Capital	3,000	-		1,250	400	4,650
<u>C. Project Management/Support</u>	<u>-</u>	<u>800</u>		<u>-</u>	<u>-</u>	<u>800</u>
<u>GRAND TOTALS</u>	<u>\$5,900</u>	<u>\$2,300</u>		<u>\$3,350</u>	<u>\$1,140</u>	<u>\$12,690</u>

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TABLE 2

PROJECTED EXPENDITURES BY YEAR

(In Thousands \$000)

I. INSTITUTIONAL DEVELOPMENT ^a	YEAR ONE					YEAR TWO					YEAR THREE					YEAR FOUR					YEAR FIVE					TOTALS			
	AID		COUNTRY PART		TOTALS	AID		COUNTRY PART		TOTALS	AID		COUNTRY PART		TOTALS	AID		COUNTRY PART		TOTALS	AID		COUNTRY PART		TOTALS	AID	COUNTRY PART	GRAND TOTAL	
	DL	DC	GOP	COOPS		DL	DC	GOP	COOPS		DL	DC	GOP	COOPS		DL	DC	GOP	COOPS		DL	DC	GOP	COOPS					DL
A. COMCRO																													
1. Long term TA	-	120	-	-	120	-	130	-	-	130	-	145	-	-	145	-	130	-	-	130	-	-	-	-	-	-	-	525	
a) Marketing Advisor (46pm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	525	
2. Short term TA	-	36	-	-	36	-	8	-	-	8	-	4	-	-	4	-	7	-	-	7	-	20	-	-	-	20	75		
a) Marketing (8-10 pm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	
b) Administrative	-	50	-	-	50	-	40	-	-	40	-	20	-	-	20	-	10	-	-	10	-	5	-	-	-	5	125		
3. Restructuring (12pm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	
4. Equipment and Materials	12	-	-	5	17	10	-	-	5	15	8	-	-	5	13	6	-	-	5	11	4	-	-	5	9	40	25	65	
5. Vehicles (2), fuel and maintenance	25	-	-	5	30	-	-	-	8	8	-	-	-	10	10	-	-	-	12	12	-	-	-	15	15	25	-	50	
6. Personnel & related costs	107	-	-	-	107	98	-	-	98	97	-	-	-	10	107	38	-	-	38	76	-	-	-	27	27	349	-	115	
7. Sub-Totals	144	206	-	10	360	108	178	-	13	299	105	169	-	15	289	44	147	-	55	246	4	25	-	97	124	695	725	-	1420
B. IPACOP Management Div. Center																													
1. Long term TA (36 pm)	-	115	-	-	115	-	125	-	-	125	-	140	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	380	
2. Short term TA (12-14pm)	-	20	-	-	20	-	15	-	-	15	-	15	-	-	15	-	30	-	-	30	-	30	-	-	-	30	110	310	
3. Seminars, training material & equipment	40	-	10	10	60	30	-	10	15	55	20	-	15	20	55	15	-	20	25	60	15	-	30	30	45	170	75	245	
4. Vehicles (8)	75	-	26	-	101	-	-	26	-	26	-	-	26	-	26	-	-	26	-	26	-	-	26	-	-	26	75	170	
5. Personnel & related costs	24	-	45	-	69	20	-	50	-	70	16	-	56	-	72	10	-	66	-	76	-	-	74	-	74	70	251	361	
6. Project Coordination Office																													
1. Vehicles (2)	25	-	8	-	33	-	-	8	-	8	-	-	8	-	8	-	-	8	-	8	-	-	8	-	8	25	-	47	
2. Other equipment & supplies	4	-	1	-	5	2	-	1	-	3	2	-	1	-	3	1	-	1	-	2	1	-	1	-	2	10	-	15	
3. Personnel & related costs	16	-	4	-	20	13	-	8	-	21	10	-	11	-	21	4	-	15	-	21	-	-	21	-	21	45	-	104	
7. Evaluation																													
1. Baseline data and Evaluation	3	-	-	-	3	-	-	-	-	3	-	-	-	-	3	-	-	-	-	3	-	-	-	-	-	3	100	100	
8. Sub-Totals	187	155	94	10	426	65	140	103	15	323	83	155	117	20	375	12	30	134	25	273	78	30	150	30	298	445	491	-	1636
C. SDA Cooperative Credit Department (upgrading Personnel)																													
1. Long term TA (24 pm)	-	120	-	-	120	-	120	-	-	120	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-	-	240	
2. Short term TA (4-6 pm)	-	20	-	-	20	-	-	-	-	20	-	-	-	-	20	-	-	-	-	20	-	-	-	-	-	-	40	40	
3. Vehicles (4)	90	-	20	-	110	-	-	20	-	130	-	-	20	-	150	-	-	20	-	170	-	-	20	-	-	90	90	150	
4. Personnel & related costs	-	-	30	-	30	-	-	30	-	60	-	-	30	-	90	-	-	30	-	120	-	-	30	-	-	30	-	150	
5. Sub-Totals	50	140	50	-	240	-	120	50	-	170	-	20	30	-	70	-	5	30	-	55	-	-	30	-	30	50	245	290	
D. Project Management/Support																													
1. Long term TA (34 pm)	-	125	-	-	125	-	155	-	-	155	-	150	-	-	150	-	155	-	-	155	-	110	-	-	-	-	-	475	
2. Short term TA (7-3 pm)	-	25	-	-	25	-	-	-	-	25	-	-	-	-	25	-	-	-	-	25	-	-	-	-	-	-	25	25	
3. Logistical support	-	20	-	-	20	-	20	-	-	40	-	20	-	-	40	-	20	-	-	40	-	20	-	-	-	-	20	100	
6. Sub-Totals	-	170	-	-	170	-	155	-	-	155	-	170	-	-	170	-	175	-	-	175	-	130	-	-	-	-	-	800	
II. MARKETING CREDIT & INFRASTRUCTURE REVOLVING FUND (SMA)																													
A. Infrastructure & Equipment	750	-	50	100	900	650	-	50	90	790	450	-	300	100	850	100	-	400	90	580	50	-	450	80	580	2000	-	1250	
B. Working capital for marketing credit	1150	-	50	110	1310	1200	-	100	120	1420	450	-	300	70	820	100	-	400	90	490	900	-	900	50	550	3000	-	1250	
7. Sub-Totals	1900	-	100	210	2210	1850	-	150	210	2210	900	-	400	170	1670	200	-	800	130	1130	150	-	850	130	1130	5000	-	2500	
8. Grand Totals	2281	651	244	230	3406	2025	593	303	238	3157	1088	514	767	205	2574	276	357	986	210	1829	212	183	1550	257	1724	5900	2300	3350	

TIME PHASED IMPLEMENTATION PLAN

<u>Action</u>	<u>Timing</u>
1. Project approval AID/W	2/84
2. Initiate procedures for selecting and contracting grant-funded technical assistance team	2/84
3. Initial technical assistance on board under IQC to assist in preparing for project start-up prior to Loan Agreement signing	2/84
4. Additional short-term T.A. on board under IQC to assist in:	2/84
- preparation of BDA sub-lending regulations, establishment of COAGRO Marketing Development Center and selection of counterpart personnel	3/84
5. Loan signing AID/GOP	4/84
6. GOP Project Manager named and functioning	4/84
7. Project Coordinating Committee established	4/84
8. Grant-funded technical assistance contract awarded	4/84
9. Senior Project Consultant (contract) on board	5/84
10. BDA counterpart named/hired	5/84
11. COAGRO technical consultant on board	5/84
12. BDA technical consultant on board	5/84
13. IPACOOOP presents procedures for administering loan-funded budget support to project institutional development activities	5/84
14. IPACOOOP and AID agree on procedures for advance of funds for institutional development activities, and for reimbursement and reporting on use of funds	5/84
15. IPACOOOP presents first request for advance of funds for institutional development support	5/84

16. Vehicle specifications completed and procurement procedures initiated 5/84
17. BDA sub-lending regulations completed, reviewed and approved by Project Coordinating Committee and by AID 6/84
18. COAGRO oversight committee formed 6/84
19. COAGRO Marketing Development Center function and counterpart personnel selected and hired 6/84
20. Short-term technical assistance for COAGRO institutional upgrading on board, and preliminary schedule for follow-up assistance in this area presented 6/84
21. Completion of first set of CPs (90 days) 6/84
22. AID advances funds for institutional development activities 6/84
23. IPACOOOP Management Development consultant on board 6/84
24. Marketing Fund demand chart reviewed and updated 7/84
25. BDA and AID established level of first advance to Marketing Credit and Infrastructure Fund 7/84
26. BDA, IPACOOOP and AID agree on procedures for processing reimbursement requests for the Fund, and reporting format on Fund utilization 7/84
27. IPACOOOP counterpart personnel on Management Development hired 7/84
28. Special Project sub-committees formed: 7/84
 - Marketing Credit and Infrastructure Fund operations (BDA hosts)
 - Marketing Development (COAGRO hosts)
 - Management Development (IPACOOOP hosts)
29. CPs to subsequent disbursement met (120 days) 8/84
30. Vehicle plans for Project Office, IPACOOOP, BDA and COAGRO approved by Project Office and AID 8/84

31. Pending marketing loan applications reviewed and processed 8/84
32. Advance of funds made by AID to BDA Marketing Credit and Infrastructure Fund 8/84
33. First sub-loan(s) approved by BDA 9/84
34. Twelve month workplan presented by BDA to the Project Coordinating Committee 9/84
35. IPACOOOP presents first request to AID for reimbursement of funds on institutional development activities. Procedures and reporting on schedule 9/84
36. Project vehicles arrive in country 9/84
37. IPACOOOP Management Development Center presents workplan on manaterials development and preliminary calendar for seminars/training courses to Project Coordinating Committee 9/84
38. IPACOOOP initiates field survey of manpower development needs to be coordinated with Marketing Development Center in COAGRO 10/84
39. COAGRO Marketing Development Center functioning, reviewing additional applications for credit and conducting feasibility analysis; 12 month workplan presented to Project Coordinating Committee 10/84
40. Project Coordinating Committee and special sub-committees functioning on schedule 10/84
41. First request for reimbursement for Marketing Credit and Infrastructure Fund presented to AID 10/84
42. Management Development Center initiatives first training course (BDA cooperative credit personnel including field supervisors) 11/84
43. IPACOOOP field survey of manpower development needs completed and workplan and calendar for Management Development Center revised 12/84

44. IPACCOOP Project Office operating effectively and coordinating Project components. Procedures and reporting on schedule 1/85
45. Marketing Credit and Infrastructure Fund operating in BDA and working effectively with sub-committees 1/85
46. IPACCOOP Management Development Center presents plan for follow-up on-the-job training visits to course/seminar participants 3/85
47. Management Development Center functioning in IPACCOOP with training materials development and training courses on schedule 3/85
48. Plan completed for coordination of sub-lending from 041 Cooperative Development Revolving Fund with Marketing Credit and Infrastructure Fund 3/85
49. Coordinating Committee reviews Project progress and annual workplans for Management Development Center, Marketing Development Center and Marketing Credit and Infrastructure Fund 9/85
50. Mid-project evaluation 2/86
51. BDA Credit Consultant completes assignment 4/86
52. Coordinating Committee reviews annual workplans for Management Development Center, Marketing Development Center and Marketing Credit and Infrastructure Fund, to ensure they reflect appropriate recommendations of the mid-project evaluation 9/86
53. IPACCOOP Management Development Consultant completes assignment 5/87
54. Project Coordinating Committee reviews annual workplans 9/87
55. Marketing Development Consultant completes assignment 1/88
56. Senior Project Consultant completes assignment 8/88
57. Final Project evaluation 3/89

TECHNICAL ASSISTANCE SCHEDULE

<u>Category</u>	<u>Timing/ Duration:</u>
1. Procedures for selection/contracting grant-funded technical assistance initiated	2/84
2. Initial T.A. on board under IQC to assist with formulation of conditions precedent, assist local institutions in meeting CPs and help with organizational and related pre-implementation activities (up to 90 days).	2/84-5/84
3. As part of 2 above, additional specialized T.A. will be furnished under an IQC in:	
a) Preparation of sub-lending regulations for Marketing Credit and Infrastructure Fund in BDA (up to 30 days)	3/84
b) Organization and staffing of Marketing Development Center in COAGRO (up to 60 days).	3/84-4/84
4. Contract awarded for long-term T.A.	3/84-4/84
5. Procedures established for loan-funded T.A. contracting.	3/84
6. AID/W baseline data specialist on board (up to 30 days)	3/84
7. Senior Contract Project Consultant assigned under long-term contract and on board (up to 54 months).	5/84
8. COAGRO Marketing Development Consultant on board (up to 46 months).	5/84
9. BDA Credit Consultant on board (up to 24 months)	5/84
10. IPACOOOP Management Development Consultant on board (up to 36 months)	5/84

11. Scopes of work and first 12 month schedule for short-term consultants completed. 5/84
12. First short-term consultants assignment(s) initiated. 5/84
13. Scopes of work and second 12 month schedule for short-term consultants completed. 5/85
14. Short-term consultants on board for mid-Project evaluation. 2-3/86
15. BDA Credit Consultant completes assignment 4/86
16. Scopes of Work and third 12 month schedule for short-term consultants completed. 5/86
17. Scopes of work and fourth 12 month schedule for short-term consultants completed. 5/87
18. IPACOOOP Management Development Consultant completes assignment. 5/87
19. COAGRO Marketing Development Consultant completes assignment. 1/88
20. Short-term consultants on board for final project evaluation. 7-8/88
21. Senior Project Consultant completes assignment. 8/88

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EXTERNAL TECHNICAL ASSISTANCE
SUGGESTED SCOPES OF WORK

I. SENIOR PROJECT CONSULTANT/TEAM LEADER

The Senior Project Consultant/Team Leader will be responsible for day-to-day monitoring and for advising on Project implementation in close coordination with the AID Project Officer and the IPACOOOP Project Coordinator. The contract consultant will perform routine project "management" functions except for commitment of funds, including signing of commitment documents.

The Senior Project Consultant will also be the leader for a team of long-term technical advisors assigned to the three activity components to be developed under the Project: the Marketing Development Center in COAGRO; the Marketing Credit and Infrastructure Fund in the BDA; and the Management Development Center in IPACOOOP.

The Senior Consultant will be a technical specialist in cooperative development and management. The incumbent will serve as direct counterpart to the Director of IPACOOOP, the General Manager of COAGRO and the Chief of Cooperative Credit of the BDA, assuring that the Project Coordinating Committee and the special sub-committees carry out their respective project responsibilities effectively and in a timely manner.

The senior consultant's specific responsibilities will include but not be limited to the following:

A. To assist and coordinate pre-project start-up activities such as formalizing the conditions precedent, assisting participating institutions in meeting the CPs in order to assure timely disbursement of funds under the institutional development activities and the Marketing Credit and Infrastructure Fund, and assisting in other pre-implementation organizational activities.

B. To assure that the other contract technicians perform their consultant responsibilities in a timely and effective manner, and that the schedule for achieving the institutional development objectives of the Project is maintained and updated through periodic reviews and a mid-project evaluation to be carried out by the Project Coordinating Committee.

C. To advise and coordinate the short-term technical assistance allocated for management and operations improvement, and restructuring of COAGRO,

D. To complement the work of the credit consultant to the BDA in helping establish more effective cash flow planning for the on-going sub-lending under the 041 Cooperative Development Revolving Fund so as to facilitate maximum coordination between the 041 fund and the Marketing Credit and Infrastructure Fund of the Cooperative Marketing project.

E. To facilitate collaboration between the Management Development Center in IPACOOOP, the COLAC management training center, FECOLAC, the INCAE Management Training Center in Costa Rica, and other international management training activities and centers.

F. To supervise preparation of scopes of work and scheduling of short-term consultants to the three Project activity centers, and direct/monitor the work carried out under these assignments.

G. To provide guidance and assistance to the consultant(s) brought in to prepare baseline data for project tracking and evaluation.

H. To assist the IPACOOOP Project Director and the Project Coordinating Committee in carrying out annual planning exercises for each activity area as well as coordination of the mid and final project evaluations.

II. CONSULTANTS TO COAGRO ON MANAGEMENT AND OPERATIONS IMPROVEMENT AND RESTRUCTURING

A total of 12 person-months of short-term consultant support will be provided to COAGRO in the area of management and operations improvement, and for restructuring the federation. Areas of special concentration will include but not be limited to:

1. establishment of additional cost centers for more effective financial planning and control;
2. revision of the overall organizational structure;
3. training for senior officials in board/management functions and division of authority and responsibility;
4. revision of pricing and credit policies; and
5. upgrading of policies and procedures for improved accounts receivable management.

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III. CONSULTANT TO THE MARKETING DEVELOPMENT CENTER

The initial responsibility of the marketing consultant will be to assist in selecting and then to direct a team of permanent Panamanian staff and occasional consultants in identifying, analyzing, developing and implementing projects of agricultural commodity marketing through cooperatives. The consultant will be expected to carry out the assignment in such a way as to stimulate a constant learning process with permanent staff, and in a style of collaborative assistance with Center personnel. Activities will include, but not be limited to:

1. Investigate general areas or productive capability and comparative advantage of cooperatives in the market setting.
2. Assist in the preparation of market feasibility studies of potential cooperative development for specific groups of agricultural producers.
3. Train center staff and assist in preparation of loan applications, for submission to the Marketing Credit and Infrastructure Fund in the BDA for activities found to be economically viable for cooperative undertaking. Develop procedures to assure that such loan applications are accompanied by all support documentation as appropriate to BDA Marketing Fund requirements.
4. Provide marketing technology assistance to cooperative groups to help them improve the efficacy and effectiveness of their operation.
5. Train, test and evaluate staff in market development techniques.
6. Assist in identifying marketing constraints, problems, risk and other aspects of marketing opportunities; help staff to be realistic in developing proposals for specific projects.
7. Develop systems for implementation including trial runs, periodic review, perfection of initial operations, feedback from both buyers and sellers.
8. Identify and develop the content of assignments for short-term consultants required by the Center for specific projects. Evaluate candidates, selecting, and supervise their work, and verify performance.
9. Maintain relationships with other GOP programs, the Management Development Center of IPACOOOP and private entrepreneurs in the agricultural marketing field which have a relationship to the overall work of the Center.

10. Collaborate in preparation of quarterly reports on the work of the Center for AID, COAGRO, IPACOOOP and the BDA.

IV. CONSULTANTS TO THE MARKETING CENTER

Frequently, expertise outside of the competence of the permanent staff of the Center will be required. 8-10 person-months of short term specialists are estimated to be necessary during the 5-year life of the project.

Specific assignments will be of 2-4 weeks duration but cannot be defined accurately at this point. However, an illustrative list of the types of work expected to be performed under this category includes:

1. Small-scale poultry processing, packing, handling and retailing.
2. Reduction of post-harvest losses of green vegetables; guidelines for farmers and marketers.
3. Cost-benefit analysis of refrigerated transport.
4. Development of grades and standards for marketing of fresh fruits and vegetables.
5. Training in the use of least-cost ratio formulation as an aid to increasing the competitive position of cooperatives in the marketing of feed grains.
6. Specialized training of food retailer personnel in the maintenance of quality in the handling of fresh produce; assistance in market planning and production scheduling.

