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## IMPACT EVALUATION OF PANAMA'S RURAL COOPERATIVE DEVELOPMENT LOAN (NIDA-AID-525-T-041)

By

John K. Hatch

Aguiles Ianso Flores

June 19, 1981

This report was prepared under Contract No. 525-0187-C-00-1006  
between the Agency for International Development (USAID/Panama)  
and Rural Development Services, dated February 17, 1981.

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## I. INTRODUCTION

### A. Purpose and Objectives of the Evaluation

On November 13, 1974 the Government of Panamá signed an \$8.1 million loan agreement with the Agency for International Development (MIDA-AID-525-T-041) to finance the Rural Cooperative Development Project. The 041 Project contributed \$6.75 million to establish a Cooperative Revolving Loan Fund for providing sub-loans to rural producers and cooperatives affiliated with Panama's three principal cooperative federations: FEDPA (credit), FECOPAN (consumer), and COAGRC (agricultural and multiple services). The remaining \$1.35 million was earmarked for "Institutional Development" intended to strengthen the Ministry of Agriculture's (MIDA) ability to provide rural cooperatives with agronomic technical assistance, management subsidies, auditing, employee training, and other services they required to make efficient use of Revolving Loan Fund resources. Although disbursements under the loan were originally intended to terminate within a three-year period (1975-1976), the Project received two extensions and was finally terminated in early 1980.

The purpose of the present evaluation is to assess the overall impact of Loan 041 on the Panamanian cooperative movement. Among the evaluation's specific objectives are the following: (1) to determine the institutional effectiveness of Panamanian cooperative organizations and government institutions serving cooperatives; (2) to determine the extent to which cooperative members, particularly small farmers and ranchers, benefited from technical assistance, credit, and other services provided by the Project; (3) to evaluate the use and results of credit from the Revolving Loan Fund, including reflows; and (4) to make recommendations for strengthening the rural cooperative movement.

### B. Methodology and Activities of the Evaluation

In addressing the above objectives, Rural Development Services made use of two professional consultants (the co-authors of this report) and eight Panamanian research assistants who were entrusted with the completion of in-depth questionnaires to a sample of 24 representative cooperatives assisted under the Project, and farm-level interviews with some 250 co-op members who received production loans financed with 041 resources. The fieldwork in Panama was conducted in three stages, as follows:

STAGE I (February 23 to April 4, 1981): Dr. Lanac arrived in Panama on February 22nd. He spent the first week in reviewing Project documents and in establishing initial contacts with USAID, IPACCOOP, BDA, FEDPA,

and COAGRO. At this time a tentative list of cooperatives to be visited was jointly determined by Dr. Lanao and IPACCOOP. From March 5-18 Dr. Lanao made his first field trip. Accompanied by IPACCOOP or federation regional personnel, he visited all of the co-ops designated in the sample; at several he visited a number of small farmers who had received production loans under the O41 Project. Dr. Lanao returned to Panama City for the period March 19-24. During this week he continued his review of Project documents, redesigned questionnaire formats, and interviewed candidates for field research assistants. Out of 28 applicants he selected eight; of these, six were IPACCOOP regional employees who had elected to conduct research activities during their vacation period. From March 25 to April 2 Dr. Lanao conducted a second field trip during which he trained the Panamanian research assistants and field-tested the questionnaires. He concluded Stage I of the evaluation in Panama City (April 2-4) with debriefings at IPACCOOP and USAID.

STAGE II (April 2-30, 1981): The Panamanian research assistants worked most of the month of April. Organized in teams of two people per region (Chiriquí, Veraguas, Herrera-Los Santos, and Coclé-Panamá), each team was assigned a coverage target of six cooperatives and 90 farm-level interviews. The cooperative questionnaires (24) were all completed. Within reasonable levels of reliability this instrument (see Annex C) yielded about 22 indicators of cooperative performance and five indicators measuring services delivered by outside institutions. Two instruments were used for farm-level interviews, one for crop enterprises and one for livestock enterprises. Of the proposed 360 farm-level interviews, reliable and useable net income summaries were obtained for 214 producers. Two primary reasons for this shortfall were apparent. First, the livestock instrument proved inadequate for generalized application to different types of livestock with operations generating income at intervals ranging from three months to three years. Hence, ambiguity of the format caused interviewer confusion which resulted in inconsistent application from one region to another, and many questionnaires had to be eliminated. A second reason for the interview shortfall was a generally unsuccessful attempt to interview non-participants in the O41 Project to establish a control group. These producers either refused to be interviewed in sufficient numbers or proved to be generally unrepresentative of the target group. Notwithstanding these limitations, Stage II generated an enormous volume of information which was collected in a very short period of time under at times very adverse circumstances. The Panamanian research assistants did an outstanding job and deserve the most effusive congratulations for their efforts.