V. CONSULTANT TO THE COOPERATIVE MANAGEMENT DEVELOPMENT CENTER

This consultant will be responsible for assisting in establishing a special management development unit in IPACOOOP and will guide the selection and development of its permanent staff. The consultant will work in a collaborative style with Panamanian staff with the constant objective of teaching and developing a permanent technical capability and business mentality of cooperative development.

Activities will include, but not be limited to:

- 1) Initiate development of a curriculum for proposed client cooperatives and selected personnel levels of COAGRO and the BDA; establish the basic management areas, skills and functions to be addressed through

practical training seminars employing principally the case study method; initiate materials development for establishment of a "library" of case studies appropriate to the level of existing management capability in cooperatives, through a staged progression of upgrading; train Panamanian staff in materials development; conduct training seminars.

2) Establish procedures for appropriate on-the-job training visits to cooperatives as follow-up to seminar courses, visiting each course participant; develop a calendar for management development center to establish on-going on-the-job visitation following each training course.

3) Develop a system of evaluation of effectiveness of training materials, seminars and on-the-job visitation program.

4) Coordinate Center activities with ongoing programs of IPACOOOP, services and policies of COAGRO and other GOP programs which may relate to the overall achievement of project goals.

5) Identify critical constraints and problems which will need input from outside consultants; develop scopes of work for short-term assistance; assist in selection of consultants for short-term assignments and supervise performance.

6) Collaborate in preparation of quarterly reports for AID, IPACOOOP, COAGRO and the BDA on the work of the Management Development Center.

VI. CONSULTANTS TO THE MANAGEMENT CENTER

A total of 12 person months of short-term technical assistance will be made available to the Center during the life of the project. An illustrative list of the type of work which might be requested from specialists on 2 or 4 week assignments follows:

- 1) Conduct seminar on Board-Management relations.
- 2) Develop a guide for interpreting financial and operating statements for cooperative directors; questions for management.
- 3) Accounting and control of branch operations.
- 4) Development and accounting practices for managerial decision; cost control, gross margin analysis, capital budgeting.

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VII. CONSULTANT TO THE COOPERATIVE CREDIT DEPARTMENT OF THE BDA

The initial responsibility of the consultant will be to assist the BDA in the establishment of procedures and regulations as stipulated in the conditions precedent to Marketing Project Loan disbursement, as will apply to operations of the Marketing Credit and Infrastructure Fund.

Subsequent activities will include but not be limited to:

1) Develop guidelines for lending concepts appropriate to the marketing credit and infrastructure and equipment financing contemplated under the Project, with emphasis on consideration of appropriate grace periods to permit adequate cash flow development prior to capital payment requirements. Appropriate use of lines of credit in market development financing, and appropriate capital repayment periods for infrastructure and equipment financing related to marketing activities.

2) Train analysts in appropriate role of analysis of financial situation of loan applicants, and financial viability of subprojects proposed for financing from the Fund.

3) Develop procedures and a calendar for processing of loan applications to assure timely analysis and decision making.

4) Assist Cooperative Credit Department staff in establishment of procedures for effective coordination of marketing fund activities with on-going lending program of Cooperative Development Revolving Fund established under AID Loan 041.

5) Assist Cooperative Credit Department in the design and use of an appropriate reporting format to reflect monthly status of Marketing Credit Fund, including pending applications and delinquent sub-loans.

6) Collaborate in preparation of quarterly reports on the work of the Cooperative Credit Department and the Marketing Credit and Infrastructure Fund for AID, BDA, IPACOOOP and COAGRO.

VIII. CONSULTANTS TO THE COOPERATIVE CREDIT DEPARTMENT OF THE BDA

4-6 person months of short-term consultant services will be provided to the Cooperative Credit Department during the life of the project. Such services may consist of periodic follow-up visits by the long-term consultant over the three year period following completion of his assignment, or may be a series of assignments.

ECONOMIC ANALYSIS

A. Introduction

Four of the twelve marketing activities identified in the paper have been subjected to pre-feasibility studies: (1) the poultry, beef and pork processing plant activity for the Cooperative Juan XXIII, combined with the poultry operation of the Avicola de Chiriqui cooperative; (2) the fruit and vegetable marketing activity for the Cooperativa Horticola de Mercadeo. This cooperative will act as marketing agent for another fruit and vegetable cooperative, Cooperativa Agropecuaria de S.M. La Libertad, which also has been identified as a potential candidate for project financing. No analysis was conducted on this latter cooperative because it is quite similar to the larger one that was analyzed; (3) the cacao marketing activity with the Cooperativa de Cacao Bocatoreña; and (4) the honey and wax activity with the Cooperativa Apicola. In addition, the COAGRO Marketing Center activity and the IPACOO Management Center activity have been analyzed as separate activities.

The four pre-feasibility analyses presented cover six of the twelve potential candidate activities described in the paper. A detailed analysis of the four grain candidate activities are omitted because they will derive a large portion of their projected benefits or increased income by assuming middlemen marketing and storage functions. The potential returns to this type of activity are discussed in the text and are substantial, around 10 percent. The preliminary assessment of cooperatives which have taken on increased marketing/storage functions indicates that a substantial increase in production from cooperative members can be expected as members realize the extra profit potential created by the ability of the cooperative to pay at least part of the anticipated sale price at the time of storage, and by the elimination of the distress sale pressure at harvest time as a result of the storage itself. Review of these activities indicate, the potential for considerable income change as a result of their implementation. Further data gathering was not justified at this stage, given that final activity selection will occur during project implementation. The last two activities not analyzed are the two coffee cooperatives. They were not analyzed for the same reasons the grain activities were not. In addition, existing small, but profitable coffee operations give indication that with an ample supply of coffee beans available, expansion of marketing activities should produce quite an acceptable rate of return.

B. Marketing Activity Analysis

A \$50,000 cost for each of the first five years is assessed against each activity in order to capture the technical assistance and support costs of the project which, it is assumed, will finance improvements in management training and marketing services provided by IPACOO and COAGRO that make the

activities possible. More specifically, without the investment to improve IPACOOOP and COAGRO as institutions, the marketing activities would not take place. The \$50,000 figure is obtained from assuming that approximately \$5 million of technical assistance and support funds should be spread over the minimum twenty marketing activities anticipated to be financed from credit funds during the five year period when all funds are to be disbursed. Such an assumption clearly overstates this cost element, first because there is reason to expect that more than twenty activities will actually be funded during the loan disbursement period and, secondly, because marketing activities that are funded after the disbursement period should bear some of the costs as those funded during the period. These conservative assumptions were adopted during this first round of analyses based on the view that if an activity could be justified under such conservative assumptions no more sensitivity analysis concerning these costs would be necessary. In all four cases, the internal rates of return (IRR's) were at least 15 percent, the minimum qualifying rate of return for the activities, and in three of four of the cases they were 20 percent or more.

The analysis also assumes project vehicles have to be replaced every five years, equipment every ten years, cold storage facilities every fifteen years, and buildings every twenty years -- again, very conservative estimates. The analysis also assumes that working capital is intact at the end of twenty years, and is thus entered as a salvage value in the twentieth year. And, as in most economic analysis inflation is assumed to be zero. Based on the types of benefits being measured and our earlier price policy discussion, no shadow pricing was considered necessary.

The cost figures for equipment, buildings, etc., can be found in the table, "Projected Capital Requirements and Capital Disbursement by Cooperative."

As specific marketing activities are initiated, the main effect will be higher prices resulting from the improved quality of production or from delayed sales made possible through storage, and not as a result of increased production alone, though the latter will obviously occur. Individual feasibility studies will consider demand and supply conditions so that increased supply does not lead to reduced income through sharp price reductions. In the area of fruits and vegetables, H. Johnson reveals that a project with the Cooperativa Horticola de Mercadeo to improve the quality of its produce will encounter a demand large enough to allow the cooperative to expand its production by 10% a year for several years to be sold in the "select market" (e.g. higher priced markets including U.S. military commissaries, local supermarkets, ships chandlers, hotels and restaurants, and hospitals). The combination of increasing annual demand due to population growth, positive product income elasticities, and the hidden demand for quality produce locally provide ample assurances that demand will be more than

adequate for the types of marketing activities likely to be undertaken under the project. As noted earlier, feasibility analyses for each proposed marketing activity will carefully consider the demand issue.

1. Juan XXIII - Poultry Beef, and Pork Processing Plant

Poultry producers receive \$.52 per pound for live birds from middlemen in the central region. Juan XXIII pays \$.57 per pound and makes a profit in the process. According to the agricultural cooperative experts who examined Juan XXIII and Avicola de Chiriqui, the impact of the activity on increased production should be in the neighborhood of 20-30%. Using the conservative figure of 10% yearly change (except for an 18% change between year 1 and year 2), the amount of broiler production was estimated for the five years of the project disbursement period, with the conservative assumption that there would be no further increases after year 5. The incremental value of one bird is estimated: 3.5 lbs/bird multiplied by the \$.05/lb extra net income (\$.57 - \$.52) provided by the cooperative, to give \$.175 per bird. This figure is then multiplied by the yearly production figures found in Table 1 to give the yearly incremental income resulting from the marketing activity shown in Table 2. This incremental income figure is understated by the amount of extra production that would be generated by the project. Since the plant was easily justified without such a value, no attempt was made to calculate it at this time.

For beef it is assumed that the farmer will receive \$.04/lb in net incremental income as a result of the activity. This amounts to \$19 per head. The incremental income figures shown in Table 2 are based on \$19 multiplied by sales of 170,340,510, 680 and 850 head of cattle during the years 2 - 6. From year 6 onward the production level stays at 850 head. No attempt is made at estimating impact on the production level itself.

The pork marketing activity is expected to provide the farmer with an extra profit of \$.06/lb. At \$8.40 a head and yearly sales expected to be 6,000, 6,600, 7,260, 8,000, and 8,800 head through the first five years and constant at 8,800 thereafter, the resulting incremental income changes are as shown in Table 2. No attempt is made at estimating impact of the project on production itself.

All costs of the plant have been included under poultry costs, along with the \$50,000 cost element discussed earlier. Purchases in the years 11, 13 and 16 are for new equipment, vehicles, etc., that have worn-out. The large income figures in year twenty include the salvage values of the various pieces of equipment, buildings, including the working capital.

As Table 2 reveals, even with the conservative assumptions, the activity renders an IRR of 21%. There is, thus, every reason to believe that such an activity will produce quite acceptable returns on investment.

2. Cooperativa Horticola de Mercadeo

The investment planned under the activity is expected to lead to increased production, reduced spoilage, and increased sales to select, high priced markets. Based on work carried out by H. Johnson (on a wide variety of fruits and vegetables) the investment planned for the cooperative is expected to increase production by 7.7%, 14.9%, 14%, and 13% during the 5 year project disbursement period. Currently, marketing losses (spoilage, bruising, etc.) are 25-35%. If we assume the figure conservatively is 15% and assume the marketing activity will cut losses in half, the result is a 7-1/2% effective increase in fruits and vegetables actually marketed. The quality of the products will be preserved because of improved packing, refrigeration, scheduling, etc. Because of this increased quality it is assumed that the cooperative's output sold to the select market will rise from the current 37.5% to 75%. Select markets pay up to 50% premium for quality, with the average estimated at 25%. Assuming a higher marketing cost of 12-1/2%, we estimate that sales in the select market provide a net value added of a 12-1/2% premium due to the activity. We assume no increases in quality or production after the fifth year. A 2% production increase due to improved marketing is included as a benefit as a result of the project. In summary, the analysis estimates the impact of the 7-1/2% increase in fruits and vegetables marketed resulting in reduced spoilage, the impact of the 2% annual change in production during the first five years due to better marketing techniques and the impact of selling a larger percentage of now higher quality produce in the higher priced select markets. We assume that extra cost of production associated with increased output is equal to 75% of the incremental income change based on the selling price so that net value added can be obtained by multiplying the gross incremental income change based on the selling price by 25%.

a. Net Income Calculations

1. Net increase in income due to 2% increase in sales resulting from improved marketing:

Rate of Change of Production	Year	Value of Prod. at Sale Price	Market Factor	Profit Factor	Net Increase in Income due to 2% Increase in Sales
	0	\$ 2,000,919			
7.7%	1	\$ 2,154,989	x .02	x .25 =	10,775
14.9%	2	\$ 2,476,083	x .02	x .25 =	12,380
14%	3	\$ 2,822,734	x .02	x .25 =	14,114
13%	4	\$ 3,189,690	x .02	x .25 =	15,848
13%	5	\$ 3,604,350	x .02	x .25 =	18,022

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b. Net increase in income due to reduced spoilage losses as a result of better handling, etc., and due to increased sales to select market.

The net increased income from reduced spoilage is a straight forward multiplication of each year's value of production sales by the .075 factor.

The following calculation produces the "select market price factor" which is applied to the new total value of production sales obtained as a result of reduced spoilage.

<u>Price Factor with Project</u>				<u>Price Factor Now</u>			
Price Premium	% Sales in Select	Rest of Sales	Regular Price	Price Premium	% Sales in Select	Rest of Sales	Regular Price
(1.125 x	.75) +	(.25 x	1) -	(1.25 x	.375) +	(.625 x	1)
1.0438			-	1.0469			

Change in select market price factor = .0469 - .0438 = .0031 as result of project

Year	Value of Prod. at Sale Price (a)	Spoilage Factor	Increase in Net Income (b)	New Total Value of Prod. (a+b)	Select Market Factor	Increase in Net Income
1	\$2,154,989	x .075 =	\$161,624	\$2,316,613	x .05 =	\$115,831
2	2,476,083	x .075 =	185,706	2,661,789	x .05 =	133,089
3	2,822,734	x .075 =	211,705	3,034,439	x .05 =	151,722
4	3,189,690	x .075 =	239,227	3,428,917	x .05 =	171,446
5	3,604,350	x .075 =	270,326	3,874,676	x .05 =	193,734

c. Total net incremental income change as a result of the marketing activity:

Year	Improved Marketing	Reduced Spoilage	Increased Sales at Select Markets	Total
1	\$ 10,775 +	\$161,624 +	\$115,831 =	\$ 288,230
2	12,380 +	185,706 +	133,089 =	331,175
3	14,114 +	211,705 +	151,722 =	377,541
4	15,948 +	239,227 +	171,446 =	426,621
5	18,022 +	270,326 +	193,734 =	482,082

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b. Cost Calculations

The cost figures in Table 3 are taken from the table "Projected Capital Requirements and Capital Disbursement by Cooperative." The cost figures beyond year 5 represent equipment and structure replacements. As with the previous activity, \$50,000 was added as a cost item for each of the first five years in order to capture that part of the project costs applicable to each activity. The large income figure in the twentieth year represents salvage value of the working capital, buildings, and equipment.

c. Summary

The 23% IRR obtained in Table 3 satisfies the Mission that at this prefeasibility stage the activity is an extremely attractive investment possibility.

Table 3

Cooperativa Horticola de Mercadeo 1/

Year	Costs	Income	Net Income
1	\$ 972,000	\$288,230	\$ - 683,770
2	305,000	331,175	26,175
3	605,000	377,541	227,459
4	365,000	426,621	61,621
5	450,000	482,082	32,082
6	53,000	482,082	429,082
7	90,000	482,082	329,082
8		482,082	482,082
9		482,082	482,082
10	30,000	482,082	452,082
11	307,000	482,082	175,000
12	90,000	482,082	392,082
13		482,082	482,082
14	250,000	482,082	232,082
15	30,000	482,082	452,082
16	453,000	482,082	29,082
17	130,000	482,082	352,082
18	400,000	482,082	82,082
19		482,082	482,082
20	30,000	1,629,382	1,599,382

IRR = 23%

1/ See Table 2 and text for heading definitions

3. Cooperativa de Cacao Bocatoreña

Cooperative consultants estimate that net income can be increased by at least 4% from economies of scale in marketing made possible by marketing capital.

The price has fallen over the past four years to a low of \$.60/lb. Indications are that the market will firm-up after this year. We assume that for 1983 the price will rise to \$1.05/lb., the eight year historical average. Production is currently 1.25 million pounds and is assumed to increase by 10% annually after the first year through the tenth year. No benefit is attributed to the activity's impact on production itself, but rather just the impact of the marketing improvements. Production is assumed constant after the fifth year.

Year	Production		Price		Income Increase Factor		Net Incremental Income
1	1,250,000	x	\$.75	x	.04	=	37,500
2	1,375,000	x	1.05	x	.04	=	57,750
3	1,512,000	x	1.05	x	.04	=	63,525
4	1,663,750	x	1.05	x	.04	=	69,878
5	1,830,125	x	1.05	x	.04	=	76,865
6	2,013,138	x	1.05	x	.04	=	84,552
7	2,214,451	x	1.05	x	.04	=	93,007
8	2,435,896	x	1.05	x	.04	=	102,308
9	2,679,486	x	1.05	x	.04	=	112,538
10	2,947,435	x	1.05	x	.04	=	123,792

The cost figures can be found in the Table "Projected Capital Requirements and Capital Disbursement by Cooperative". As in the other analyses \$50,000 are added for each of the first five years.

The fairly high IRR shown in Table 4, for a project with relatively low incremental income values and the extra relatively high \$50,000 project cost element compared to the activity's costs, gives reason to be satisfied that the activity will provide acceptable returns.

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Table 4
 Cooperativa de Cacao Bocatoreña ^{1/}

Year	Costs	Income	Net Income
1	\$ 255,000	\$ 37,500	\$ - 217,500
2	81,000	57,750	23,250
3	85,000	63,525	21,475
4	91,000	76,865	21,122
5	96,000	84,552	19,135
6		93,007	84,552
7		102,308	93,007
8		112,538	102,308
9		123,792	112,538
10		123,792	123,792
11		123,792	123,792
12		123,792	123,792
13		123,792	123,792
14		123,792	123,792
15		123,792	123,792
16		123,792	123,792
17		123,792	123,792
18		123,792	123,792
19		123,792	123,792
20		446,597	446,597

IRR = 19%

^{1/} See Table 2 and text for heading definitions

4. Cooperativa Apícola

Marketing has been the limiting factor in expanding honey production in Panama. The marketing system resulting from the activity is expected to increase the number of marketing outlets leading to a 20% yearly increase in production from year 2 through 6, dropping to 10% through year 11, when it ceases to grow.

In calculating the returns to the activity we assume: (1) honey sells for \$.90/kilo; (2) without the activity production would stay at 218,000 kg; (3) cost of production is 75% of sale value so that net incremental income farm increased production can be obtained by multiplying the incremental sales

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figure by .25; (4) more efficient processing and marketing leads to a 3% increase in net income from all production --both original without the project and incremental as a result of the project; (5) the values in points 3 and 4 are summed to give a 0.28 factor.

Net Incremental Income Calculation

Year 2				
218,000 kg.	x 1.20	=	261,600	
			<u>218,000</u>	
			43,600	change in production
43,600 kg	x \$.9/kg	=	39,240	gross income from increase in production
			x <u>.28</u>	
			\$ 10,987	net incremental increase in income due to production increase and marketing efficiencies for incremental production
			5,890	net incremental increase in income due to marketing efficiencies on the original 218,000 kg.
Year 3				
216,000	x 1.20	=	313,920	
			<u>218,000</u>	
			95,920	x .9 x .28 =
				\$24,172
				<u>5,890</u>
				30,062
Year 4				
313,920	x 1.2	=	376,704	
			<u>218,000</u>	
			158,704	x .9 x .28 =
				39,993
				<u>5,890</u>
				45,883
Year 5				
376,704	x 1.2	=	452,044	
			<u>218,000</u>	
			234,044	x .9 x .28 =
				58,979
				<u>5,890</u>
				64,869

Year 6				
452,044 x 1.2	=	542,453		
		<u>218,000</u>		
		324,453	x .9 x .28	= 81,762
				<u>5,890</u>
				87,652
Year 7				
324,453 x 1.1	=	596,698		
		<u>218,000</u>		
		378,698	x .9 x .28	= 95,432
				<u>5,890</u>
				101,322
Year 8				
596,698 x 1.1	=	656,368		
		<u>218,000</u>		
		438,368	x .9 x .28	= 110,469
				<u>5,890</u>
				116,359
Year 9				
656,368 x 1.1	=	722,005		
		<u>218,000</u>		
		504,005	x .9 x .28	= 127,009
				<u>5,890</u>
				132,899
Year 10				
722,005 x 1.1	=	794,206		
		<u>218,000</u>		
		576,206	x .9 x .28	= 145,204
				<u>5,890</u>
				151,094
Year 11				
794,206 x 1.1	=	873,627		
		<u>218,000</u>		
		655,627	x .9 x .28	= 165,218
				<u>5,890</u>
				171,108

The cost data are obtained from the same source as for the other studies. The \$50,000 a year argument pertains also.

An IRR in excess of 30% as shown in Table 5, combined with the high cost \$50,000 element is ample assurance that the project should prove to be viable.

Table 5
 Cooperativa Apicola 1/
 Honey and Wax Production

Year	Costs	Income	Net Income
1			
2	\$ 120,000	\$ 16,877	\$ - 103,123
3	62,000	30,062	31,938
4	64,000	45,883	18,117
5	67,000	64,869	2,131
6		87,652	87,652
7		101,002	101,322
8		116,359	116,359
9		132,899	132,899
10		151,094	151,094
11	40,000	171,108	131,108
12		171,108	131,108
13		171,108	131,108
14		171,108	131,108
15		171,108	131,108
16		171,108	131,108
17		171,108	131,108
18		171,108	131,108
19		171,108	131,108
20		421,108	421,108

IRR = 36%

1/ See Table 2 and text for heading definitions

C. COAGRO: Impact of Management Improvement

Over the last three years costs have equaled 99% of gross income. With the management improvement within the COAGRO organization, a minimum reduction in costs to 98% of sales is expected as COAGRO personnel learn new and better management skills. Only the costs pertaining to the COAGRO operation are included here on the assumption that no other costs are necessary to attain the 2% increase in profits. We assume that the value of sales remains constant over a ten year period. The \$1.32 million expenditure

on the COAGRO element is averaged over the five year disbursement period of the project. The internal rate of return that results is huge, 130%, and demonstrates the impact a modest investment can have on an organization that has struggled for some years.

Table 6
 COAGRO 1/

Impact of Management Improvement

Year	Costs	Income	Net Income
1	\$264,000	\$260,000	\$ - 4,000
2	264,000	260,000	- 4,000
3	264,000	260,000	- 4,000
4	264,000	260,000	- 4,000
5	264,000	260,000	- 4,000
6		260,000	260,000
7		260,000	260,000
8		260,000	260,000
9		260,000	260,000
10		260,000	260,000

IRR = 130%

1/ See Table 2 and text for heading definitions.

Costs: \$125,000 restructuring; \$545,000 marketing advisor; \$55,000 marketing development; \$595,000 support.

D. IPACOOOP - Impact of Management Improvement

The CLUSA experts estimate that the new training skills to be taught by IPACOOOP as a result of the technical assistance and support (approximately \$1.18 million) will increase cooperative net incomes by 5-10% due to improved efficiencies of operation. If we only consider that portion of cooperative production which is marketed through cooperatives (\$16.4 million of roughly \$82 million), a 1 1/2% improvement in operations will produce a 29% IRR in ten years. We, thus, are quite certain that the IPACOOOP element could be justified on its own merit.

Table 7

IPACCOOP 1/

Impact of Management Improvement

Year	Costs	Income	Net Income
1	\$236,800	\$ -0-	\$ - 236,800
2	236,800	246,000	- 9,200
3	236,800	246,000	- 9,200
4	236,800	246,000	- 9,200
5	236,800	246,000	- 9,200
6		246,000	246,000
7		246,000	246,000
8		246,000	246,000
9		246,000	246,000
10		246,000	246,000

IRR = 29%¹

1/ See Table 2 for heading definitions

MARKETING ANALYSIS OF COMMODITIES

A. Introduction

A technical team composed of CLUSA AND AID staff visited selected cooperatives to determine which organizations would be best able to exploit improved product marketing services and other agribusiness opportunities. This report presents a commodity and cooperative specific analysis of marketing sub-projects, which showed the greatest potential based on pre-feasibility calculations of the financial viability of investments as well as an institutional analysis of the subject cooperatives.

Poultry Production

The poultry industry in Panama is dominated by three large integrated producers concentrated in Panama City. These producers raise both broilers and layers. The large producers have control of hatcheries, feed mills, poultry houses, abattoirs, cooling facilities and the marketing system. The primary market for poultry products is in Panama City, however, both eggs and meat are shipped to regional markets in cities such as David, Santiago, Colon, Chitre, Penonome and elsewhere.

Within the COAGRO system are a number of farmers who raise broilers or layers on a relatively small scale. The largest concentrations of small growers are in David with 165 growers in the Avicola de Chiriquí organization and in Santiago with 10 commercial operations in the Juan XXIII organization. A number of other small growers are scattered throughout COAGRO affiliates.

Avicola de Chiriquí and Juan XXIII are the only COAGRO cooperatives which are marketing poultry products. However, a number of COAGRO affiliates are providing input supplies to members for poultry operations such as feed, pharmaceuticals and equipment. In addition, many of the COAGRO affiliates and COAGRO itself sell input supplies to non-members.

The economics of poultry production are favorable to producers because of the input/output price ratios in both broilers and layers. With reasonable levels of production and marketing efficiency poultry producers should be able to show a level of profit sufficient to justify the investment and risk involved.

There appears to be no inherent reason why small farmers cannot produce as efficiently as large farmers, measured on a basis of cost of production per bird or per egg. However, small farmers are not now producing as efficiently as the large integrated operations in Panama City. There are

basically five reasons why small farmers have not been able to enter production and produce as efficiently as the large integrated operations:

1) Lack of farm level technical expertise. Achieving a favorable feed conversion ratio and limiting poultry mortality at the farm level is the most important variable in determining profitability of poultry raising. To do this requires close supervision of poultry operations by persons with expertise in poultry pathology, nutrition and poultry husbandry. The large Panama City producers have acquired such expertise, but small producers have had only irregular contact with Government extension agents who are unproven in the poultry area.

2) Lack of access to capital. BDA operating policies do not take into account the production cycles and resultant cash flows. Thus, BDA repayment schedules are frequently not very realistic.

3) Lack of access to inputs. Small farmers must buy day old chicks or 20 week old pullets either from the government hatchery or from one of the large Panama City producers. Some farmers voiced concern with the quality of birds obtained from these sources. Small farmers are also not receiving the benefits of large volume purchases of supplies and equipment as do the large growers and, therefore, small farmers are paying higher prices for inputs.

4) Lack of access to processing and marketing systems. Except for the limited efforts of Avícola de Chiriquí and Juan XXIII at marketing, smaller farmers have had to find their own markets for output. At modest production levels this obstacle is not particularly severe. However, practical limits are placed on production by processing and marketing facilities because these activities become disproportionate burdens on the time of a farmer if he must perform these activities himself and also try to increase his production. Processing and marketing are areas where there are definite economies of scale.

5) Lack of integrated operations. Large producers have control of hatcheries, feed production, poultry houses, processing and marketing. At various times the economic situation changes so that certain activities of an integrated operation are profitable while at other time they are not. Thus an integrated operation is more stable economically because there are a number of activities in which a profit can be made. A non-integrated producer has to make a profit on the growing of his birds and thus is exposed to greater risk.

Investing solely in a marketing system for poultry will result in a modest increase in poultry production since a number of the present poultry producers view marketing as a major constraint to increased production. The emphasis of this marketing system will be in the central and western regions

of the country where the cooperatives should have a transportation advantage over producers located near Panama City.

However, major increases in poultry production will not come about until cooperatives have a completely integrated system. Field observations of broiler production showed management deficiencies at the farm level and perhaps at the hatchery which were resulting in feed conversion ratios of about 4:1 whereas a ratio of 2.5:1 is feasible and 2:1 is possible.

PROJECTED CAPITAL REQUIREMENTS FOR POULTRY MARKETING
(\$000)

Y E A R	1	2	3	4	5	TOTAL
Central Region						
Juan XXIII						
Refrigerator truck*	50	-	-	-	-	50
processing equipment*	90	-	-	-	-	90
building*	50	-	-	-	-	50
marketing capital level required	<u>168</u>	<u>+24</u>	<u>+31</u>	<u>+22</u>	<u>+25</u>	<u>270</u>
SUBTOTAL CENTRAL NEW CAPITAL DISBURSEMENTS	358	24	31	22	25	460
Western Region						
Processing Equipment	-	70	-	-	-	70
Building	-	40	-	-	-	40
Marketing Capital level	<u>132</u>	<u>+20</u>	<u>+15</u>	<u>+17</u>	<u>+19</u>	<u>203</u>
SUBTOTAL WESTERN- NEW CAPITAL DISBURSEMENTS	132	130	15	17	19	313
GRAND TOTAL-NEW CAPITAL DISBURSEMENTS	490	154	46	39	44	773

* Equipment will also be used for processing and marketing beef and pork products.

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TABLE 1
PROJECTED BROILER PRODUCTION

	Y E A R				
	1	2	3	4	5
	Number of Broilers Produced				
Central Region					
Juan XXIII	60,000	72,000	80,000	88,000	97,000
other coops *	108,000	130,000	143,000	157,000	173,000
EASTERN REGION	24,000	29,000	32,000	35,000	39,000
WESTERN REGION	<u>132,000</u>	<u>152,000</u>	<u>167,000</u>	<u>184,000</u>	<u>203,000</u>
TOTAL	<u>324,000</u>	<u>383,000</u>	<u>422,000</u>	<u>465,000</u>	<u>512,000</u>

* Includes Agropecuaria Santeña, La Union de Anton, and scattered others. Eastern region data is not included in the analysis.

C. Beef Production

The estimated cattle population in Panama in 1981 stood at 1.35 million head. Over the last decade the increase in the cattle population has been less than 1 percent per year. Panama is a net exporter of beef and has access to the U.S. market because of freedom from hoof and mouth disease. Two thirds of the cattle population is located in the Provinces of Chiriqui, Los Santos and Veraguas.

In the COAGRO federation the Cooperativa de Productores de Leche and the Cooperativa Ganadera in the Western Region are raising cattle for beef. Juan XXIII in the central region is planning to enter production and slaughter of beef cattle. In the Eastern Region Bejuco Chame produces beef. Numerous members of other COAGRO affiliates also produce veal or beef.

The present marketing system consists of middlemen, truckers, processors and other buyers who visit farmers and purchase cattle "by eye" rather than weight. Some buyers purchase on credit and others give cash.

Cash purchases are made at a lower price. Since the Government controls the price of most beef cuts there is not as much variation in farm gate prices as would be expected under free market conditions. Prices paid to farmers are generally lower during the dry season when many small farmers sell cattle because of lack of available forage.

Despite the number of cooperative farmers producing beef, there appear to be limited opportunities for cooperatives to get involved with beef marketing at this time. Suggestions of cooperatively-owned auction facilities or buying stations were not greeted with any enthusiasm during the field survey. It does appear that encouraging small farmers to store hay or fodder for dry season feeding would help them avoid selling livestock during the dry season when prices are lower. However, no provision was made in this project for such activities.

The one cooperative which is prepared to enter beef marketing is Juan XXIII. Plans are being made for a multi purpose slaughterhouse to process beef, pork and chicken. The beef will be sold in the same marketing channels as the pork and chicken. This is in their 16 retail outlets, other consumer cooperatives in the Central Region, restaurants and private stores.

CAPITAL REQUIREMENTS FOR PROCESSING AND MARKETING
BEEF CATTLE IN JUAN XXIII (\$000)

	Y E A R					Total
	1	2	3	4	5	
Cattle Sold	0	170	340	510	680	1,700
Capital Investment						
Processing equipment*	-	-	-	-	-	90
Building*	-	-	-	-	-	50
Refrigerator truck*	-	-	-	-	-	50
Marketing capital	<u>0</u>	<u>30</u>	<u>+30</u>	<u>+30</u>	<u>+30</u>	<u>120</u>
TOTAL-NEW CAPITAL DISBURSEMENTS	-0-	30	30	30	30	120

* Building and equipment will also be used for processing and marketing pork and poultry products. The \$190,000 is included only in the \$490,000 figure for poultry.

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D. Pork Production

In the country as a whole, pork consumption and production assumes a minor role when compared to beef. Panama is a net importer of pork products as consumption has been outpacing production. A major portion of pork production is small farmers raising local breed scavenger pigs.

Farmers in the Juan XXIII cooperative are commercially raising Danish Landrace and other improved cross breed varieties of pigs. The pigs are fattened on grain concentrates produced in the feedmill operated by the cooperative. Some of the farmers are specializing in breeding and producing feeder pigs. Other farmers are buying feeder pigs and fattening them to market weight of about 220 pounds.

About 30 percent of the hogs raised by Juan XXIII farmers are slaughtered in facilities owned by the cooperative and sold in retail outlets owned by the cooperative. In addition negotiations are proceeding to sell pork products in several other cooperatives, a number of privately run stores in the Santiago area and in local restaurants. Seventy percent of the hogs are sold live to middlemen processors and retailers. Markets for pork are expected to complement the markets being developed for poultry and beef. Joint marketing of pork, chicken and eggs will extend the product line and provide external economies in the marketing effort.

The present level of production in Juan XXIII is 200 hogs per month. In 1983 the production level was expected to reach 500 hogs per month, with further increases in production expected to hinge on developing markets. The price of a dressed 145 pound carcass is \$1.03 per pound.

At the present time there does not appear to be any other cooperative in the COAGRO system which is in a position to market pork. However, it might be expected that if pork production proves to be profitable because of easier market access through the developing marketing system at Juan XXIII, individual farmers in other cooperatives may enter pork production.

The major uncertainty in pork marketing is the ability of the market to absorb increased production at a price which is favorable to the farmers. The major determining factor will be government policy toward agricultural prices and the level of imports permitted. Comparisons were made of the projected pork production levels in the Juan XXIII cooperative with the total increased pork production in the country during this same period.

Between 1971 and 1980 the swine herd in Panama increased from 151,000 head to 211,000 head. This represents an average increase of 3.8 percent per year over the 9 year period. If this same rate of increase continues for the

life of the cooperative marketing project, in 1987 the swine herds will number 273,000 head. This represents an increase of 46,000 head over the present estimated herd of 227,000 head. The 5 year projected increase in production by Juan XXIII of 4,600 head per year represents 14 percent of the increase for the country as a whole. It is reasonable to assume that the increased production will be readily absorbed in the market if there is no major shift in pricing policies.

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PROJECTED SWINE MARKETING AND CAPITAL
REQUIREMENT IN JUAN XXIII

	<u>PRESENT</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>
Swine Marketed	2,400	6,000	6,600	7,260	8,000	8,800	36,660
Marketing Capital level		224,000	+22,000	+25,000	+28,000	+29,000	328,000
Capital Investments							
Refrigerated truck*		-	-	-	-	-	-
Processing Equip.*		-	-	-	-	-	-
Building*		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total NEW CAPITAL DISBURSEMENTS		224,000	22,000	25,000	28,000	29,000	328,000

* Building and equipment will also be used for processing and marketing beef and poultry. The \$190,000 is included only in the \$490,000 figure for poultry.

E. Honey and Wax Production

Panama is a net exporter of honey and wax. Two cooperatives are supplying beekeepers with supplies and marketing. One of the cooperatives is associated with COAGRO, the other is not.

In the Central Region is Cooperative Apicola. Apicola has 70 members and tries to coordinate supplies and marketing for beekeepers in the whole country. Apicola encourages beekeepers who are members of other COAGRO cooperatives to form special interest working groups rather than starting a new cooperative. The cooperative has been largely inactive because of a lack of capital for marketing.

In the western region is Cooperative Servicios Multiples de Apicultores de Chiriqui. Twenty-nine of the approximately 100 beekeepers in Chiriqui Province are members of this cooperative. Members maintain 4,000 hives. This relatively new cooperative is not yet marketing honey, but the president sees marketing as the key to success of the cooperative. At present the cooperative is being run by the board without hired management, at a very low administrative cost. This cooperative is not a member of COAGRO but discussions have been held with COAGRO board members. The board and membership of this cooperative appear to be very business oriented and their future development would be strengthened by participation in the marketing project.

Beekeeping is potentially very well suited for small producers. The capital requirements are modest, equipment can be made locally, land ownership is not essential, and beekeeping is labor intensive.

A potential problem with beekeeping in Panama is the invasion of African bees. In some South American countries where African bees have invaded, honey production went down. Costs of production went up because beekeepers were required to move their hives away from populated areas to prevent mass stinging and many beekeepers reduced the number of hives or went out of business. However, the African bees are breeding with the more docile Italian bees and the cross produces colonies which are more docile than the Africans, variety but retain its superior foraging ability. As a consequence honey production in Panama could actually increase.

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CAPITAL REQUIREMENTS FOR HONEY AND WAX MARKETING
(\$000)

	Y E A R					Total
	1	2	3	4	5	
<u>Central Region</u>						
Cooperativa Apicola						
Processing Equipment	10	-	-	-	-	10
Marketing Capital level	<u>60</u>	<u>+12</u>	<u>+14</u>	<u>+17</u>	<u>+22</u>	<u>125</u>
Total	70	12	14	17	22	135
<u>WESTERN REGION</u>						
S.M. Apicultores						
Processing Equipment	30	-	-	-	-	30
Marketing Capital level	<u>60</u>	<u>+12</u>	<u>+14</u>	<u>+17</u>	<u>+22</u>	<u>125</u>
TOTAL NEW CAPITAL DISBURSEMENTS	90	12	14	17	22	155
GRAND TOTAL-NEW CAPITAL DISBURSEMENTS	160	24	28	34	44	290

F. Cacao Production

Cacao is produced in the Eastern Region by the Cooperativa de Cacao Bocatoreña. In 1981 its 250 members marketed 946,000 pounds of cacao. This financially sound cooperative has begun direct export of cacao to take advantage of greater marketing margins than are available by selling to local buyers. The activities of this group are limited to collection, grading, storage, transportation and marketing of cacao as well as bargaining on behalf of its members. Plans for construction of a cacao processing plant were shelved when (1) prices for cacao dropped from \$1.47 per pound to \$.60 per pound, (2) an outbreak of fungus reduced output for the group from 1.5 million pounds to .95 million pounds, and (3) another business group constructed a processing plant.