STAGE III (April 26-May 25, 1981): Dr. Hatch reached Panama on April 28 and was joined by Dr. Lanao the following day. After initial meetings with USAID and IPACCOOP staff, the evaluators traveled to Volcán (Chiriquí) where a three-day conference was held with the Panamanian research assistants to share their field experiences and discuss strengths, weaknesses, and opportunities facing the rural cooperative movement in general. Following this very insightful encounter, Lanao and Hatch spent two weeks in the field making follow-up visits to all of the 24 coopera-

tives which had been selected for in-depth evaluation. The evaluators were accompanied during these visits by the Panamanian research assistants who had completed the original questionnaires. These follow-up visits were very useful in filling data gaps and developing a more unified consensus of the problems and needs of the rural cooperative movement. The evaluators returned to Panama City on May 16 to spend a final week meeting for intensive discussions with each of the co-op federations and government agencies who participated in the O41 Project. Dr. Hatch left Panama on May 23 to begin data analysis and write-up tasks. Dr. Lanao remained until May 26 in order to collect important information concerning the Revolving Loan Fund from the Agricultural Development Bank, together with data from FEDPA on loan balances.

The evaluation report was completed at the offices of Rural Development Services in New York City during the period June 1-19.

A detailed list of activities by the consultants, and their itineraries, is presented in Annex A. In Annex B we present a list of all individuals contacted during the course of the evaluation.

### C. Summary of Evaluation Findings and Recommendations

Overall, the O41 Project can be regarded as a highly successful development undertaking. Even though the Project got off to a very slow start, even though its external technical assistance arrived quite late, even though only a fraction of the agronomic supervision and education services ever materialized, and even though the Federation of Consumer Cooperatives went bankrupt in 1978--despite these major deficiencies the Project achieved significant positive impact. Before 1979 only half the resources of the Revolving Loan Fund had been disbursed; but in the following two years not only was the balance of the Fund utilized, but total loan disbursements to cooperatives had reached \$11.7 million--indicating some \$4.5 million in lending from reflows. Although available records do not permit a precise calculation of delinquency rates, the loan repayment performance by recipient cooperatives is considered to be excellent and the Agricultural Development Bank currently estimates total delinquency at less than 3 percent.

Judging the O41 Project in terms of its own benefit targets identified in the original project paper, most have been achieved or surpassed. Membership in agricultural and consumer cooperatives was expected to increase by 60 percent, while that of rural credit cooperatives by 35 percent; in reality the membership increases actually achieved are 76 percent (agricultural), 65 percent (consumer), and 46 percent (credit). COAGRO was expected to reach a volume of business in farm input wholesaling of \$3 million per year; in 1980 it had reached \$4.4 million. (These figures apply to sales to cooperatives only). At least 50 percent of agricultural cooperative members were expected to receive pro-

duction credit and technical supervision; in practice, the coverage rate for credit cooperatives can be estimated at above 70 percent of rural members, while in agricultural cooperatives--on a case by case basis--coverage ranges from 55 to 100 percent.

Our survey research data on selected cooperatives (24 out of 46 co-ops benefitted under the Project) paint a suprisingly positive picture of consolidation and growth of the rural cooperative movement, particularly in its economic aspects. From 1976 to 1980 the total assets of sampled cooperatives increased by 119 percent, membership savings by 96 percent, net profits by 81 percent, and patronage refunds by 35 percent. Among social indicators, attendance at general assemblies and frequency of meetings by co-op administrative, vigilance, and credit committees were markedly improved over the project period.

Lack of baseline data prevents a reliable estimate of growth in farmer-member productivity and income. However, inferences that can be drawn from crop and livestock summaries conducted during the evaluation would suggest that the O41 Project has enabled hundreds of rural households to capture yield and income opportunities which otherwise would have been unavailable to them. Extremely high levels of fertilizer and insecticide use were observed. In high value commodities like potatoes, onions, and tomatoes, very few losses were recorded such that net income per hectare ranged from \$1,200 to \$2,200--an achievement which in part must be explained by the availability of credit. In contrast, net income for more traditional crops such as corn, rice, sorgo, and yuca ranged from \$92 to 490 per hectare. Similarly, availability of credit enabled many small producers to undertake livestock operations--principally cattle and swine--requiring cash investments of \$2-5,000, but which generated net income of between 27 and 61 cents for every dollar invested. Very few deficit operations in livestock were observed.