The needs of this group for marketing operating capital will be influenced by changes in world market prices for cacao and recovery of the trees from fungus infestation.

CAPITAL REQUIREMENTS FOR CACAO MARKETING (\$000)

	Y E A R					Total
	1	2	3	4	5	
Marketing Capital level	205	+31	+35	+41	+46	358
Capital Investment	-	-	-	-	-	-
Total NEW CAPITAL DISBURSEMENTS	205	31	35	41	46	358

G. Fruit and Vegetable Production

Fruit and vegetable production is an important economic enterprise for many Panamanian farmers. Variations in climate, soil and altitude permit the production of a wide variety of horticulture crops over a fairly long marketing season. Horticultural crop enterprises are operated under an intensive production system that is well suited to small farmers. Unused or underutilized family labor can be used on small parcels of land to provide needed cash income for families wishing to lift themselves from subsistence farming.

The western and central regions of the country are now producing the bulk of horticultural crops in Panama. It appears the area also has potential for expansion. Chiriqui province is the most important production area for vegetables, with Boquete and Cerro Punta being most active. At present these two highland areas are producing, potatoes, onions, lettuce, cabbage, carrots, tomatoes, celery and oranges for market. They are also producing a smaller volume of bell peppers, beets, sweet potatoes, cucumbers, chili peppers, beans, chinese cabbage, strawberries, cauliflower, broccoli, grapefruit, chayote and avocados. With market development production of these minor crops could be expanded.

A second potential commercial production area is in the lowlands of the Azuero Peninsula. Communities presently active in production are Ocu, Chitre, Santiago, El Valle and Aguadulce. The principal varieties produced in

this area are yucca, onions, tomatoes, carrots, watermelons and melons. Onion and tomatoe production could complement the Boquete and Cerro Punta production areas.

La Cooperativa Horticola de Mercadeo de Boquete is presently the most active cooperative in Panama in the marketing of fruits and vegetables. During the 1981-1982 marketing year Horticola handled 100,000 cwt. of vegetables. Grading, cold storage and bagging equipment now (primarily for potatoes) exist in the cooperative. In addition, the cooperative has established a small marketing facility in Panama City. This facility has two small cold storage chambers, trucks for local delivery, a small space where re-packaging can be done, and a salesman-manager. They have been able to make a market entry with several Panama City supermarkets (Riba-Smith, Gago, etc.) and fast food chains (Taco-Bell and Pizza Hut).

Of Horticola's total volume, 80 percent is trucked to Panama, with the remaining 20 percent sold locally in Boquete, mostly to middlemen. The cooperative considers their "select" market as being, supermarkets, ship chandlers, hotels and retaurants, and the former Canal Zone. More than 37 percent of their Panama City volume goes to this select market, with the remainder being sold in the public market, to small bodegas and middlemen.

Other cooperatives and individual producers have not developed a marketing system. Instead, their production is sold to middlemen or, as in the case of potatoes and onions, to IMA.

The present distribution system for perishable fruits and vegetables does little to preserve quality. Lack of refrigeration, poor packaging, inadequate transport, lack of sorting and grading facilities, all contribute to a large volume of waste. In addition, the product which does reach the consumer is of such inferior quality that it lowers its acceptance, resulting in lower consumption and lower prices.

Cooperative leaders have confused "selling" with marketing. If they produce, they look for a buyer. They do not look for a buyer (a market) and then produce to meet that need. If they find someone today to buy what they have, they believe they have secured a market. In fact, the buyer may well buy elsewhere tomorrow if price is lower, the quality is better, or if the another seller reaches him first. Long term markets can be developed only if the seller is able to convince the buyer he has something his competitor does not have. Panamanian cooperatives developing fruit and vegetable markets should consider the following strategies in market development:

1. Quality. Deliver to the buyer a superior quality product which will be in high demand by the consumer.

2. Supply. Maintain a regular supply of the product which the buyer can depend on. This means where feasible, extending the marketing season with storage or scheduling production to extend the season. Delivery of the product on the day, at the time and in the amount and quality ordered by the buyer also is important. If the cooperative has been able to secure a sizable portion of the market supply, this will also give the organization more control of the market.

3. Services. Examples of services which might be developed are store delivery, pre-pack for the buyer, and training of super-market personnel in the maintenance of in-store quality to assure consumer satisfaction. Other services could also help secure markets. However, only those which are profitable should be offered. For example, the extension of credit is often risky and credit policies should be adopted which do not hamper the movement of produce, but which also protect the cooperative market.

4. Contractual agreement. If the buyer perceives enough of an advantage, he may agree to a contract which will legally secure the market for the cooperative. Here again, there are risks if the cooperative cannot meet its production obligations.

H. Future Cooperative Market Development in Fruits and Vegetables

Horticola in Boquete is presently the leader in the cooperative marketing of fruits and vegetables. Future development should be built around this organization. Ways should be found to involve other cooperatives in fruits and vegetable marketing. A mechanism should be developed which will involve these groups in such a way that Horticola does not become just another "middleman" for other farmer groups. It would seem that groups from different areas should maintain their autonomy within their local community. However, it may be advantageous for them to cooperate with other cooperatives in operating facilities in Panama City and in developing a distribution system for their product. It is unreasonable to expect that Horticola de Boquete should give these other groups a "free ride". Each group should make an equitable contribution to market development. A way should be found to assist Horticola in moving ahead with its market development efforts, and still permit the entry of other groups at a later date. COAGRO as a federated cooperative could possibly make a contribution in this area.

One small cooperative, El Valle de Anton, could possibly develop its fruit and vegetable production so that it could market cooperatively with Horticola. El Valle presently has 13.5 hectares of production, devoted mainly to onions. This could readily be expanded to 20-25 hectares. In addition, the cooperative has access to 43 hectares of mesa land a half hour distance from El Valle. Individual producers, farming small plots within the area,

could probably be induced to join with the cooperative for expanded volume, if the cooperative could offer them marketing services. Another potentially valuable resource available to the cooperative is a very substantial building for grading and storing of fruits and vegetables. This facility has a small cold storage room (approximately 400 square feet) and a fruit grading system. With minimal investment this facility could be used to handle fruits and vegetables in a quality program which could fit into the larger market development plan under consideration by Horticola. Leaders of the two cooperatives have discussed the idea.

Other even smaller producer groups could fit into a cooperative marketing plan under Horticola leadership. The small cooperative in Chica and the unorganized producer group at Ocu have shown interest in working in such a marketing arrangement. No projections were on their credit needs or potential production. However, any cooperative fruit and vegetable marketing plan developed should facilitate the easy market entry of such groups.

The marketing system to be developed should give the producer, through the cooperative, maximum control of the product until it reaches the retailer. No attempt should be made to sell directly to the household consumer in Panama City. Key market areas to be developed should be (1) supermarkets (2) hotels and restaurants, (3) Canal Zone buyers (4) ship chandlers. A market will still exist for lower quality produce with small stores, the public market and middlemen.

At some future date cooperative development of food processing should be considered (canning, freezing, drying, etc.). However, this should not be done until the fresh market potential has been fully realized.

Howard Johnson, Volunteer Development Corps, working with Horticola developed the following production projections which they believe can be marketed through their Panama City outlet. A part of this production would need to be provided by producers outside the Boquete area. The projections seem in line with their capabilities and market demand if additional investment is made in the marketing system.

Base	1st Year 1982 - 1983			2nd Year 1983 - 1984				3rd Year 1984-1985			4th Year 1985 - 1986			5th Year 1986 - 1987			New Total Volume
	X 1981-1982	Volume Change	New Total Increase	X Volume	Change Volume	New Total Increase	X Volume	Change Volume	New Total Increase	X Change	Volume Increase	New Total Volume	X Change	Volume Increase	New Total Volume		
Potatoes	75,223	-	-	75,223	10X	7,522	82,945	10X	8,274	91,141	10X	9,104	100,145	10X	10,014	110,159	
Onions (XXX)	11,721	20X	2,344	14,065	20X	2,813	16,878	20X	3,575	20,253	20X	4,050	24,303	20X	4,860	29,164	
Carrots (XX)	2,379	20X	476	2,855	35X	428	3,283	10X	328	3,611	10X	361	3,972	10X	397	4,369	
Tomatoes	1,839	100X	1,839	1,678	50X	1,839	5,519	25X	1,379	6,896	10X	689	7,585	10X	758	8,343	
Peppers (XX)	476	90X	428	904	60X	542	1,446	40X	578	2,024	20X	405	2,430	10X	243	2,673	
Beets (XX)	464	40X	183	649	20X	129	798	10X	78	856	10X	85	942	10X	96	1,036	
Sweet Potatoes	111	-	11	122	10X	12	132	10X	13	148	10X	15	162	10X	16	179	
Cucumbers	20	-	2	22	10X	2	24	10X	2	26	10X	3	29	10X	3	32	
Chili Peppers	19	-	2	21	10X	2	23	10X	2	25	10X	3	28	10X	3	31	
Egg Plant	1	-	-	1	500X	6	7	10X	1	8	10X	1	9	10X	1	10	
Lettuce	3,119	30X	933	4,054	25X	1,013	5,067	20X	1,013	6,080	20X	1,216	7,296	20X	1,459	8,755	
Cabbage	3,857	10X	1,157	5,014	25X	1,253	6,269	20X	1,253	7,521	20X	1,504	9,025	20X	1,805	10,830	
Celery (XXX)	897	50X	448	1,345	40X	538	1,883	30X	565	2,448	20X	489	2,937	20X	587	3,524	
Beans (XX)	149	10X	15	164	10X	16	180	10X	18	198	10X	20	218	10X	22	240	
Chinese Cabbage	221	10X	22	243	10X	24	267	10X	27	294	10X	29	323	10X	32	356	
Sp. Onions	44	10X	4	48	10X	5	53	10X	5	58	10X	6	64	10X	6	70	
Cauliflower	31	25X	8	39	25X	10	49	20X	10	59	20X	12	70	20X	14	84	
Broccoli	15	25X	4	19	30X	6	25	20X	5	30	20X	6	36	20X	7	43	
Paraley	6	-	-	6	-	-	6	-	-	6	-	-	6	-	-	6	
Oranges	1,803,315(*)	10X	180,331	1,983,646	10X	198,363	2,182,011	10X	218,201	2,400,212	10X	240,021	2,640,233	10X	264,023	2,904,256	
Grapefruit	43,434(*)	-	-	43,434	-	-	43,434	-	-	43,434	-	-	43,434	-	-	43,434	
Lemons	850(*)	-	-	850	-	-	850	-	-	850	-	-	850	-	-	850	
Chayote	6,089(*)	-	-	6,089	-	-	6,089	-	-	6,089	-	-	6,089	-	-	6,089	
Avocado	1,540(*)	-	-	1,540	-	-	1,540	-	-	1,540	-	-	1,540	-	-	1,540	

* In units of 1, all others in cwt.
 ** These will increase considerably if contracts are made processing industry.
 *** This volume will double, if storage silos are constructed.

An estimate of investment needs for market development and expenses are listed below:

La Cooperativa Horticola de Mercadeo de Boquete

Investment	YR 1	YR 2	YR 3	YR 4	YR 5	Total
Onion Dryer	200,000					200,000
Cold storage for Onions and Vegetables (Boquete)	400,000		400,000		400,000	1,200,000
Cold storage for Panama City Dist.		40,000				40,000
Re-Pack office short-term storage (Panama City)	60,000					60,000
Office space (Boquete)			30,000			30,000
Grading and Handling Equipment	54,000					54,000
Vac. Cooling for Leafy Vegetables				250,000		250,000
Delivery trucks		40,000				40,000
Big trucks for Boquete-Panama	50,000	50,000				100,000
Field man Marketing Asst. for Producer	10,000	10,000	10,000	10,000	10,000	50,000
F. M. Transport.	3,000	1,000	1,000	1,000	1,000	7,000
Mkt. Sales Dev. (Panama City)	18,000	18,000	18,000	18,000	18,000	90,000
Managerial Staff Training	12,000	6,000				18,000
Operating Capital level for Increased Onion Storage		65,000	+65,000	+65,000	(revolves)	195,000
Operating Capital level for Expanded Mkt. other veg.	80,000	+60,000	+60,000	(revolves)	(revolves)	200,000
Total New Capital Disbursements	887,000	290,000	584,000	344,000	429,000	2,534,000

Cooperativa Agropecuaria de Servicios Múltiples La Libertad de El Valle

	<u>YEAR ONE</u>	<u>YEAR TWO</u>	<u>YEAR THREE</u>	<u>YEAR FOUR</u>	<u>YEAR FIVE</u>	<u>TOTAL</u>
Renovation of Fruit and Vegetable Receiving, Handling, and storage building	20,000					20,000
Total Operating Capital for Marketing Truck		40,000	+20,000	(revolves)	(revolves)	60,000
		30,000				30,000
Total NEW CAPITAL DISBURSEMENTS	<u>20,000</u>	<u>70,000</u>	<u>20,000</u>	<u> </u>	<u> </u>	<u>110,000</u>
Grand Total New Capital Disbursements for Fruit and Vegetable Marketing	907,000	360,000	604,000	344,000	429,000	2,644,000

The quality of leafy vegetables produced in the Chiriqui area is quite good. However, it begins to deteriorate from the moment it is harvested. High temperatures and high humidity rapidly destroy the original high quality, leaving the kind of poor quality produce often found in Panama City markets. During the first three years of the project cooling chambers and refrigerated trucks will be used to maintain produce quality. During the fourth year a \$250,000 investment in a vacuum cooler is recommended. This cooler will quickly lower field heat as well as the humidity of the product. When used in conjunction with cold storage and refrigerated transport, a superior quality product can be delivered to the Panama market.

Additional delivery trucks will be needed in Panama if the market expands as anticipated. Two small delivery trucks are planned for purchase during the second year. \$40,000 is budgeted for them. In addition two large trucks will be needed to improve the transport of produce from Chiriqui to Panama City. They should be refrigerated and have a 30,000 lb. capacity. One is scheduled for purchase the first year at \$50,000 and the second in year two. These two trucks will not completely meet the cooperative's transportation needs. They will give the coop flexibility and provide refrigeration for the most perishable crops. The additional transport needed will be leased.

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Expanded fruit and vegetable production with a heavy emphasis on quality and market timing will require additional fieldman assistance to work with producers. A figure of \$10,000/year is planned for each of the five years to assist with this service. In addition, \$3,000 is budgeted in year one to buy and maintain a small motorcycle. In each of the following years \$1,000 is budget for operation and maintenance.

Added sales and market development assistance will be needed in the Panama City market operation. The sum of \$18,000/year has been budgeted to assist with this most necessary activity.

Another \$18,000 was estimated to be needed for managerial staff training; \$12,000 for the first year, and \$6,000 for the second year. Practical experience with successful fruit and vegetable operations is envisioned. The possibility of training in Mexico should be investigated as the country is marketing to the U.S. Mexico also produces and markets many of the same crops as those produced in Panama and language would not be a problem.

Additional operating capital will be required because of the increased onion storage. A total of \$195,000 is planned. An estimated \$65,000 is proposed for the second year of the project, coming the first year after additional storage facilities are built. The third and fourth years of the project will require \$65,000 each year of added working capital. This working capital should permit advancing producers a sizable portion of the value of their crop at harvest time, while still allowing the cooperative to hold the product for better prices during the off-season.

Additional working capital (\$200,000) is planned to increase potato volume and for all of the other crops being marketed by the cooperative. The first year calls for a \$80,000 investment, with \$60,000 being added during the second and third years.

An investment of \$110,000 is anticipated for the five year period of fruit and vegetable market development by the El Valle Cooperative. A modest \$20,000 investment is expected the first year to renovate the existing fruit and vegetable receiving, grading, cooling and storage building. This would include putting the cool room back in operation, and performing needed maintenance. It should also cover the cost of constructing a few handling and storage facilities, but would not cover the cost of the building to house the onion dryer.

A total of \$60,000 working capital for marketing is anticipated; \$40,000 the second year of the project and another \$20,000 the third year.

A new truck for fruit and vegetable transport is scheduled to second year for \$30,000. The truck will be needed to transport produce from the new

land to be developed on the mesa. It will also be needed to transport produce from El Valle to the main highway for connection with Horticola trucks, for further transport to Panama City. At times, El Valle may be called upon to transport their produce to Panama City.

A total investment of \$2,534,000 could be utilized by Horticola for market development over a five year period. \$887,000 could be utilized the first year, \$290,000 the second, \$584,000 the third, \$344,000 the fourth and \$429,000 the fifth year.

\$200,000 is budgeted for an onion dryer. A feasibility study should be conducted on the potential of expanding the onion market by drying and storing. Different fuel sources should also be investigated. The possibility of using alternative energy as a heat source (as is currently being done by some of the area coffee driers) should be thoroughly investigated.

Personnel of the Horticola Cooperative estimate a needed expansion of cold storage chambers for onions and other vegetables. Onions are considered one of the most profitable crops of the area. Horticola estimates a need for new storage capacity of 1 1/2 times their existing potato storage. Total cost of this expansion is estimated at \$1,200,000. This storage could be constructed in stages, with 1/3 of the new storage being built the first year, an equal amount the third year, with the last storage units being built the fifth year. This will permit a gradual increase in production and essential market development. While a sizable portion of this new storage would be utilized for onions, a portion of the capacity should be used for short-term cooling and storage of other crops.

Expansion in the Panama City facilities is also anticipated. A small \$40,000 cold chamber is envisioned which when added to the existing two chambers should give the Panama City plant the needed short term storage capacity to meet increased marketing needs. The cold storage investment is anticipated during the second year.

Additional area for re-packing and short term storage as well as improved office space is also needed in Panama City. This anticipated \$60,000 investment is scheduled for the first year.

Added office space is also needed by Horticola at Boquete. A small \$30,000 facility is scheduled for the third year. This could be planned in connection with the new storage facilities.

During the first year a \$54,000 investment in grading and handling equipment is planned. This would include grading and sizing equipment, sorting tables, conveyers, bagging and packaging equipment. This investment

could do much to help upgrade the uniformity of product and maintain quality standards.

I. Coffee Production

Coffee is an important cash crop in the highlands of Chiriqui province. Well over half of Panama's coffee production comes from this area. "Café de Altura" the higher grade of coffee is produced there, with a lower quality coffee, "cafe Bajura" being produced at lower altitudes in other provinces. Yields are highest in Chiriqui but still well below those of other coffee producing countries.

Panama is a member of "La Organización Internacional del Café" (OIC) and has a quota for coffee exportation. However, a sizable portion of the country's production is utilized for domestic consumption. The higher quality coffee tends to be exported with the lower grades utilized within the country. Domestic demand is projected to be 6,500 metric tons (low estimate) to 7,300 metric tons (high estimate) by 1985. Production estimated for the 1981-82 crop year was slightly over 7,020 metric tons. Without increased production Panama would become a net exporter of coffee.

Farmers have been receiving around \$100 per cwt. for high quality "cafe altura". The lower quality "cafe bajura" coffee has been selling for \$75 per cwt. These prices are for coffee beans after they have been processed at a "beneficio". The value of the unprocessed fruit would be somewhat less. Export prices of coffee vary throughout the year and from year to year, as world prices fluctuate. Prices of \$140 per cwt. would not be an uncommon seasonal peak price.

Cooperativa de S. M. Blanca Flor in Chiriqui has an existing yearly capacity of 1,500 cwt. of coffee beans. Working capital for marketing has become a restriction to their operations. A \$100,000 revolving fund would permit the advance of approximately 2/3 of crop value to farmers at delivery. A three year period is suggested to phase in these funds; \$50,000 the first year of the loan, with an added \$25,000 for the second and third years. This should permit the cooperative to develop and refine its policies on market fund advances before receiving all its projected working capital resources.

Renovation and expansion of Blanca Flor's beneficio will be needed by the third year of the loan. An estimated \$400,000 has been projected as the capital requirement for infrastructure. A total loan requirement of \$500,000 is projected for Blanca Flor.

Cooperativa S. M. La Esperanza de Los Campesinos De Santa Fe in Veraguas province is a small cooperative which has a small coffee beneficio among its several operations. The existing plant has very poor drying

facilities, the equipment needs upgrading, and volume should be expanded. A small investment in marketing working capital funds needs to be made. In addition, the cooperative is in need of transport for its coffee to market at Chiriqui, and for the movement of production inputs to their isolated village in Santa Fe.

A sum of \$50,000 is projected for improvement of the facilities at the beneficio. This would include a paved patio for sun drying coffee beans, as well as new equipment and facilities for up-grading and expanding the beneficio. The plant would remain small, but would serve as a needed market outlet for small coffee producers whose lands are suited to producing little other than coffee.

A \$40,000 investment to augment their working capital fund for marketing is also anticipated. A requirement of \$90,000 for infrastructure and working capital is expected for the first year of the loan. During the third year of the project demand is anticipated for a truck to transport coffee to market and to bring production inputs to the cooperative; \$40,000 is projected for this investment.

COFFEE MARKETING

Cooperativa de S. M. Blanca Flor

	Y E A R					Total
	1	2	3	4	5	
Total Marketing Working Capital	50,000	+25,000	+25,000	(revolves)	(revolves)	100,000
Infraestructure	-	-	400,000	-	-	400,000
TOTAL NEW CAPITAL DISBURSEMENTS	50,000	25,000	425,000	-	-	500,000

Cooperativa S. M. La Esperanza de los Campesinos de Santa Fe

Marketing Working Capital level	40,000	(revolves)	(revolves)	(revolves)	(revolves)	40,000
Coffee Processing Plant	50,000					50,000
Trucks to Transport Coffee to Market			40,000			40,000
Total New Capital Disbursements	90,000		40,000			130,000
Grand Total New Disbursements	140,000	25,000	465,000			630,000

An assessment should be made of how the export market for coffee could best be utilized by small local coffee cooperatives. COAGRO, a federated cooperative, could play a major role in this market development.

J. Grain Production

The production of corn and grain sorghum is well suited to much of the cultivated land located in the central and western regions of Panama. Another

major grain production area is located in the Azuero Peninsula of the central district. Chiriqui province is also an important grain producer.

Panamanian farmers have shown good progress in the adoption of improved technology in their grain production. Improved seed, fertilizer and agricultural chemicals are commonly used. Production costs, however, remain high.

The Panamanian government pricing program protects the country's grain industry from competition from low price imports. Panama still imports a sizable portion of its national grain needs. All grain importation is handled by the government agency, Instituto de Mercadeo Agropecuario (IMA). Domestic grain users buy from IMA at support prices above the world market price intended to protect the Panamanian producer.

Grain producers and their cooperatives are free to sell wherever they like. COAGRO's Midarina feed plant is a market for some. Others sell to private feed companies, local cooperatives and individuals. However, the Government, through IMA, is the largest buyer of grain. IMA has most of the country's grain storage capacity, and is constructing more with AID assistance. Grain producers complain about IMA's slowness in paying them for grain purchases. Some must wait weeks or even months to be paid for their grain. This has caused financial problems for producers who have loans to repay, or have production or living expenses. It would seem that IMA does not have sufficient working capital to make prompt payments for grain. Apparently, the IMA price paid to producers at harvest may be \$1.50 per cwt. lower than the price charged by IMA to grain users a few months later. And, IMA must still recover its storage and operations costs.

Panama's feed grain marketing system could be improved if (1) grain producers could maintain ownership of their grain following harvest until market prices improve; (2) cooperative users of grain, such as COAGRO's Midarina feed plant could increase their storage capacity to help grain producers and feed users by improving the efficiency of grain movement from producer to user.

Given IMA's soon to be expanded grain storage capacity, it is probably not feasible for cooperatives to construct additional storage facilities for their member producers. Instead, cooperatives should investigate the possibility of leasing grain storage space from IMA which would relieve the demand for IMA's scarce working capital needed to pay producers. The grain producers cooperative could advance a percentage of the market value at harvest delivery. Final settlement would be made after selling at the hoped for market price peak. Storage and costs of operation would be deducted from the final settlement.

COAGRO's Midarina feed plant is an important processor and marketer of corn and grain sorghum. Their present capacity is around 35 tons per day with an annual production of 6,250 tons. Grain storage facilities at the plant are inadequate. The two existing silos should be augmented by additional storage of around 60,000 cwt. This would benefit the Midarina plant by assuring a secure supply of feed grain for processing, could lower their cost of buying from IMA, and permit their buying from COAGRO member cooperatives at an improved price for grain producers.

Presently, over half of the plant's production is going to the asentamientos through government purchases. Nearly a quarter of the production is sold to private individuals and companies. Only 20 percent or less of the plants volume is being utilized by COAGRO cooperative members. Increased grain storage facilities could do much to improve Midarina's competitive market position. In addition, other efficiencies should be investigated by Midarina management. Computerized least-cost formulation of rations could, with only minimal investment, greatly improve their market position. Midarina should not be expected to completely supply the mixed feed needs of the country's cooperatives. Some, particularly the larger volume cooperatives, will continue to find it advantageous to continue their own feed processing and mixing facilities. This is especially true of those located in grain producing areas. Midarina should find ways of better servicing them with more specialty feeds, feed inputs (vitamins, minerals, medicines and protein supplements, etc.), market price information, and least-cost ration formulation services.

In addition to an investment in grain storage facilities, Midarina should upgrade its feed and grain handling equipment. An estimated credit need of at least \$80,000 is projected for this investment. Working capital will also need to be increased if grain storage capacity is increased. A revolving capital fund of \$660,000 would be needed to finance the 60,000 cwt. of additional grain to be stored.

An estimate of investment needs for market development is listed below:

COAGRO Midarina Plant

Y E A R

Investment	1	2	3	4	5	Total
New silos with total capacity of 60,000 cwt.	120,000					120,000
Grain Handling Equipment	80,000					80,000
Working Capital for Grain Inventory		660,000	(revolves)	660,000	660,000	660,000
Total New Capital Disbursements	200,000	660,000	-	-	-	860,000
Grain Marketing Needs of Local Cooperatives						
Cooperativa de P. y S.M. Agropecuaria Santeña, Las Tablas Working Capital level for Grain Marketing	200,000	+127,750	+127,750	+127,750	+127,750	711,000
Cooperativa de P. y S.M. Union Agrícola Chitre Working Capital level for Grain Marketing	40,000	+ 39,000	(revolves)	(revolves)	(revolves)	79,000
Cooperativa de La Unión de Antón, Working Capital level for Grain Marketing	40,000	+ 39,000	(revolves)	(revolves)	(revolves)	79,000
Total New Capital Disbursements	280,000	205,750	127,750	127,750	127,750	869,000
Grand Total New Capital Disbursements	480,000	865,750	127,750	127,750	127,750	1,729,000

Capital investments in a 60,000 cwt. storage facility and in grain and feed handling equipment are anticipated for the Midarina plant the first year of the loan. This should permit the feed mill to purchase much of its grain needs at harvest time. The demand for working capital to finance grain purchases is anticipated to occur during the second year of the loan (following completion of the new grain storage silos). A \$11.00 per cwt. cost is anticipated. Grain processed into mixed feed would require continued investment of marketing working capital until the feed is removed from inventory and sold.

Since little or no infrastructure investment will be required by local cooperatives leasing grain storage from IMA, the total credit demand will be for working capital for marketing. Demand for working capital has been estimated as follows:

1. <u>Advances to producers at harvest.</u> This has been estimated at 60% of the IMA support price, \$6.60 per cwt.	6.60
2. <u>Storage and drying cost.</u> As low a cost as possible should be negotiated with IMA. In addition to storage costs, the cooperative should expect to pay for grain drying. A weight loss will occur with drying necessitating a price discount to the grower, a rough estimate of \$.80 per cwt. is estimated to cover the cooperative's cost for storage and drying services by IMA.	.80
3. <u>Transportation costs.</u> These costs will vary upon distance to IMA storage. An estimate of .30 per cwt. has been projected.	.30
4. <u>Management.</u> Certain management costs incurred by the cooperative should be passed on to the grain producer. However, until final settlement these costs will require the investment of working capital. \$.20 per cwt. has been estimated as direct management costs.	<u>.20</u>
Total Capital needed per cwt. of feed grain markets	\$ 7.90

A gradual phasing in of grain marketing working capital is anticipated. Santeña, with the largest potential volume of the three cooperatives requiring grain marketing credit, should have the revolving fund marketing capital increased slowly as expected volume increases. An amount of \$200,000 is budgeted the first year of the loan, with an additional \$127,750 per year anticipated for years two through five. At the end of year five

Santeña should be marketing 90,000 cwt. of corn and grain sorghum. Santeña's total working capital demand should be around \$711,000.

The Cooperatives at Chitre and Anton have a much smaller volume potential when compared to Santeña. Therefore, their market potential should be realized sooner. Each of these two are projected as needing \$40,000 the first year, and \$39,000 the second year. By then, they should be marketing 10,000 cwt. of feed grain per year.

K. Dairy Production

Panama has two quite different milk production and marketing systems. Grade A fluid milk is produced by large dairys, using modern equipment and technology. While their production levels may seem low when compared to commercial dairys in more temperate climates, they are well above that of the small producer of Grade B and industrial grade milk.

The major production area for Grade A milk is located in Chiriqui province. Most of the Grade B and manufacturing milk production comes from Los Santos and Herrera provinces as well as Chiriqui.

Milk processing and manufacturing is effectively controlled by a few large companies. Their facilities appear to be adequate to handle the country's needs. Through its system of price controls, the Panamanian Government sets the producer price for milk.

While producers of grade B and industrial grade milk may complain of low prices, several other factors appear to be more critical to the wellbeing of their industry. Sanitation and inferior milk quality is a significant problem for the small producer of industrial milk. Hand milking in a corral or open shed is the start of the problem. Add to this poor herd management in the separation from the milking herd of mastitis cows, cows receiving medication and diseased cows. In addition, milk is seldom cooled, much less refrigerated on the farm or in the trucks used to transport milk to the plant. A common sight is cans of milk setting in the tropical sun at roadside, waiting for pick up by a milk truck, which is late.

The average daily production of manufacturing milk herds may be only two or three liters per cow. Little or no supplemental feeds are used, and the "dual purpose" cattle seem better suited to beef rather than to milk production.

Intensive studies should be conducted to determine if industrial milk production, under existing conditions and technology, is profitable to dairymen. Is it truly his best enterprise for the use of available

resources? What production and management changes need to be made to make the enterprise profitable? Are producers willing and able to make these production changes? Only after these production questions have been positively resolved, should plans be made to invest in an improved cooperative marketing system for lower grade milk.

Perhaps at some future time, cooperative transportation, collection and storage depots, and processing and manufacturing facilities could be developed.

The Grade A milk industry presents a somewhat different picture than does the industrial grade milk industry. Grade A milk production is centered in Chiriqui province, with large producers operating modern facilities with milk tanks and producing a relatively high quality product. They are well organized and represented by their cooperative, Cooperativa Productores de Leche de Chiriqui, Concepcion. Sales are made to the few large processors of Grade A milk active in Panama. Generally, prices are considered good. As with Grade B milk, prices are determined by the Panamanian Government.

Present opportunities for cooperative market development for this group appears limited. However, opportunities may develop in the future. As an example, Grade A dairymen and their cooperative are presently investigating the possible development of a plant to process sterilized milk. This \$5,000,000 program would be hard to justify under this loan program. However, if sufficient other support is found, a small piece of the market development could possibly be financed.

	<u>YEAR</u> 1	<u>YEAR</u> 2	<u>YEAR</u> 3	<u>YEAR</u> 4	<u>YEAR</u> 5	<u>5 YR TOTAL</u>
<u>COOPERATIVA DE S.M. BLANCA FLOR</u>						
COFFEE						
Marketing Capital Level	50,000	75,000	100,000	100,000	-0-	
Processing Equipment	-0-	-0-	400,000	-0-	-0-	
Total Disbursements	50,000	25,000	425,000	-0-	-0-	500,000
<u>COOPERATIVA S.M. LA ESPERANZA DE LOS CAMPESINOS</u>						
COFFEE						
Marketing Capital level	-0-	40,000	40,000	40,000	-0-	
Processing Equipment	-0-	50,000	-0-	-0-	-0-	
Vehicles	-0-	-0-	-0-	40,000	-0-	
Total Disbursements	-0-	90,000	-0-	40,000	-0-	130,000
<u>COOPERATIVA de P. y S.M. UNION AGRICOLA CHITRE</u>						
GRAIN						
Marketing Capital level	-0-	40,000	79,000	79,000	79,000	
Total Disbursements	-0-	40,000	39,000	-0-	-0-	79,000
<u>COOPERATIVA DE LA UNION DE ANTON</u>						
GRAIN						
Marketing Capital level	-0-	40,000	79,000	79,000	79,000	
Total Disbursements	-0-	40,000	39,000	-0-	-0-	79,000
<u>COOPERATIVA AGROPECUARIA de S.M. LA LIBERTAD</u>						
FRUIT & VEGETABLE						
Marketing Capital level	-0-	-0-	40,000	60,000-	60,000	
Equipment & Vehicles	-0-	20,000	-0-	-0-	30,000	
Total Disbursements	-0-	20,000	40,000	20,000	30,000	110,000
<u>AVICOLA DE CHIRIQUI (2)</u>						
POULTRY						
Marketing Capital level	-0-	132,000	152,000	167,000	184,000	
Equipment & Vehicles	-0-	-0-	70,000	-0-	-0-	
Building	-0-	-0-	40,000	-0-	-0-	
Total Disbursements	-0-	132,000	130,000	15,000	17,000	294,000

(2) Participation by this cooperative in project financing would require a management contract with COAGRO and close coordination by COAGRO and the BDA on working capital financing.

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	<u>YEAR</u> 1	<u>YEAR</u> 2	<u>YEAR</u> 3	<u>YEAR</u> 4	<u>YEAR</u> 5	<u>5 YR TOTAL</u>
<u>COOPERATIVA APICOLA</u>						
HONEY AND WAX						
Processing Equipment	-0-	10,000	-0-	-0-	-0-	
Marketing Capital level	-0-	60,000	72,000	86,000	103,000	
Total Disbursements	-0-	70,000	12,000	14,000	17,000	113,000
<u>COAGRO MIDARINA PLANT</u>						
GRAIN						
Storage Silos	-0-	120,000	-0-	-0-	-0-	
Equipment	-0-	80,000	-0-	-0-	-0-	
Marketing Capital level	500,000	800,000	800,000	800,000	-0-	
Total Disbursements	<u>500,000</u>	<u>500,000</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>1,000,000</u>
GRAND TOTAL	2,459,000	1,406,150	1,488,750	652,750	721,750	6,729,000

DETAILED FINANCIAL ANALYSIS OF COAGRO

A. General Analysis

An analysis was made of COAGRO's financial statements over the past six years (1976-1982) and its estimated financial statement for 1983. In addition, projections of COAGRO's income statement and balance sheet were prepared for the next five years (1984-1988), using a series of assumptions developed from recommendations growing out of the analyses, and in-depth discussions with COAGRO regarding the federation's sales projections, plans for external financing, etc.

The analysis was carried out in two stages: (1) the original analysis covering actual and estimated financial statements through 1982 was conducted during November-December 1982; (2) the second stage covering 1982 actual and estimated financial statements through 1983 was conducted in December 1983.

The first stage of the analysis coincided with a series of actions by the new Board of Directors of COAGRO after taking office in May 1982. Specifically, the new board moved decisively to restructure the federation in order to streamline COAGRO's business operations and assure the profitability of each operational unit and/or commercial activity.

The second stage of analysis permitted comparison of both the estimated financial statements for 1982 with the actual audited statement, and comparison of projected statements for 1983 with actual performance through October 1983 and estimated statements through December 1983. These comparisons illustrate significant comparability between projections and accomplishments, despite COAGRO's limited access to most of the additional resources projected as being available during CY 1983. In addition, COAGRO has carried out many of the recommendations made during the original intensive design effort.

The following improvements were noted over the approximately one year period between the two stages of analysis:

1. COAGRO established a second cost center (the Midarina plant) as recommended under its restructuring program;
2. COAGRO personnel levels were drastically reduced;
3. COAGRO's Board of Directors established a policy for assigning B/.200,000 a year for five years to the bad debt reserve, beginning in 1984;

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4. the audited financial statement for 1982 confirms that COAGRO's inventory is now valued at the lower of either acquisition cost (first in, first out) or current market value;
5. the level of non-rotating inventory was reduced by 25%;
6. although sales were lower than projected, principally in fertilizers, due to the extensive drought, an increase in chemical sales prompted by the drought compensated in part through higher margins in this product line;
7. overall interest rates declined significantly, and overall administrative costs were reduced by \$300,000 below the level projected; and
8. COAGRO is projected to show a profit of approximately B/.85,000 for 1983, in addition to having assigned approximately B/.150,000 to bad debt reserves during the period. Further details on COAGRO's are provided below.

COAGRO's continuing weak financial position reflects, in part, the high level of external financing, and the high interest rates which the federation has had to pay on external financing over the past several years. As a cooperative, COAGRO is extremely under-capitalized by its member organizations, which has forced it to secure most of its working capital requirements from commercial sources. The low level of member equity in the organization further detracts from the organization's credibility on the money market, making government guarantees essential. The analysis further verified that the working capital requirements of COAGRO are approximately 36% higher than would otherwise be the case, due to slow moving inventory and delinquent accounts receivable.

The burden of external financing became further aggravated in 1981 with the expiration of a five year GOP guaranty for COAGRO's external financing, at a level of approximately \$10 million. The GOP subsequently approved a "temporary" extension of the guaranty for one year only, which in effect forced COAGRO to secure short term financing at even higher interest rates. The short term nature of a major portion of COAGRO's external financing has also caused a drain on management time.

The contract analyst reviewing COAGRO's financial and management situation prepared a series of recommendations dealing with the basic restructuring of the organization. These recommendations have been discussed with COAGRO's Board and management, and certain changes have been implemented during 1983.

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The analyst's recommendations and their present status are presented for the following areas, and are considered critical to the rehabilitation of COAGRO along efficient, commercial lines.

1. GOP Guaranty: COAGRO completed negotiations with the Ministry of Planning (MIPPE) and the Comisión Financiera in November 1982 for a two stage renewal of the GOP guaranty for COAGRO's external financing, at a level of \$8.2 million. The first stage was a short term renewal for one year which authorized to COAGRO to negotiate long term financing at the most favorable terms available from commercial banks. This long term financing will receive a GOP guaranty. The conditional one year guaranty is scheduled to expire in April 1984.