The O41 Project was also instrumental in achieving several unexpected but highly significant benefits for Panama's cooperative movement. The creation of a Revolving Loan Fund for exclusive use by cooperatives helped to reorient GOP agricultural policy away from a rather narrow focus on asentamientos (group farms), gave cooperatives an opportunity to demonstrate their viability as instruments of agricultural development, and virtually made cooperatives the preferred borrower of the Agricultural Development Bank. The O41 Project also strengthened the relationship and coordination of three sectors of the cooperative movement which had never worked together before--credit, consumer, and agricultural. This unity of common interest is said to have been directly responsible for the creation of the Autonomous Cooperative Institute (IPACOOB) in 1980 (which replaced both the Cooperative Department of MIDA and the O41 Project Authority) and the passage of a National Cooperative Law (Ley 38)--both being initiatives actively promoted by the Panamanian cooperative movement.

Of course, the O41 Project was not a complete success, and several major deficiencies were observed. A variety of implementation weaknesses were noted previously: slow start-up, under-staffing, curtailment of services, late arrival of external technical assistance, and the bankruptcy of FECOPAN. To these may be added a number of continuing problems which await solution: (1) COAGRO is dangerously indebted to commercial credit sources, seriously undercapitalized by its affiliates (97 cents of every dollar of assets has been provided by outside creditors), and is being eaten alive by soaring interest charges on borrowed capital; its debt must be refinanced immediately if this organization is to survive. (2) Both at the level of individual cooperatives or their federations who have borrowed from the Revolving Loan Fund, inadequate controls have been established to prevent co-mingling of O41 resources with other funds; separate bank accounts and recording procedures exclusively for the monitoring of O41 funds must be established as soon as possible. (3) One of the major objectives of the O41 Project--to establish a cooperative marketing system--was not achieved, and efforts in this area by COAGO, FEDPA, and IPACOOOP have so far been negligible; meanwhile, at the level of the Project's farmer participants, the absence of adequate marketing services has become a constraint to production and income which is far more serious than adequate technology and technical supervision. (4) For lack of suitable reporting formats, inadequate decentralization of staff, frequent shifting of staff from one area to another, and inappropriate in-service staff training, the direct impact of IPACOOOP services on recipient cooperatives remains rather tenuous and unmeasurable. (5) The rapid economic growth of Panama's rural cooperatives is fast outstripping their social and managerial capacity; training activities for managers and co-op leaders and members must not be merely intensified but at least tripled. (6) The O41 Project has been possibly too successful, for it has awakened a demand for credit among small farmer members of cooperatives which presently far exceeds the supply of funds available for lending; a follow-on project to increase the size of the Revolving Loan Fund and continue valuable institution-building activities is urgently needed.

The final chapter of this evaluation report presents a detailed set of guidelines for such a follow-on project, a so-called "Stage II" to the Rural Cooperative Development Loan. The proposed Stage II strategy suggests a variety of components, as follows: (1) An expansion of Revolving Credit Fund resources by \$6 million, coupled with a revision of credit policy requiring borrowers to provide not 10 percent but at least 20 percent of the value of their loan in share capital subscription; (2) A refinancing of COAGRO's commercial debt up to a maximum of \$3 million, but on a matching basis with equivalent subscriptions of member share capital; (3) The selection

of the most successful credit, agricultural, and consumer cooperatives in each region, to provide them with subsidies to organize educational and technical assistance activities in support of smaller or weaker co-ops of each type; this self-help model would serve to mobilize excellent expertise already available in the movement and would enhance the integration of cooperative activities at the regional level, from the bottom-up. (4) Finally, continuing institution-building support for IPACCOOP to improve its capacity to provide audit, training, supervision, and general support services to cooperatives on a decentralized regional basis.

#### D. Acknowledgements

This evaluation report was the product of a group enterprise which went far beyond the efforts of its co-authors. It was strengthened by the cooperation, commentaries, and insights of hundreds of Panamanians. Most of these individuals were small farmers and ranchers, the very people for whom the O41 Project was intended to benefit, and without their direct participation in its evaluation this report would have little value.

After the rural producers themselves, we are indebted to the managers, employees, or directors of at least 28 cooperatives visited, 24 of which were interviewed in depth. In one co-op after another the evaluators encountered an exciting classroom. We came to discover that here and there the rural cooperative movement is blessed by individuals who are virtual giants in terms of their experience and hard-won expertise. We came away greatly impressed and humbled by what we were able to learn from these individuals. And of one thing we are certain: before looking to outsiders for technical advice, the Panamanian cooperatives must first learn to mobilize and share their own excellent human resources.

We wish to record our special gratitude to our eight outstanding Panamanian research assistants, namely: Alejandro Saldaña, Rosibel Santamaría, Avis de Delgado, Osvaldo Gomez, Alfredo Concha, Tomás Higuera, Carlos Julio Bernal, and Ricardo Callender. Considering what they were paid, the work of these fine individuals was far above and beyond the call of duty.

Finally, mention should be made of the representatives of cooperative federations and of government institutions serving the movement who were particularly supportive of the efforts of the evaluators. To name but a few: Euclides Tejada, Danaik Garcia, and José Gutierrez of IPACCOOP; Rodrigo Botello of BDA; Simón Pastor González, Ernesto Voughan, and Humberto Osorio de FEDPA; Orlando De Vicente, Pablo Calvo, y Raúl Valdivia de COAGRO; and Tomás Ugarte and Tomás Chapman of USAID.

II. COMPONENTS OF THE 041 LOAN: PLANNED VERSUS ACTUAL IMPLEMENTATION

A. Project Goal

The stated goal of the 041 Loan was to improve the relative economic position of small and medium-sized rural producers in Panama. According to a survey conducted by USAID in 1974, it was found that farmer members of rural cooperatives tended to be significantly larger in terms of land holdings than the average farmer. At that time the average land holding of 57 sampled co-op farmers was 46.5 hectares and only 25 percent had less than 5 hectares. This reality appears to have shifted dramatically. As shown in Table I, a sample of 86 co-op farmers interviewed for the present evaluation in April 1981 yielded an average land holding of 6.7 hectares, and 56 percent had less than 5 hectares. An additional 37 percent had between 5 and 20 hectares.

TABLE I. COMPARISON OF CO-OP MEMBER LAND HOLDINGS  
(1974 VERSUS 1981)

<u>Area</u>	1974 USAID COOPERATIVE SAMPLE		1981 EVALUATION SAMPLE	
	<u>No. farms</u>	<u>%</u>	<u>No. farms</u>	<u>%</u>
Less than 3 Has.	11	20	37	43
3 - 4.9 Has	4	5	11	13
5 - 9.9 Has.	10	18	18	21
10 - 19.9 Has.	4	7	14	16
20 - 49.9 Has.	9	16	5	06
Over 50 Has.	<u>19</u>	<u>34</u>	<u>1</u>	<u>01</u>
	57	100	86	100

The above figures do not include ranchers, for whom size of operation is better measured by heads of livestock. Excluding swine producers, a sample of 54 co-op ranchers in April 1981 revealed that 28 percent (15) were small producers (10 head or less), 24 percent (13) were medium-scale ranchers (11-20 head), and 48 percent (22) were large ranchers. It was determined that most ranchers hold an average of slightly more than 1 hectare per head of livestock. But assuming a straight 1:1 ratio, this would give the average co-op rancher a holding of 26 hectares. If livestock and crop areas are combined, the average land holding of co-op members would rise from 6.7 to 14.1 hectares. Even so, this figure remains far below the 46.5 hectare average obtained in the 1974 survey. In precise compliance with the 041 Project goal, it reflects a sharp downward shift in co-op

membership toward small and medium sized rural producers.

B. Cooperative Revolving Loan Fund

The bulk of the O41 Loan was earmarked for the establishment of a Cooperative Revolving Loan Fund. The sum of \$6.75 million was set aside for this purpose. An additional \$500,000 was to be contributed to the Fund by the Agricultural Development Bank (BDA) out of its own resources. All borrowers from the Fund--Federations and individual cooperatives--were expected to contribute 10 percent of the total financial requirements of their loan projects. These contributions were estimated at \$725,000. However, since they did not enter the Fund itself, and because the BDA exercises no discretion over their use, they should not be included in the total value of the Revolving Loan Fund. Thus, the total value of Fund resources (excluding interest earnings) should have been \$7,250,000. Table II shows that this capitalization target was not quite reached, resulting in a minor shortfall in AID disbursements of \$14,255.

TABLE II: PERFORMANCE OF THE REVOLVING LOAN FUND (1974-81)

<u>Description</u>	<u>Planned</u>	<u>Actual*</u>	<u>Difference</u>
AID Loan resources	6,750,000	6,735,745	14,225
BDA Contribution	<u>500,000</u>	<u>500,000</u>	
	7,250,000	7,235,745	
Reflows:			
Capital		4,946,227	
Interest		<u>809,960</u>	
Total		5,756,187	
Total Income to Fund		12,991,732	
Total Loan Disbursements		<u>11,713,352</u>	
Balance		1,278,579	
1981 Loan Commitments*		<u>479,661</u>	
Net Balance Available		798,918	

\* As of April 30, 1981

Source: Gerencia de Desarrollo del BDA

Table II also shows that the Fund has to date generated an aggregate lending of 62 percent more than the original value of the Fund's resources. This is a rather exceptional accomplishment considering that AID disbursements to the Fund were only 10 percent of its commitment in 1976, 17 percent in 1977, and 20 percent in 1978. In other words, by the start of 1979, some 53 percent of the AID commitment to the Fund remained to be utilized for cooperative lending.