The analyst concludes that a minimum of five years of guaranteed financing will be required by COAGRO, at a beginning level of \$8 million. The level will decline over the period. COAGRO must be assured of the continual availability of the financing over the minimum period of five years in order to avoid the recurring cycle of replacing one short term note with another, and the high interest rates of short term credit.

The analyst used as his assumption for purposes of these projections a proposal put forward by MIPPE and the Comisión Financiera to COAGRO in November 1983, under which the GOP guaranty would be renewed in April 1984 for a period of two years, renewable on a two year cycle and subject to annual review of COAGRO's performance in use of the guaranty. This permits the analyst to reflect periodic payments of the long-term credits contracted with the guaranty and the subsequent contracting of declining amounts over the five year period.

2. Accounts Receivable/Reserve Fund for Bad Debts: COAGRO's financial statements carry all accounts receivable under current assets without qualifying reference to the status of those accounts as to aging.

The analyst recommends that in future financial statements (1984 forward) all accounts receivable over 360 days be removed from current assets and included under other assets to more accurately reflect the intended short term convertibility of current assets, or that the amount of accounts over 360 days old be footnoted.

As of October 31, 1983 COAGRO carried a total of B/.10,821,000 in accounts receivable. The analyst verified that as of October 31, 1982, B/.184,780 of that amount had completed due legal processing for collection and been determined to be non-recoverable.

The analyst is of the opinion that the current rate of provision for the reserve for bad debts - 1% of credit sales - is inadequate. Analysis

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was undertaken of all accounts receivable over B/.1,000 in amount, and the status of legal and other actions being undertaken currently or scheduled to be initiated. It is the analyst's opinion that for the total accounts receivable as of October 31, 1983, the reserve for bad debts is inadequate in the amount of B/.1,129,000. It is believed that a bad debt reserve provision of 2% of credit sales would be adequate.

COAGRO's Board of Directors has now established a bad debt reserve provision of B/.200,000 a year for five years, beginning in 1984. This bad debt reserve, in addition to the legal reserves corresponding to 20% of profits, will be greater than the analyst's recommendation of 2% of credit sales, and should be adequate.

In the projected income statements for 1984-86 provision for the reserve for bad debts is shown in two places; bad debt expense resulting from the B/.200,000 provision plus legal reserves and bad debt expense resulting from the \$1,129,000 of estimated uncollectible accounts on the books as of October, 1982. In short, it is estimated that by the end of 1986 the reserve for bad debt will be adequate.

3. Inventory: The analyst also reviewed COAGRO's inventory accounts systems in December 1982 and confirmed with COAGRO that approximately B/.800,000 of current inventory is non-rotating. Further investigation verified that this inventory is not damaged nor technically obsolete, but rather for the most part is over-valued and/or more costly, sophisticated merchandise than current market demands. Approximately one half of this inventory is high quality (and therefore high priced) permanent irrigation equipment, while current market demand is for low cost PBC tubing.

The analyst made specific recommendations to COAGRO for sale of this inventory at prices significantly lower than acquisition cost explaining that even if the inventory is sold at a loss it would be better than having it sit in the warehouse with little prospect for sale at its current price. The analyst has verified that COAGRO did take corrective action in this area during CY 1983, covering the non-rotating inventory level 25% to B/.600,000. The analyst stresses, however, that with the bulk blending fertilizer plant coming on stream in 1980, inventory rotation in general is slower than during the period of bagged fertilizer importation, due to the greater complexity of arranging for bulk shipments of optimum economic units in terms of transportation costs, given the low draft clearance of the Aguadulce port.

4. Restructuring of COAGRO: Beginning in May 1982, the new Board of Directors ordered a review of COAGRO's personnel requirements and an outside analysis of the federation's operations, with the objective of restructuring the organization along lines of profit centers.

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- In September-October, 1982, an immediate 16% reduction of personnel was carried out.
- In November 1982 a management consultant presented recommendations on restructuring the organization.
- In December 1982, additional personnel cuts were announced with elimination of an education department, as a part of projected in-depth restructuring.
- In December 1982, the Board reviewed alternatives presented by management for restructuring and formally approved the first stages of a phased restructuring including the following elements:
 - a) The position of Assistant General Manager will be re-established.
 - b) The number of functional divisions of COAGRO will be reduced.
 - c) The MIDARINA feedmill will be established as a profit center beginning January 1983. (The fertilizer plant already functions as a distinct profit center).
 - d) Collections are being reorganized to place major responsibility for collection of receivables on the region and sales personnel making the corresponding sales; overall policy on prices and credit will be retained at the central office level.

5. COAGRO's participation in bidding operations: COAGRO has traditionally participated in public bid competition for quantity lots of fertilizer for both government and private sector enterprises such as the major sugar mills. COAGRO has won a number of such bid offerings, or parts of such offerings where awards were made for partial units of a larger offering.

During the past several years COAGRO has responded to public bid competition for imports of agricultural products such as onions, beans, etc., and has won a number of such contracts.

Analysis was made of COAGRO's participation in five bidding operations, to determine the degree of profitability to the organization of the expansion of this type of activity to non-input commodities which are not otherwise within COAGRO's normal product line. The analysis verified that the bidding operations do not divert working capital resources from COAGRO's

normal operations, since each is carried out under a distinct letter of credit. Of five operations analyzed, four produced profit margins for COAGRO which fluctuated between 7% and 18%, and in only one case was the profitability doubtful, with a margin of only 1.5%. In the favorable cases, the bidding operations resulted in income which alleviated critical cash flow problems. In the fifth case it would be impossible to determine if the diversion of management and other personnel time, even for the relatively brief period involved in responding to the particular bid, could be adequately compensated for by the direct financial return represented by a margin of 1.5%.

The analyst has recommended and the Board has agreed on formalization of procedures to establish which types of public bids COAGRO management may wish to respond to, and the level of margin which must be assured before presentation of a bid offer can be made. In general, bidding operations were significantly reduced during 1983. A decision was made to suspend participation in bidding on grains procurement, but to continue in the area of fertilizers.

B. Detailed Analysis

1. Ratio analysis of COAGRO's operations, 1976-1982: Chart A presents COAGRO's summary financial statements as of December 31, 1982 for the years 1976-1982. Chart B presents the income statements for the same years.

The following ratio analyses of the financial statements were carried out:

a) Current Assets: The ratio between current assets and current liabilities has been the following:

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
0.86	0.89	2.81	1.83	1.37	1.11	1.03

Apparently, COAGRO has the capacity to meet its short term commitments, however, further analysis shows that approximately 34% of the current assets in 1981 relate to non-current inventory and accounts receivable. Therefore it can be anticipated that there would be difficulties in meeting short term commitments.

b) Ratio of Liabilities to Capital

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
(*)	(*)	(*)	86.10	52.71	39.31	37.26

* Capital was negative.

Although the ratio is considerably high it is decreasing.

c) Average Number of Days for Converting Account Receivable into Cash. (Average Amount of Accounts Receivable Divided by Yearly Sales Divided by 365)

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
313 days	280 days	239 days	229 days	232 days	232 days	256 days

d) Average Number of Days for Converting Inventory into Sales: (Average inventory divided by cost of sales divided by 365)

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
90 days	83 days	65 days	68 days	76 days	84 days	93 days

e) Profits to Assets

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
(5.65)	0.2%	1.6%	0.9%	0.7%	1.2%	1.2%

f) Gross Margin on Sales

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
10%	14%	14%	14%	15%	12%	13%

g) Operation Costs to Over Sales

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
23%	19%	12%	11%	11%	11%	11%

2. Five year projections of COAGRO's financial statements 1984-1988)

In order to prepare financial projections for the next five years for COAGRO's operations, the analyst established a series of assumptions which are considered to be reasonable. The analyst has taken into account the historical growth pattern of COAGRO which would be subject to improvement if certain conditions relative to the restructuring of COAGRO are carried out. In terms of income, the amounts reflected should be considered to be the minimum targets for the given years. The following are the most important assumptions:

a. Payment to COAGRO by the GOP of a remaining amount of approximately \$1 million in acknowledged old accounts receivable will be completed during 1984. Negotiations are currently underway (Dec. 1983) for accomplishing payment of this obligation by applying approximately \$800,000

toward payment in full of COAGRO's loan from COFINA for the fertilizer plant, and payment in cash of the remaining \$200,000. Although such a settlement would not provide COAGRO with as significant an immediate cash flow injection, such a paper exchange may prove more realistic than a total cash settlement. Therefore the analyst has used as an assumption that COAGRO will receive only \$200,000 in cash under this obligation during 1984. The remaining \$800,000 is then reflected in the change in status of the COFINA loan commitment with the corresponding adjustments in future interest and amortization payments.

b. Approval will be given by the Government of a the guaranty of COAGRO's external financing in the amount of approximately B/.8.2 million for a two year period renewable every two years for the life of the project.

c. Financing will be arranged by the BDA from 041 or other funds in the amount of \$1,500,000.00. This financing should be accomplished at a rate of \$500,000 a year for the next three years beginning mid-1984.

d. Financing by the Interamerican Development Bank (IDB), in an amount of \$500,000 with a three year grace period and a period of ten years to amortize the capital amount, and with a maximum interest rate of 2%. This financing would be for the Midarina feed mill.

e. COAGRO will charge 14-15% annual interest on current accounts receivable.

f. Growth in sales will be as reflected in the sales chart (Chart E), by product lines, and with the cost of sales margins as reflected in Chart F.

g. 100% of sales of animal feed will be carried out on a cash basis. 85% of other sales will be on credit.

h. Current financing commitments will be retired according to the contracted terms.

i. Legal proceedings will be vigorously pursued against debtors resulting in collection of approximately \$1,444,000 between 1984 and 1988 of old accounts receivable on the books as of October, 1982.

j. The reserve for bad debts will be increased by \$200,000 yearly for five years beginning in 1984.

Estimated figures for the last two months of 1982 have been projected by the analyst in order to permit a complete 12 months period through December 31, 1983 for comparison purposes.

3. Projections for COAGRO status in key areas over the five year period 1983-1987:

a. Sales: Sales will increase from the projected 1983 level of B/.9,371,000 to B/.19,744,000 in 1988.

b. Member Equity: Equity capital and reserves will increase from the 1983 level of B/.522,000 to B/.3,571,000 by 1988.

c. Bad debts: Adequate bad debt reserves will have been established by 1986.

d. Inventory rotation: Inventory rotation will increase from 3.59 times in 1983 to 5.13 times in 1988.

e. External financing: COAGRO's requirements for external financing will be reduced from the 1983 level of B/.13,529,000 to B/.7,154,000 by 1988.

f. Profitability: COAGRO's profits on operations will increase from an estimated B/.89,000 in 1983 to B/.1,957,000 in 1988.

FEDERACION DE COOPERATIVAS AGROPECUARIAS DE LA REPUBLICA DE PANAMA R.L. (COAGRO)

BALANCES GENERALES

AL 31 DE DICIEMBRE

(EN US\$)

	1976	%	1977	%	1978	%	1979	%	1980	%	1981	%	1982	%
ACTIVO														
Activo Circulante:														
Efectivo	275,883	2.9	186,912	2.4	59,116	0.8	136,198	1.5	184,603	1.6	234,665	1.7	407,612	2.9
Docum. por Cobrar	6,197,456	64.3	5,351,738	68.2	5,388,754	70.8	5,986,853	66.2	6,851,872	61.1	8,133,946	57.7	7,862,944	55.9
Inventario	1,612,987	16.8	1,329,807	16.9	1,192,308	15.7	1,724,143	19.1	1,839,767	16.4	2,869,495	20.3	2,619,626	18.6
Depósitos Aduana									148,536	1.3				
Gtos. Pag. por Adel.	23,656	0.2	23,911	0.3	154,261	2.0	133,664	1.5	33,272	0.3	98,974	0.7	150,770	1.1
ACTIVO CIRCULANTE	8,109,982	84.2	6,892,368	87.8	6,794,439	89.3	7,980,858	88.3	9,058,050	80.7	11,337,080	80.4	11,040,952	78.5
Otros Activos:														
Prést. y Doc. por C.	43,372	0.5	90,766	1.1	58,961	0.8	12,618	0.1	40,583	0.4	53,948	0.4	190,685	1.3
Depósitos y Fianzas	406,755	4.2	117,321	1.5	68,767	0.9	61,739	0.7	94,565	0.8	173,738	0.9	122,088	0.9
	450,127	4.7	208,087	2.6	127,728	1.7	74,357	0.8	135,148	1.2	177,686	1.3	312,773	2.2
Prop. Maq. y Equipo	617,028	6.4	651,799	8.3	681,708	9.0	983,442	10.9	2,030,766	18.1	2,512,974	17.8	2,654,152	18.9
Intangibles y Dif.	454,885	4.7	100,606	1.3					78,198	0.5			64,233	0.4
TOTAL ACTIVO	9,632,022	100.0	7,852,860	100.0	7,603,875	100.0	9,038,657	100.0	11,223,964	100.0	14,105,938	100.0	14,072,110	100.0
PASIVO, CAPITAL Y RESERVAS														
Pasivo Circulante:														
Prést. Bancarios	3,282,481	34.1	4,295,407	54.7	500,000	6.6	1,739,583	19.3	4,474,498	39.9	7,206,670	51.1	8,564,128	60.9
Doc. y Ctas. por Pag.	6,170,234	64.0	3,442,074	43.8	1,833,016	24.1	1,738,881	19.2	1,015,602	9.0	1,664,036	11.8	819,210	5.8
Retención Planillas	7,268	0.1	6,690	0.1	15,590	0.2	21,598	0.2	33,808	0.3	35,097	0.2	51,829	0.3
Porción Corriente														
Prést. por Pagar	12,869	0.1	12,869	0.2	73,125	0.9	855,398	9.5	1,088,810	9.7	1,320,728	9.4	1,274,449	9.1
TOTAL PASIVO CIRCULANTE	9,472,852	98.3	7,757,040	98.8	2,421,731	31.8	4,355,460	48.2	6,612,718	58.9	10,226,531	72.5	10,709,616	76.1
Pasivo Largo Plazo:														
Prést. Banc. por P.	325,239	3.4	212,869	2.7	5,190,360	68.3	4,572,727	50.6	4,388,083	39.1	3,507,711	24.9	2,833,850	20.2
Prima de Antigüedad							6,699	0.1	14,187	0.1	21,778	0.1	30,756	0.2
	325,239	3.4	212,869	2.7	5,190,360	68.3	4,579,426	50.7	4,402,270	39.2	3,529,489	25.0	2,864,606	20.4
CAPITAL Y RESERVAS	(166,069)	(1.7)	(117,049)	(1.5)	(8,216)	(0.1)	103,771	1.1	208,976	1.9	349,918	2.5	497,888	3.5
TOTAL PASIVO, CAPITAL Y RESERVAS	9,632,022	100.0	7,852,860	100.0	7,603,875	100.0	9,038,657	100.0	11,223,964	100.0	14,105,938	100.0	14,072,110	100.0

Fuente: Estados financieros de los respectivos años.

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FEDERACION DE COOPERATIVAS AGROPECUARIAS DE LA REPUBLICA DE PANAMA R.L. (COAGRO)

ESTADO DE EXCEDENTES Y PERDIDAS

AÑOS TERMINADOS EL 31 DE DICIEMBRE

(EN US\$)

	1976	%	1977	%	1978	%	1979	%	1980	%	1981	%	1982	%
Ingresos:														
Ventas Netas	7,225,729	94.2	7,520,925	94.8	8,201,066	93.2	9,076,394	94.2	10,078,972	94.5	11,752,537	98.0	12,148,625	99.2
Intereses	26,055	0.3	4,698	0.1	450,312	5.1	476,213	4.9	419,479	3.9	1,332,781	10.0	1,302,545	9.5
Otros	420,339	5.5	406,773	5.1	152,773	1.7	83,023	0.9	171,538	1.6	264,718	2.0	326,673	2.3
TOTAL INGRESOS	7,672,123	100.0	7,932,396	100.0	8,804,151	100.0	9,635,630	100.0	10,669,989	100.0	13,350,036	100.0	13,777,843	100.0
Costos y Gastos:														
Costos de Ventas	6,534,998	85.2	6,475,611	81.6	7,065,754	80.3	7,846,575	81.4	8,539,493	80.0	10,280,445	77.0	10,617,217	77.0
Gastos Generales y Administración	1,679,727	21.9	1,436,771	18.1	998,617	11.3	957,568	9.9	1,160,515	10.9	1,319,520	9.9	1,375,828	10.0
Intereses					619,348	7.0	750,188	7.8	895,233	8.4	1,583,812	11.9	1,626,866	11.8
TOTAL COSTOS Y GASTOS	8,214,725	107.1	7,912,382	99.7	8,683,719	98.6	9,554,331	99.1	10,595,241	99.3	13,183,780	98.8	13,619,911	98.9
EXCEDENTE (PERDIDA)	(542,602)	(7.1)	20,014	0.3	120,432	1.4	81,299	0.9	74,748	0.7	166,256	1.2	157,932	1.2

* Fuente: Estados Auditados de los respectivos años.

COAGRO PORTFOLIO OF ACCOUNTS RECEIVABLE

-1983-

(Reflects Thousands of Balboas)

	Total Portfolio	%	Current	%	30 Days	%	60 Days	%	90 Days	%	120 Days	%
12/31/80	6,530	100	2,190	34	470	7	416	6	274	4	3,200	49
12/31/81	8,134	100	3,100	38	442	6	260	3	196	2	4,134	51
12/31/82	9,222	100	5,097	55	552	6	645	7	568	4	2,150	28
12/31/83	10,821	100	6,938	64	145	2	224	2	32	*	3,482	32

* More than zero, less than 0.5

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BREAKDOWN OF THE PORTFOLIO BY Maturity TYPE
OF CLIENTS

AS OF 31 OCTOBER 1963

(In Thousands of Dollars)

	Total	%	Current	1-30	31-60	60 Days	90 Days	120 Days	180 Days	240 Days	360 Days	%
Commercial Banks	2,457	100	1,952	57	46	20	17	1	1,378	40		
Associates	285	100	132	53	12	10	2	1	93	33		
Government	2,523	100	1,486	59	32	128	3	*	874	35		
Mutual Funds	<u>4,644</u>	<u>100</u>	<u>3,268</u>	<u>70</u>	<u>58</u>	<u>66</u>	<u>10</u>	<u>8</u>	<u>1,165</u>	<u>25</u>		
All	<u>10,821</u>	<u>100</u>	<u>6,908</u>	<u>64</u>	<u>52</u>	<u>224</u>	<u>32</u>	<u>4</u>	<u>3,482</u>	<u>32</u>		

* More than zero, less than 0.1%

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C O A G R O
 SALES BY TYPE OF PRODUCT
 PERIOD 1984-1988
 (In Thousands)

	Fertilizers		Animal Feeds		Other Products	TOTAL
	MT	B/.	CWT	B/.		
1984	22.0	6,580	145	2,030	4,290	12,900
1985	24.2	7,527	210	3,078	182	14,267
1986	26.6	8,605	220	3,257	258	15,782
1987	30.0	10,093	236	3,587	241	17,841
1988	33.0	11,547	246	3,830	4,417	19,744

Basis: The volume of sales of fertilizer is projected with a 10% annual increase, and price with an increase of approximately 4% yearly. Increases under animal feeds in 1985 result from the proposed expansion of the Midarina plant.