C. Lending to Federations and Cooperatives

Revolving Loan Fund resources were to be made available for loans to the three cooperative federations--FEDPA, COAGRO, and FECOPAN--as well as to their affiliated cooperatives. In the case of FEDPA, some \$2 million was made available to the federation for sub-lending to its affiliates under its own cognizance and responsibility. However, in the case of COAGRO and FECOPAN, sub-loans to their affiliates were made directly by the BDA; the federations did not share loan supervision and administrative responsibilities. Originally, all sub-loans to the federations were to be made at an interest rate of 5 percent. Any resources loaned directly to cooperatives were to be made available at the same rate for on-lending to farmer members at 12 percent. In the case of FEDPA, the federation reloaned to its affiliates at 9 percent and the latter made loans to their members at 12 percent. In 1980 the 041 Project Loan Agreement was amended to permit the BDA to raise its interest charge from 5 to 7 percent, and to allow the credit maximum for sub-loans to farmers to be raised from \$7,500 to \$12,000.

Table III shows the distribution of lending from the Revolving Fund among the three federations and their affiliates. Detailed breakdowns of lending by individual cooperative and by loan type--production credit, working capital, and infrastructure/equipment--are presented in Chapter V.

TABLE III.  
COMPARISON OF REVOLVING FUND LENDING TO FEDERATIONS  
AND AFFILIATES (1974-1981)

BORROWER	PLANNED	%	ACTUAL	%
COAGRO				
Federation	780,000	19	2,185,657	28
Affiliates	<u>3,220,000</u>	<u>81</u>	<u>5,762,225</u>	<u>72</u>
Total	4,000,000	100	7,947,882	100
FEDPA				
Federation	200,000	9	-	
Affiliates	<u>2,000,000</u>	<u>91</u>	<u>2,095,896*</u>	<u>100</u>
Total	2,200,000	100	2,095,896	100
FECOPAN				
Federation	511,000	41	371,551	23
Affiliates	<u>739,000</u>	<u>59</u>	<u>1,298,024</u>	<u>77</u>
Total	1,250,000	100	1,669,575	100
GRAND TOTAL	7,450,000		11,713,353	

Actual aggregate value of on-lending to farmer or rancher-members for production credit is estimated at \$4,166,724 (Source: FEDPA)

Source: Gerencia de Desarrollo del BDA

In relative terms Table III shows that COAGRO received significantly more resources for its own working capital and infrastructure requirements than originally planned. These changes were authorized by two separate implementation letters. Because of its bankruptcy in 1978, FECOPAN's relative share of Revolving Fund resources declined sharply from the planned target. On first glance it would appear that COAGRO's affiliates received a much larger aggregate share of Revolving Fund resources than did FEDPA's affiliates, but this impression is misleading. Two points should be mentioned. First, FEDPA's \$2 million share was disbursed in 12 separate installments and the full amount was not received until late 1979. This fact severely limited its ability to expand its aggregate lending through the use of reflows. But secondly, notwithstanding the above constraint, FEDPA records estimate that the total aggregate value of production loans made by its affiliated cooperatives to their members with O41 financing is about \$4.2 million. If this unofficial estimate is indeed accurate, the result is all the more impressive considering that FEDPA has provided a much larger relative share of O41 funds for medium-term livestock operations than has COAGRO.

#### D. External Technical Assistance

After the Revolving Credit Fund there were six components in the O41 loan paper which were identified as institutional development activities. The first of these was External Technical Assistance. Under this component AID was to provide \$640,000 for external advisors to MIDA's Department of Cooperatives, the BDA, COAGRO, and FECOPAN. MIDA was committed to provide an additional \$220,000 for miscellaneous consultants and for salaries of Panamanian counterparts to the external advisors. MIDA was to receive 96 man-months of advisory assistance in Agricultural Credit and Financial Systems, Rural Administration/Farm Management, Financial and Management Auditing, and Data Gathering and Evaluation. The BDA was to receive 12 man-months of a specialist in Cooperative Credit. COAGRO was to receive 37 man-months of assistance in General Cooperative Administration, Procurement and Distribution, Production, and Marketing. FECOPAN was to receive 60 man-months of assistance in Administration, Financial Systems, Procurement, Inventory Control, and Distribution.

Table IV shows the planned versus actual performance of external technical assistance under the O41 Loan. Of 205 man-months of planned assistance only 146 man-months were provided. The cut-back was in part due to the late arrival of the advisors, which in turn caused a rebudgeting of their costs. No advisors began work in Panama until late 1976, and these were for BDA and FECOPAN only. The advisors for MIDA (DINACOOP) and COAGRO did not begin work until 1978.