The heading "Other Products" includes veterinary products, hardware and pesticides.

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C O A G R OCost of Sales
(In Thousands)

Year	Fertilizers	Animal Feed	Other Products	TOTAL
1984	5,593	1,786	3,647	11,026
1985	6,398	2,706	3,113	12,217
1986	7,314	2,866	3,332	13,512
1987	8,579	3,157	3,537	15,273
1988	9,815	3,370	3,755	16,940
Margin	85%	88%	85%	86%

Basis: The margins utilized are based on actual experience. By increasing use of existing capacity of the fertilizer plant and the Midarina feed mill there will be a lowering of unit costs of production, however since additional profits will be invested in advertising and technical assistance programs, for simplicity the margin is fixed throughout the period being considered.

C O A G R O

PROFORMA CASH FLOW PROJECTIONS

(In Thousands Balboas)

	1984	1985	1986	1987	1988
INCOME					
Accounts Receivable	5,461	3,496	3,371	3,037	3,305
Sales	12,900	14,267	15,782	17,841	19,744
Expenses and Amortization representing no direct Egress of Funds	154	177	200	227	254
Short Term loans	6,500	7,200	5,000	3,300	2,300
Loans BDA	500	500	500	-0-	-0-
Midarina	1,000	-0-	-0-	-0-	-0-
IDB	500	-0-	-0-	-0-	-0-
Capitalization	52	62	68	76	85
Interest Charges	800	700	600	500	400
Other Income	150	165	180	195	205
Supplier Credit	500	1,000	1,500	2,000	2,000
TOTAL	28,517	27,567	27,201	27,176	28,293
EXPENSES					
Payments on Short-Term Credits	8,423	6,500	7,200	5,000	3,300
Payments on Long-Term Credits	1,955	2,479	115	115	315
Accounts Payable	273	500	1,000	1,500	2,000
Interest Payments	1,304	1,113	905	784	728
Inventory Purchases (Net)	936	200	100	100	100
Cost of Merchandise	11,026	12,217	13,512	15,273	16,940
Expenses	1,217	1,344	1,383	1,453	1,524
Credits Extended (Net)	3,071	2,946	2,839	3,107	3,208
Investments Facilities and Equipment	480	200	50	50	50
TOTAL	28,685	27,499	27,104	27,382	28,165
Balance for the period	(168)	68	97	(206)	128
Previous balance	334	166	234	331	125
New balance on hand	166	234	331	125	253

C O A G R O

PROFORMA PROFIT STATEMENT

JANUARY 1 - DECEMBER 31

(In Thousand Balboas)

	1983	1984	1985	1986	1987	1988
Sales	9,371	12,900	14,267	15,782	17,841	19,744
Cost of Sales	8,153	11,026	12,217	13,512	15,273	16,940
Gross Margin	1,218	1,874	2,050	2,270	2,568	2,804
Administrative Costs, General	922	1,217	1,344	1,383	1,453	1,524
Net Margin on the Operation	296	657	706	887	1,115	1,280
Other Income:	<u>1,111</u>	<u>950</u>	<u>865</u>	<u>780</u>	<u>695</u>	<u>605</u>
Interest	994	800	700	600	500	400
Others	117	150	165	180	195	205
Other Expenditures:	<u>1,318</u>	<u>1,504</u>	<u>1,313</u>	<u>1,105</u>	<u>984</u>	<u>928</u>
Interest Payments	1,163	1,304	1,113	905	784	728
Reserves por bad debts	155	200	200	200	200	200
Profit	89	103	258	562	826	957

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C O A G R O

Chart I

PROFORMA GENERAL BALANCE STATEMENTS

(In Thousands of Balboas)

	1983	1984	1985	1986	1987	1988
ASSETS						
Cash on Hand - Bank	334	166	234	331	125	253
Accounts Receivable	5,461	3,496	3,371	3,037	3,305	3,406
Inventory	1,913	2,849	3,049	3,149	3,249	3,349
Others	<u>377</u>	<u>377</u>	<u>377</u>	<u>377</u>	<u>377</u>	<u>377</u>
TOTAL CURRENT ASSETS	8,085	6,888	7,031	6,894	7,056	7,385
Fixed Assets	2,739	3,065	3,088	2,938	2,761	2,557
Accounts Receivable Long Term	2,832	2,207	1,582	1,184	786	388
Others	<u>395</u>	<u>395</u>	<u>395</u>	<u>395</u>	<u>395</u>	<u>395</u>
TOTAL OTHER ASSETS	5,966	5,667	5,065	4,517	3,942	3,340
TOTAL ASSETS	<u>14,051</u>	<u>12,555</u>	<u>12,096</u>	<u>11,411</u>	<u>10,998</u>	<u>10,725</u>
LIABILITIES						
Accounts Payable - Others	273	500	1,000	1,500	2,000	2,000
Short Term Credit	8,423	6,500	7,200	5,000	3,300	2,300
Portion of current short-term credits	1,138	2,479	115	115	315	265
TOTAL CURRENT LIABILITIES	9,834	9,479	8,315	6,615	5,615	4,565
Long-Term Credit	3,695	2,399	2,784	3,169	2,854	2,589
CAPITAL AND RESERVES	<u>522</u>	<u>677</u>	<u>997</u>	<u>1,627</u>	<u>2,529</u>	<u>3,571</u>
Membership Capital	413	465	527	595	671	756
Reserves	109	212	470	1,032	1,858	2,815
TOTAL LIABILITIES & CAPITAL	<u>14,051</u>	<u>12,555</u>	<u>12,096</u>	<u>11,411</u>	<u>10,998</u>	<u>10,725</u>

Chart J

C O A G R O

Breakdown of projected sales by category: cash sales and credit sales, 1984-1988

Year	Cash Sales	Credit Sales	TOTAL	Accounts Receivable At Year End
1984	4,128	8,772	12,900	3,071
1985	4,494	9,773	14,267	2,946
1986	4,892	10,890	15,782	2,839
1987	5,531	12,310	17,841	3,107
1988	6,121	13,623	19,744	3,208

A SOCIOLOGICAL FIELD SURVEY OF THREE PRODUCTION
COOPERATIVES IN WESTERN PANAMA
(EDITED)

1. PURPOSE AND METHODOLOGY

The following study is the result of an eleven day field survey, carried out under contract AID 525-P.O. 035-T, in support of the Cooperative Marketing Project. The principal objectives of this study were threefold: (1) to sketch a broad socio-cultural and economic profile of medium and small sized cooperative farmers, (2) to describe the existing marketing systems utilized by cooperative farmers; and (3) finally to ascertain those factors that might support or hinder implementation of the marketing project.

The bulk of the information was obtained by means of in-depth interviews with cooperative officials and affiliated producers. Some use was also made of relevant official and cooperative documentation as well as such reports as the Hatch-Lanao final evaluation of the Cooperative Development Loan Project (525-T-041). The data in this study is presented in the same chronological and geographical order as followed during the field work.

2. THE COOPERATIVA HORTICOLA DE MERCADEO - BOQUETE, CHIRIQUI PROVINCE

A. Area Description

The district of Boquete is situated in the highlands of the central Mountains in the westernmost province of Chiriqui. The district is small, barely 514 km², with most of it formed by steep terrain cut by numerous narrow river valleys. Elevations range from three to seven thousand feet. The soils are amongst the most fertile in the country as a result of their volcanic origins. Precipitation rates vary from between 3,000 to 4,500 millimeters per year.

According to the preliminary figures of the 1980 national census, the population of the Boquete area stands at 11,727, while that of Chiriqui province is 287,000 persons. ^{1/} The town of Boquete itself has 2,800. In 1970 the town had 2,600 people thus the growth rate in the decade 1970-80 has been on the order of 8%.

It was not until the beginning of this century that Boquete was fully opened to colonization, prompted by construction of the small rail line, the "Ferrocarril Nacional de Chiriqui", which linked this sparsely inhabited, mostly wooded region to the provincial capital of David, some 30 miles to the

1/ Censos Nacionales de 1980. "Cifras Preliminares", Panama, agosto de 1980.

south. The fertility of the land and the quality of other natural resources in Boquete also served to draw a number of Europeans, North Americans and others to the area. Coffee was a principal crop grown by these new arrivals.

These same groups had a significant impact on the agricultural development of the district through their introduction of specific technological innovations and in influencing attitudes of the Chiricano farmers towards technological change generally. From a sociological standpoint the farmer from Boquete, like most Chiricanos, is a self-reliant, independent individual and one who is usually receptive to technological innovation.

B. Organizational History of the Marketing Cooperative

This marketing cooperative of vegetable growers is an outgrowth of an older, larger organization: the "Cooperativa Agrícola Industrial". The history of both organizations is intimately intertwined.

The Cooperativa Agrícola was constituted in 1958 by a small nucleus of vegetable growers with three goals in mind: (1) to provide farmers with agricultural inputs at lower costs; (2) to undertake the marketing of produce; and (3) to attempt the industrialization of certain foodstuffs. Only the first goal was achieved.

The first service established by the Cooperativa Agrícola was the opening of an agricultural inputs store which quickly grew into the largest of its kind in the district. Later, other departments were added including hardware and household goods, and a gasoline station. Today, the Agrícola is the largest single cooperative in Boquete with over 800 members. Besides the original core of vegetable growers, it includes coffee and other producers, cattlemen, housewives and taxi drivers. Agrícola's yearly volume of sales surpasses \$3.0 million dollars.

In 1962, some 22 vegetables growers founded a separate organization, "The Cooperativa Hortícola de Mercadeo", - still linked to the Agrícola - but with the specific purpose of marketing their produce. Hortícola has made several attempts to expand into the Panama City/Canal Zone market with only partial success due (at various times) to lack of marketing experience, lack of contacts in the key markets, lack of supporting infrastructure, transportation equipment and credit, and opposition from established middlemen.

In the early 1970's Hortícola acquired new impetus thanks to a generous contribution from the German Government which was used to build refrigerated silos in Boquete for the storage of potatoes and a packing shed for storing a variety of vegetables.

AID's Cooperative Development project Loan 041 signed in 1974 also gave the Hortícola a strong economic push by establishing a \$200,000 revolving credit fund which allowed many small and poor farmers to acquire production credit for the first time. From all indications the cooperative has developed adequate administrative skills to handle its credit program and could easily manage larger sums. Membership in Hortícola presently stands at 175 farmers, while sales volume has surpassed two million dollars this year.

C. A Socio-Economic Profile of the Membership

The Hortícola membership can be divided into two distinct groups: the large, wealthier farmers who's sales are over \$10,000 yearly constitute 20% of the membership, while the majority of farmer members (80%) are small producers with sales of less than \$10,000 a year. The following chart taken from the cooperative's annual report, provides production sales data for 1981 for Hortícola members:

Sales Volume (in Dollars)	Farmers of Farmers
0 - 10,000	60
10,000 - 20,000	12
20,001 - 30,000	5
30,001 - 40,000	4
40,001 - 50,000	0
50,001 - 60,000	0
60,001 - 70,000	1
70,001 - 80,000	0
80,001 - 90,000	3
90,001 - 100,000	1
100,001 - 110,000	0
110,001 - 120,000	0
120,001 - 130,000	0
140,001 - 150,000	1

Larger producers tend to concentrate on production of potatoes and onions. Frequently, they also carry out other agricultural activities such as coffee and dairy farming. A few are also merchants who own stores in town or trucks for transportation of produce and other goods.

The more numerous small farmers come from the lower socio-economic level of the local society. Their parents were mostly poor peasants who were unable to provide their children with land or at most with only a very tiny parcel. Most have only two or three years of formal schooling. These small farmers come from a diversity of backgrounds. Some have emerged from the

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ranks of the "minifundista" or small landholding class, others were previously landless laborers or sharecroppers.

The typical small cooperative farmer is a man 40 to 50 years of age who comes from a large family and, in turn, has many children of his own. While engaged in farming for their livelihood, many do not want their sons to become farmers, because the life of a "man of the soil" is too hard. Sixty percent of Horticola farmers own less than five hectares.

Small production centers on vegetables such as: cabbage, lettuce, tomatoes, celery, and pimentos. "Leaf" production entails less inputs thus lower credit demand than potatoes or onions. Most small farmers still worry about borrowing money and thus jeopardizing their main source of security, their small parcel of land. At the same time, their prospects for acquiring more land are limited since it has become so expensive, fluctuating from \$1,500 to \$6,000 a hectare. Land in Boquete has become some of the most expensive agricultural real estate in the country.

It is difficult to describe all the separate farming strategies used by small farmers. As the Hatch-Lanao evaluation report of Loan 041 underscored, there exist a "bewildering variety of production strategies even within the same crop enterprise" ^{2/} The same applies to the levels of technology currently in use. To describe these in detail would require considerable space and would add little to the analysis itself.

The typical small cooperative farmer seldom works more than one hectare of land at a time because vegetable growing is both labor and capital intensive. In Boquete, for example, competition between the vegetable growers and the larger coffee farmers for laborers is keen. Given the high disarticulation rate from agriculture, the supply of labor is usually filled by the Guaymí Indians. Four out of five rural workers in the district of Boquete are Guaymies from the highlands of Eastern Chiriquí. They migrate seasonally from their settlement to Boquete to earn cash after which they return to their own farm plots. Given the extensive use of Guaymí labor throughout the Boquete areas, it is speculated that if this supply of labor is ever disrupted the economy of Boquete will be severely affected.

Besides cultivating their own plots smaller cooperative farmers often continue to engage in wage labor, working for wealthier farmers with whom they may also engage in sharecropping arrangements. Each week they might work two or three days as laborers and devote the remaining days to their own plots.

^{2/} John Hatch and Aquiles Lanao. Impact Evaluation of Panama's Rural Cooperative Development Loan. Rural Development Services. New York, 1981.

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To these individuals the cooperative has been an important institution in promoting their social and economic improvement. Through membership they have been able to obtain production credit, technical assistance and a better price when marketing their produce. All the small farmers interviewed considered that their incomes have risen considerably due to their membership in the cooperative. They point out that as a result of their better economic situation, the quality of their home life has improved and their children have acquired a better education.

Examples of the positive impact which the cooperative has had in furthering the upward socio-economic mobility of poorer farmers in Boquete are numerous. One cooperative member is a man in his late fifties. Before joining the cooperative he had been a landless wage laborer, working for large coffee or vegetable growers. In the off season it was often difficult to secure even a few days work. After working as a cooperative member for a few years he was gradually able to save some capital and with a loan from the cooperative to purchase a few hectares of good farm land and rent another larger parcel on a yearly basis. He has also become a member of the cooperative board of directors. With his improved economic status he has been able to send three sons to college.

In the words of yet another cooperative member, a former landless cultivator, the cooperative has been "la tabla de salvación del pobre", the lifesaver that has kept the poor from drowning.

Most of the small farmers interviewed were unable to estimate their yearly income with any precision. The figures offered varied substantially depending on the price of vegetables, vagaries of the weather and other factors that normally affect farming. Income estimates fluctuated between \$2,500 and \$5,500 per year, which is substantially higher than that of non-cooperative small farmers. The average income for this latter group is below \$1,800 while that of wage laborers is still lower.

Finally, it can be said that the cooperative has helped to ease social differences. Large and small farmers readily indicate the fact that through the cooperative they have been able to relate better to one other, to understand their mutual problems, and to share information and know how.

D. The Existing Marketing System

The Hortícola de Mercadeo markets about 90% of the potatoes, 70% of the onions but only 40% of the vegetables produced by its affiliated

members. ^{3/}. The reasons why the marketing of vegetables has lagged behind that of root crops are twofold. First, the marketing of vegetables is a competitive sphere with several well established middlemen also engaged in the operation. A few middlemen are also producers who own trucks and have good contacts in the markets of Panama City and the central provinces. Sometimes middlemen offer slightly higher prices than the cooperative for selected products. However, when the farmer sells to the intermediaries he does so on a credit basis, sometimes not getting paid for a week or longer. Second, the cooperative lacks sufficient cold storage facilities in Boquete for all the vegetables produced. Moreover, vegetable production, as pointed out earlier, is concentrated in the rainy season. The cooperative does not have refrigerated trucks to transport the highly perishable vegetables to the major urban markets. Furthermore, the small storage facilities in Panama City are wholly inadequate to the needs of the central metropolitan market. In the case of onions the cooperative does not have a drier to keep the product for longer time periods.

E. Receptivity to the Proposed Marketing Project

Most farmers and cooperative employees interviewed contend that the greatest obstacle to the further economic growth of the organization lies not in the field or production but in marketing. They also maintain that an improved marketing system is necessary and that the membership is ready to participate provided the project is tailored to their specific needs, and takes account of economic and other conditions that affect the organization today.

As previously mentioned, improved marketing services, when put into effect, will bring the cooperative into direct competition with the well established middlemen. To help the cooperative compete successfully the marketing improvements need to take into account some concrete requirements. First, the cooperative needs capital so as to be able to purchase the vegetable production from its affiliated farmers at harvest time and to pay them in the shortest time possible - but no later than one week from delivery of their produce. Secondly, the cooperative has to improve its infrastructure. More specifically, it has an urgent need to enlarge the storage capacity used to store vegetables of the smaller farmers. The cooperative also has to either construct or rent cold storage facilities in the growing market of the central provinces and above all in the crucial metropolitan market. In the case of onions the project could use a modern efficient drier at the cooperative's headquarters at Boquete, as there is no

^{3/} Figures based on informatin obtained from Ing. Mario Serrano, Agronomist and head of the Cooperative Extension Service, Horticola de Mercadeo, Boquete.

capacity at the moment to reduce the water content of the produce and substantial losses are being sustained by farmers. Any marketing improvements should include the acquisition of a refrigerated truck(s) to ferry the highly perishable vegetables to the main markets hundreds of kilometers away, thereby preventing deterioration of vegetables in transit.

Finally, it is strongly recommended that smaller farmers be instructed on the basic elements of sound soil management to ensure that their productivity will not diminish in the future due to degradation of the soil and other natural resources. This assistance should come from GOP extension agents who will be increasing their services under the AID-supported Agrocultural Technology Transfer Project (525-0227) and other activities.

F. The Proposed Cooperative Marketing Project and Socio-Cultural Factors that Might Impede Its Implementation.

As indicated earlier both cooperative officials and producers agree that marketing is the crucial bottleneck to the further economic development of the cooperative. Moreover, there already exists a strong motivation in favor of the proposed cooperative marketing project. At this stage, therefore, it is difficult to discern any significant social or cultural factors that might hinder small-medium farmer participation. As the project proceeds and production increases, attention should be given to continuing labor needs (e.g., as provided currently by (Guaymi Indians), to ensure an adequate supply of manpower or mechanized substitutes to handle the expanded volume of production and related activities.