TABLE IV: COMPARISON OF PLANNED AND ACTUAL TECHNICAL ASSISTANCE

<u>Recipient Institution</u>	<u>P L A N N E D</u>		<u>A C T U A L</u>	
	<u>Man- Months</u>	<u>Expenditure \$</u>	<u>Man- Months</u>	<u>Expenditure \$</u>
MIDA (DINACOOB)	96	302,000	59	188,450
BDA	12	36,000	37	120,293
COAGRO	37	112,000	30	164,739
FEDPA	-	-	2	10,000
FECOPAN	60	180,000	17	50,082
Equipment		10,000		9,592
	<u>205</u>	<u>640,000</u>	<u>145</u>	<u>543,156</u>

Source: Dirección del Proyecto de Desarrollo Cooperativo

E. Establishment of an Audit Section Within MIDA

The 041 Loan earmarked \$160,000 in financing to establish a section within DINACOOB for the auditing of cooperatives. The unit was to be staffed by 5 auditors, and MIDA was expected to provide an additional \$45,000 in salary support. In practice, it was possible for MIDA to hire 12 auditors with the funds that had been budgeted, an action authorized by implementation letter in 1976. Eventually a total of \$182,078 was spent for this component out of loan funds. Of this amount, \$19,801 was spent on equipment and \$162,277 for salaries and per diem.

F. Agronomic Technical Assistance

This 041 Project component provided for the recruitment of 60 agricultural technicians to be assigned to individual cooperatives or clusters of cooperatives assisted under the Project. These technicians were to assist co-op members in the planning of production loan projects, supervision of loan use, and general technical training of co-op members in subjects of crops and livestock technology. Half the agronomists were to be assigned to FEDPA affiliates and the other half to COAGRO affiliates.

The component was to be financed with resources totaling \$725,000 from three sources. From loan funds \$175,000 was set aside for commodity support, particularly vehicles and equipment. Salary support of \$440,000 was to be provided by MIDA, while salary supplements totaling \$110,000 would be provided by the federations and individual cooperatives.

In practice the shortfall in this component was perhaps the most dramatic in the entire Project. Of 60 agronomists only 19 were hired, of which 4 were assigned to FEDPA and 15 to COAGRO. Of the \$175,000 in loan financed budget, \$160,164 was spent. A hiring freeze within MIDA

has been blamed for the Ministry's failure to hire the programmed number of agronomists.

#### G. Mobile Cooperative Education Teams

Another critical component of the Rural Cooperative Development Project was the creation of an intensive training program for co-op managers, employees, and directors at the local level. Two mobile training teams of four technicians each, plus a program coordinator, were to have been hired by MIDA to conduct training courses, short seminars, and lectures for co-op personnel at the local level. These teams were to teach cooperative management, financial and accounting practices, marketing skills, inventory control, membership promotion and education, savings mobilization, and other subjects of vital interest to rural cooperatives. The total budgeted cost of the Mobile Team Component was \$575,000, of which AID loan funds were to provide \$25,000 for vehicles and commodities. MIDA was to contribute \$550,000 in salary support and trainee participation expenses.

The mobile education teams were never organized. Indeed, the external consultant for cooperative education did not begin work in Panama until three months before the Project's termination date. Eventually \$47,730 of loan funds were spent for equipment to support educational activities. DINACCOOP and eventually IPACCOOP organized co-op education activities on a sporadic basis throughout the Project period, but these efforts tended to be too general in content, too lacking in rigorous technical skill training, and too brief to have a major impact in upgrading the quality of co-op management expertise at the local level. Hence, the failure of the Project to mount an ambitious and effective co-op training program must be considered a major deficiency in implementation; this shortcoming has resulted in a huge management skills deficit which must be overcome quickly if the rural cooperative movement is to sustain its present rate of rapid growth.

#### H. Manager and Accountant Trainees

The 041 Loan Project designated \$350,000 for an innovative service of providing subsidies to rural cooperatives to finance the salaries of qualified managers and accountants. Under this component some 40 managers and 30 accountants were to be given a three month intensive training program at Panama's Rural Management Training Center, after which they would be assigned to rural cooperatives which most needed their services. The Project was to pay 90 percent of the salary of any of these technicians during his first year of service to a recipient cooperative, 60 percent the second year, and 30 percent the third and last year; the balance of salary costs would be progressively assumed by the cooperative.

This subsidy scheme is widely acknowledged to have been extremely successful. At the co-op level it served to dramatize the importance of qualified management and up-to-date accounting records. The presence of trained staff in the weaker cooperatives greatly improved the efficiency of Project services directed at these institutions and, in many instances, permitted the co-ops to access Project resources in the first place.