3. THE "COOPERATIVA DE SERVICIOS MULTIPLES, AGROPECUARIA SANTEÑA", LAS TABLAS, LOS SANTOS

A. Description of Los Santos Province

Los Santos, in the Azuero peninsula, is a hot dry land where precipitation averages between 1,000 to 1,500 mm annually. Summers are harsh (dry) and last four to five months. Even the rainy season is frequently broken by unexpected dry spells that can ruin crops. The region is notorious for its "sequias" or droughts. The coastal plain spreading out from the coast inland is flat, with few rivers, many of which are dry in summer. Further inland the terrain is hilly and generally unsuitable for mechanized farming. The soils are generally poor. The rich alluvial soils found in Chiriqui Province are mostly limited to narrow strips along the main rivers and streams. ^{4/}

^{4/} Stanley Heckadon Moreno. Los Bosques Comunales en la Economía Tradicional de Azuero, Naciones Unidas, FAO, Panama; 1981.

Some of the oldest settled sites of the Isthmus are found in this region. The bulk of the land is occupied by "potreros" or pastures of "faragua" grass (Hypparrentia rufa). Farmers in the region are mainly involved in the extensive rearing of beef cattle. It is only within the last decade that modern agriculture has made an appearance in the region. Population pressure and ecological degradation have driven thousands of "santeños" from the area towards the remaining unsettled regions along Panama's Caribbean coast and the Darien region. ^{5/} In 1970 the population of the province was 72,000, whereas by 1980 it had fallen to 70,000.

B. Organizational History of the Multiple Services Cooperative

This is the largest cooperative in the province of Los Santos. The headquarters is at Las Tablas, the province's capital, but the membership is found all across Los Santos. In terms of origins and purpose it differs substantially from the cooperative at Boquete.

The cooperative was organized in the mid 1960's by large cattlemen of Los Santos in an attempt to improve the quality and quantity of veterinary assistance available to cattlemen of the Province and to establish a veterinary/agricultural inputs store at Las Tablas.

Because of the high social status of the original founders, the cooperative developed the image of being a "wealthy man's" organization, which indeed it was. This exclusiveness, however, changed markedly in the late 1970's as smaller cattlemen joined the organization along with a number of small farmers. More recently the small and medium size producers gained control of the organization, instituting a more dynamic and innovative direction for the cooperative. Today, the large cattlemen who first established the cooperative have either left or reduced their participation.

Presently, the cooperative owns the largest agricultural input store in the province of Los Santos, with a volume of sales surpassing \$1.0 million per year. A second service provided by the cooperative has been small credit loans for agricultural production made possible by AID's previous Loan 041. The project provided the cooperative with a \$200,000 revolving credit fund which has been used wisely and effectively and has helped attract many former subsistence farmers and small ranchers. Demand for credit has risen well beyond the cooperative's capital resources and it could easily grant twice as much credit. Loans, however, are limited to a maximum of \$12,000 per

^{5/} Stanley Heckadon Moreno. La Colonización Campesina de Bosques Tropicales en Panamá in Colonización y Destrucción de Bosques en Panamá. S. Heckadon Moreno y A. McKay (ed.) Panama, 1982.

person and are calculated at a rate of \$480 per hectare. Since production costs have risen to 540 dollars per hectare the maximum area a producer can plant with a cooperative loan is 27 hectares.

The cooperative has also established a modest extension service. The first step was to contract the services of a veterinarian. Later, an agronomist was added to the staff to provide advice to the 50 or so farmers that are currently participating in the cooperative's credit program. Finally, the organization engages in marketing on a limited scale. It buys the corn and sorghum produced by those farmers participating in its credit program.

Membership has risen spectacularly. This year it stands at 560 producers, of which about 80% are active in the sense of purchasing their inputs at the cooperative's store, borrowing money, marketing or using the extension services. Likewise, overall sales of the cooperative have increased sharply in recent years. In 1980, sales rose to \$689,000 up from \$603,000 in 1979. In 1981 crop sales reached \$1,042,000.

C. Socio-Economic Profile of the Membership

The small cooperative farmer from Los Santos is similar in many respects to his Boquete counterpart. He is between 40 and 50 years of age and comes from the lowest socio-economic strata. His parents were peasants e.g., subsistence farmers. Rarely has the small farmer finished elementary school and the average education level is three years of elementary school. Like most small Chiriquí farmers he does not want his son(s) to remain in farming, but rather to get a better education and to move into a more prestigious occupation. Agriculture is seen as something hard and economically unrewarding. Although the cooperative did not have records on the income of its membership, it is undoubtedly clear that incomes have risen. All the interviewed farmers manifested that they have improved their production and thus their economic situation since joining the cooperative.

There are no current statistics on the economic distribution of the affiliated producers, however, on the basis of interviews and previous field work in the region ^{6/} it is possible to make some broad generalizations as to the characteristics of the producers.

A small number of members (less than 10%) are very large cattlemen who remain from the group which originally organized the cooperative. They are primarily oriented to extensive beef ranching for the Panama City market.

^{6/} Stanley Heckadon Moreno. El Seguro Agropecuario en el Marco Socio Económico de la Península de Azuero, Instituto Inter-Americano de Cooperación para la Agricultura. Panamá; 1981.

By far the largest groups of cooperative members is that of the medium and small "ganaderos" or cattle ranchers. They depend for their livelihood on extensive beef ranching which provides them with the largest source of cash income. Some also are engaged in agriculture which avails them of staples for their diet (e.g., rice, corn and beans). In the last three decades milk production has increased as a result of the demand created by large industrial processing plants (Blue Star and Nestle's) situated in Natá, Coclé province. These industries buy all the available milk produced in the central provinces of Panama. Many ranchers have slowly shifted to dairy production as part of their cattle operation.

Mr. Vasquez is a typical santeño cattleman. He owns 50 hectares of land. Before joining the cooperative he reared cattle in a rudimentary manner. Each year he would sell four or five young steer which provided his main source of cash income. Usually he sold the cattle before the onset of the dry season because he did not have enough pasture for all his herd. During the long dry season his cattle suffered grievously. One year he lost 16 head due to the lack of pasture. Besides engaging in ranching he practiced a primitive form of agriculture (slash and burn) to obtain the basic foods for his family. However, due to the gradual disappearance of the forest, securing his family's food supply became more difficult.

In joining the cooperative Mr. Vasquez has been able to make the transition into more modern farming. The cooperative furnished him with needed credit, technical assistance and helped him in marketing his produce. He began by planting small quantities of land, three or four hectares, with corn and some rice. The grain was used for feeding his family and to raise pigs and poultry both for household consumption and for sale in the market. After the harvest he sustains his cattle during the summer with dry corn stalks. He presently farms 25 hectares of corn, the whole of this hectareage supported by credit from the cooperative. In 1982 he bought a small 50 horsepower tractor to cultivate his own land and to rent to his neighbours.

Overall in recent years, mostly small landholders have joined the cooperative. These farmers are either former slash and burn cultivators who have begun to engage in semi-mechanized farming due to the disappearance of forests, or small producers of industrial tomatoes who sell their produce to Nestle's plant at Nata. As the system of slash and burn agriculture has entered into a crisis with the gradual depletion of much of the region's forests, many small producers have begun the slow transition into semi-mechanized production of basic grains. This transition has been greatly facilitated by the cooperative in the form of credit and technical assistance.

The cooperative at Los Santos has also been a powerful vehicle for social and economic change. It has provided farmers with the opportunity to engage in modern commercial farming, has helped to raise their incomes and

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their families' standard of living, allowed them to purchase more and better consumer goods, and overall to change their vision of the world. For these reasons, the general attitude of the small farmer towards the cooperative is very positive and he feels strongly identified with the future of the organization.

D. The Existing Marketing System

Total grain production for all cooperative members in 1981 was given as 180,000 quintals. The bulk of this production is marketed through other channels not by the cooperative. The cooperative's marketing budget is \$133,000 which can only cover purchases from farmers to whom it has given loans for production. Once the farmer harvests his grain he sells it to the cooperative which, lacking storage space, sells the grain immediately to the large buyers. The cooperative then discounts the sum granted in credit to the farmers and pays him the cash difference. In this manner the organization assures that its loans are repaid. As indicated, however, most members sell their grain outside the cooperative's channels; in Los Santos itself, in neighboring Herrera Province or as feed to one of the large poultry producers which supply the metropolitan market.

The procedure whereby producers and the large buyers get together to carry on transactions is as follows. During the harvest season, from January to March, the large companies send buying agents to Las Tablas where buyers and producers agree on prices and volumes. Companies buy on a weekly basis since they lack grain storage facilities. A large amount of grain is also purchased by the GOP's Agricultural Marketing Institute (IMA). Often, the farmer has to wait 30 to 40 days to get paid, by commercial buyers and from 3-6 months by IMA, which is unsatisfactory since the farmer has to pay laborers, his own creditors and cover household expenses. Late payment for produce is the farmer's most serious complaint against the existing marketing system.

E. Receptivity to the Proposed Cooperative Marketing Project

As in the case of the Hortícola de Mercadeo the officials and the affiliated farmers of the Agropecuaria Santefia clearly recognize the need for improved marketing services; and no major social or cultural obstacles were identified which might hinder the marketing project's implementation.

The needs of the Agropecuaria Santefia are very specific and require less investment than the case of the Hortícola de Mercadeo. First, the cooperative requires cash to rent storage space at the large IMA grain silos nearing completion, close to Las Tablas. The cooperative does not need to invest resources in constructing any new infrastructure. The storage facilities would be used starting at harvest time (when corn and sorghum

prices are lower), with a quantity of the grain stored until prices go up between July-September. Secondly, the cooperative requires capital to pay farmers cash for their produce as soon as possible following the sales.

In conclusion, the proposed cooperative marketing project can have a significant impact on the cooperative at Los Santos itself and on the livelihood of its affiliated farmers. Administrators and members alike state the need for better marketing and manifest the timeliness of the project now under consideration. There is no question about the farmers' willingness to participate in the project. In all probability, the marketing project will help to attract additional members, particularly subsistence farmers, into the cooperative fold.

4. THE COOPERATIVA DE PRODUCCION RURAL, BEJUCO - CHAME, PANAMA PROVINCE

This cooperative was organized by migrant cattlement from Los Santos who, during the decade of the 1960's, settled in the western sector of Panama province. Eventually, native farmers, slash and burn agriculturalists and root cultivators began to join the organization mainly to take advantage of the cooperative's store.

The santefio cattlemen had two purposes in mind when they established the cooperative; one was to find a market for their milk production, the other was to establish an input store to eliminate the trip to distant Panama City. The membership presently numbers 322 farmers. Half of the members are cattlemen residing in Chorrera, while the other half live primarily in Bejuco-Chame and San Carlos district.

In recent years the Bejuco-Chame cooperative has come upon hard economic times. In fact, some of its present difficulties seem insurmountable. The marketing of milk, the main economic function of the organization, has ceased to be profitable either for the organization or individual farmers. Western Panama is not an optimal area for dairy production. The terrain is of generally low fertility which has been depleted even more as a result of the cultural practices of the santefios who burn the pastures yearly. The region is generally dry with low annual precipitation. The natural vegetation has been extensively destroyed by slash and burn agriculture and the expansion of the "potreros". These adverse ecological conditions have contributed to the low productivity of dairy farmers who find it increasingly difficult to compete in volume and efficiency with dairymen from other areas such as Chiriqui.

The cooperative has also faced some serious management and administrative problems in recent years. The store currently has some \$16,000 in uncollected debts which has an adverse effect on the cooperative's capacity

to expand its inventory. Farmers also complain that they lack money to pay their debts.

Unlike the cooperatives at Boquete and Las Tablas, one encounters at Bejuco-Chame a feeling of pessimism and despair. An atmosphere of defeatism seems to surround the management of the organization. When queried about the future of the cooperative, some of the administrators did not hide their deep apprehensions about its chances of survival, unless cooperative farmers find a viable economic alternative to dairy farming given Bejuco-Chame area soils.

5. SOCIAL CONSEQUENCES AND BENEFITS

A. Groups Primarily Benefitted

The proposed cooperative marketing project comes at a most opportune time in the development of the cooperative movement in Panama. It will be of the utmost importance to those organizations, and groups most in need of attention namely, the small-medium producer.

In the last decade the Panamanian Government has focused its rural development efforts on strengthening other types of agricultural production models such as communal farms (asentamientos). Cooperatives were generally given secondary priority. However, a number of the cooperative organizations have managed to grow into successful enterprises that have shown themselves to be effective vehicles for social and economic change. A strong, well organized cooperative movement is also seen as a safeguard against acute social conflicts. Nonetheless, the proposed project should not dissipate its efforts among all production cooperatives but should concentrate on the most viable and successful ones.

The most immediate beneficiaries will be small and medium sized farmers to whom, at the present time, cooperatives only provide modest help in the marketing of their produce. In the case of the "Hortícola de Mercadeo", at Boquete, the principal target group should be the small land holding vegetable producers, who now sell their produce to middlemen because the cooperative is unable to purchase, store and retail most of its small farmer vegetable production.

With regard to the Agropecuaria Santefia, the project will aid the small cattleman-farmer and the semi-mechanized grain producer whose production cannot presently be marketed through the cooperative. Selling to the large poultry companies results in these small producers not receiving payment for four to six weeks after delivery of their product and selling to IMA frequently involves delays in payment of 3-6 months.

The benefits to small-medium producers will be in the form of greater security in having a market for their crops at harvest time, in receiving a fairer price for it and freeing farmers from the hold of the middlemen. In this way, farmers' income will receive a boost. Needless to say, the larger cooperative farmers will also benefit from the project for the same reasons namely increased capacity of the cooperative to market production.

A second beneficiary will be the cooperative organizations themselves. The project will strengthen their administrative skills and their marketing positions vis-a-vis the middleman system. The urban consumer can be expected to benefit through lower prices for higher quality agricultural produce and lower prices for poultry (the industry which purchases most of the corn produced in Panama).

B. Groups Adversely Affected

The group that probably will be most adversely affected by the proposed cooperative marketing project will be the middleman structure through increased competitiveness from the cooperative movement.

C. Groups Indirectly Benefitted

It can be reasonably expected that the project will help to draw into the cooperative fold in Boquete and Los Santos some 200 to 300 additional small producers who are now primarily engaged in subsistence agriculture, as well as wage laborers and sharecroppers. Thus far, these marginal groups have not been able to become cooperative members and commercial farmers because the cooperatives lack sufficient capital resources to extend them credit and other services.

It can be expected that a number of wage laborers presently working for the small and medium sized cooperative farmers will also benefit from the project, however it is difficult to predict to what extent. Possibly, as cooperative members increase their own production due to improved marketing conditions, this will lead to an increase in the demand for labor which in turn will generate an upward surge in income and related economic benefits for wage laborers.

D. Final Observations

It would seem that the best approach to get the cooperative marketing project underway and ensure success, would be to concentrate on those cooperatives that have shown the greatest organizational and economic potential and are in a position to take advantage of the resources made available by the project. Of the three cooperatives visited in this brief

field survey, only two merit consideration at the moment; the Hortícola de Mercadeo at Boquete and the Agropecuaria Santeña, at Las Tablas. The Hortícola and the Agropecuaria Santeña have shown remarkable institutional and membership growth. They have shown resilience and a capacity to spring back from adversity. They have consolidated themselves institutionally as well as administratively with a core of dedicated, highly motivated cooperative cadres. Their "esprit" is high. The relationship between the organizations and its affiliated farmers is also good. It is thus on these two production organizations and other like them that the Marketing Project should focus initially. The Cooperativa de Producción Rural, at Bejuco-Chame, does not presently provide the conditions to guarantee effective use of external assistance in the area of marketing.

INITIAL ENVIRONMENTAL EXAMINATION

Project Location: Panama, R.P.

Project Title: Agricultural Cooperative Marketing Loan/Grant

Funding: All years: \$8,200,000
(6,100,000)
(2,100,000)
FY 1984: \$8,200,000
(First year)

Life of Project: Five years (FY1984 - 1989)

IEE Prepared by: Frank Miller, ODR, USAID/Panama
John L. Champagne, AGR, USAID/Panama

Environmental Action Recommended: Negative determination

Concurrence:

Robin Gomez
Director
USAID/Panama

Date

I. Examination of Nature, Scope and Magnitude of Environmental Impact

A. Description of Project

The basic goal of the proposed loan is to increase the income of small and medium size farmers. The purpose of the project is to expand the range of services provided by agricultural cooperatives into the area of production marketing. The project will create an efficient medium size farmers with an assured market for their production. This marketing system will furnish participating farmers with timely market information as well as the marketing infrastructure and know-how necessary to store, process, and transport their products so as to raise incomes. Where appropriate, assistance will be provided to permit cooperative expansion into food processing and distribution.

The project will concentrate (initially) on several of the more successful cooperatives in each agricultural region, a few of which have already made initial entry into commercial marketing activities. These "model" cooperatives will be developed into market centers through which crop and livestock production from neighboring cooperatives can be channeled and marketed; increasing the value added to production and, thereby, profits to the individual cooperative farmers.

The major activities under the project are (1) institutional development to improve and expand the marketing services provided by cooperatives and (2) establishing a marketing credit and infrastructure fund to provide credit to agricultural cooperatives for improving the physical infrastructure to collect, store, and transport agricultural commodities.

B. Identification and Evaluation of Environmental Impact

1. Institutional Development

The proposed project will establish in the National Federation of Agricultural Cooperatives (COAGRO) and its affiliated cooperatives the capacity to address marketing problems in a coordinated and systematic fashion. To accomplish this the project will (a) provide technical assistance and training to improve the capacity of agricultural cooperative managers to develop and implement sound marketing plans based on an analysis of market demand and supply information; (b) provide technical assistance and training to improve agricultural cooperative marketing procedures and staff skills, and to expand operations; and (c) improve agricultural cooperatives' administrative and financial management systems to handle the demands of increased services to their members.

These technical assistance and training activities are expected to have a positive impact on cooperative business operations generally and marketing operations specifically, and by their nature, will not have significant negative effects on the environment. AID Environmental Regulations, 22 CFR, Part 216, Section 216.2 describes the classes of action which are eligible for categorical exclusion and for which an Initial Environmental Examination (IEE) is not generally required. The basic institution-building nature of the proposed project is applicable to the following categorical exclusion: 216.2(c)(2)(i) education, technical assistance and training programs.

2. Marketing Credit Fund

The project proposes to establish a Marketing Credit and Infrastructure Fund to finance the construction of marketing facilities such as collection centers, packing sheds and refrigerated storage plants. Panama's Agricultural Development Bank (BDA) will be responsible for managing the fund and for approving projects for financing based upon AID approved sub-loan criteria. The criteria will require that detailed feasibility studies be prepared which ensure that individual proposals are technically, economically and financially sound. Each feasibility study must also show that the proposed project will not have a significant effect on the human environment or, if a project is likely to have a significant effect, that a satisfactory environmental analysis is prepared. In addition, no marketing credit funds will be utilized to finance the procurement of pesticides. Subparagraph (x) of AID Environmental Regulations, 22 CFR, Part 216, Section 216.2(c)(2) states that an IEE is not required when the activity being financed provides "support for intermediate credit institutions when the objective is to assist in the capitalization of the institution or part thereof, and when such support does not involve reservation of the right to review and approve individual loans made by the institution".

Environmental Action Recommended:

Based on the negative environmental impacts and categorical exclusions discussed above, the Mission recommends that the Agricultural Cooperative Marketing Project be given a Negative Determination requiring no further environmental review.