Surprisingly, however, such positive impact was achieved even though the subsidy scheme fell considerably short of its target. No more than 40 out of the 70 programmed technicians ever completed training and provided service at the co-op level. COAGRO received 20 technicians, FECOPAN 7, and FEDPA 10. FECOPAN received only a few man-months of benefit from the subsidy program because the Federation went bankrupt in 1978; at that time the subsidy funds budgeted in its name were passed to MIDA (DINACOOP) to help finance 10 accountants recruited by this agency for service to co-ops at the regional level. Misunderstandings concerning the size, purpose, and logistics of subsidy management led to a discontinuation of the subsidy program to COAGRO affiliates in late 1978. Possibly the best use of the program was made by FEDPA, which even before the O41 loan had organized a management support loan service (interest free) for its affiliates. The O41 Project simply consolidated and broadened this initiative.

Of the \$350,000 initially budgeted for the subsidy program a total of \$240,876 was eventually spent.

### I. Training Programs

Aside from the Mobile Team and Management Subsidy components, no other activity described in the original project paper of the O41 Loan was specifically directed at education or training initiatives. In practice, however, a separate component labeled "Training" came to be included in the budget of O41 loan funds. From 1975 to 1980 some 40 training activities were financed under this component. Ten of these were international courses or seminars held in Costa Rica, Chile, Colombia, Salvador, and the U.S.; the remainder were held in Panama. Of the 40 training activities, 6 were directed at DINACOOP, BDA, or other staff of government agencies serving cooperatives. FECOPAN and its affiliates received 12 training activities, COAGO received 10, FEDPA received 9, and 3 activities were organized for the joint participation of staff from various federations. In total, \$48,138 in loan funds were spent on these activities.

### III. FARM-LEVEL IMPACT OF THE O41 LOAN

#### A. Initial Clarifications

To describe the impact of the Rural Cooperative Development Project we have chosen to begin with the farmer--the Project's intended beneficiary--and work upwards. All impacts created by the Project at higher levels--at the cooperative, the federation, and finally at the level of government agencies serving the cooperative movement--these are of secondary importance because they are all means to the same end of improving the income and well-being of rural producers, particularly small and middle-sized farmers and ranchers.

Theoretically, the O41 Loan could generate benefits for farmers and ranchers in several ways. First, it could provide them with production credit. By financing investments in yield-increasing technology or productive assets, such credit can help rural producers to increase their productivity and income. Second, by providing rural cooperatives with loans for working capital and infrastructure/equipment investments, the O41 Loan could assist cooperatives to provide rural producers with more efficient services, particularly in the fields of input supply and marketing. Third, by providing farmer-members with technical assistance and supervision in the use of modern inputs and credit (agronomic and veterinary services) it is presumed that farmer and rancher productivity can be enhanced even further. Fourth, by making available management personnel on a subsidized basis, the O41 Loan could improve the efficiency with which the above-mentioned services are made available to rural producers through cooperative institutions on a profitable basis. And fifth, if profitable operations are achieved, the rural producer is benefitted once again through an end-of-year patronage refund.

All of the above benefits can be translated into a net increase in the income of farmer-members of rural cooperatives. If the O41 Loan were to be evaluated as successful, it would therefore have to meet two prerequisites: (1) it enabled rural producers to generate income, and (2) it enabled them to generate more income than non-members of equivalent means.

Both prerequisites are almost impossible to measure reliably because under the O41 Loan no information system was established for gathering data on changes in the income of farmer-members. So the evaluators designed an instrument--for application to farmers receiving production loans under the O41 Project--intended to measure the net income generated by each respondent's most important (financed) crop or livestock enterprise. This instrument enables us to estimate how much income--on the average--was generated per hectare of any given crop or any head of livestock financed under the Project.

Far more difficult is the task of measuring income changes over time among Project participants, or differences in income between co-op members and non-members operating similar crop and livestock enterprises. The strategy for use of control groups composed of non-member farmers and ranchers was only partially successful. Among crop enterprises (151 summaries) we were able to obtain only 14 control farmers --5 in rice, 4 in tomato, 3 in corn, 1 in onion, 1 in flax, and none in potato and sorghum. Among livestock summaries (93) there were only 7 control ranchers that could be utilized--5 in cattle and 2 in swine production. Because the size of the control groups is so limited, the reader is cautioned that the data are not completely reliable and should be considered indicative of possible tendencies only.

At different points in the following narrative the reader will find references to "COOPLEX data". The COOPLEX is a credit planning instrument (it stands for Cooperative Production Plan) which consists of estimates of input use, machinery, and general credit requirements of co-op farmers requesting production loans for any given year. The data are drawn from the production plans accompanying the credit requests of individual farmers and aggregated on a regional and national basis. The data also permit estimates to be made of total production costs, income (but not yields), and net income per hectare. The COOPLEX has two serious limitations. First, it covers only co-op farmers who request production loans, thereby excluding non-member farmers and those receiving credit from other sources. Second, the COOPLEX has been used exclusively as a planning (pre-planting) instrument rather than as an evaluation (post-harvest) information system for measuring the results achieved with production credit.

#### E. Onion

The highest value commodity grown by co-op farmers on a per hectare basis was onion. Among 33 sampled farmers, only two lost money on this crop in 1980, which reflects a low level of risk. The average net income per hectare was \$2,202 against costs of \$3,705. This result was 24 percent above the COOPLEX estimate in terms of net income and 5 percent above in terms of cost. It indicates that for every balboa invested, the average onion farmer earned 59 cents net profit. The average yield per hectare was 350 quintals, with a range of 160 to 600 quintals. Of the 33 sampled producers, all used fertilizer (with an average investment of \$487/hectare) and likewise all used insecticide or other agrochemicals (average investment \$315/hectare). Labor use averaged 1,151 man-days per hectare, reflecting extremely labor-intensive cultivation practices. The average area planted was .49 hectare, with a range of .25 to 1.5 hectares. Ten of the 33 producers rented the land they used to grow onion. Co-op growers had quotas to sell 60 percent of their production to the National Marketing Agency (IMA) at \$17.50 per quintal, with the remainder sold on the free market at prices reported to fluctuate from \$14-28 per quintal.

There was only one control farmer for onion-growers, and he did significantly better than the norm. On a per-hectare basis he used 32 percent more fertilizer and achieved a yield (480 quintales/hectare) which was 37 percent above average. His net income was 49 percent above average. Of course, this single case is not sufficient to demonstrate the superiority of non-member over co-op onion growers. However, what can be concluded is that onion is a potentially very remunerative enterprise, but it requires a large investment of cash and labor. Few small farmers could afford to grow this crop in the absence of production credit. We can infer that the key benefit provided by co-op membership is that it has given small farmers access to credit, and in doing so it has given them access to an agricultural income opportunity which otherwise might be beyond their reach.

Finally, it bears mentioning that the O41 Loan resulted in the generation of significant rural employment. Of the 37 sampled growers of onion, the average labor use was 566 man-days per farmer or 1,150 man-days per hectare. A total of 9,419 man-days (50 percent of all labor) was generated in non-family hired labor employment. It is safe to assume that some small farm participants in the O41 Project received additional benefits from the sale of their labor services in onion cultivation to other co-op and non-member growers.

### C. Potato

Close behind onion, the next highest value crop grown by co-op farmers was potato. This crop also proved to be low risk with only two losses occurring out of 30 growers sampled. Average net income was \$2,157 per hectare against costs of \$3,263 per hectare. This income result was 34 percent below the COOPLEX estimate while the cost result was 5 percent above the COOPLEX projection. Thus, for every balboa invested in potato production, the average grower earned a net profit of 66 cents. The average yield per hectare was 303 quintals with a range of 160 to 600 quintals. Of 30 growers sampled, all used fertilizer (average investment was \$627/hectare) and all used insecticide or other agrochemicals (average investment \$318/hectare). Average labor use was 201 man-days per hectare, of which 50 days (25 percent) represents hired labor. The average area planted in potato was 3 hectares, with a range from 1 to 11 hectares. Five of the 30 growers rented the land on which they produced potatoes.

There were no suitable control farmers among potato growers. However, once again the crop is one requiring high levels of investment and use of modern technology requiring heavy reliance on purchased inputs. The self-evident benefit of the cooperative is that of allowing small and undercapitalized producers to participate—through production credit—in this high value and profitable crop enterprise. A secondary benefit for co-op and non-member rural households selling labor services is the generation of employment income resulting from O41 financed potato cultivation.

It is appropriate to mention that the bulk of the potato growers sampled are members of a single very successful co-op society: the Boquete Vegetable Production and Marketing Cooperative (Chriqui). This organization has gradually acquired its own refrigerated storage facilities, transportation units, and is developing a marketing distribution center for a variety of vegetables in Panama City. The low-risk, high-profit characteristics of sampled potato production is in large measure the result of this co-op's successful marketing operations, which has integrated in a single structure an entire commodity industry from production to final distribution to the consuming public. The Boquete example constitutes an important precedent for the entire agricultural cooperative movement of Panama.

#### D. Tomato

The third highest value crop grown by co-op members with 041 financing is tomato. Of 37 growers only seven lost money on this crop, which reflects a moderate to low level of risk. Average net income per hectare was \$1,190 against expenditures of \$1,585. This income result was 10 percent below the COOPLEX estimate while the cost result was 23 percent below COOPLEX projections. For every balboa of expenditure the average farmer earned 75 cents of net profit. The average yield per hectare was 439 quintales, with a range of 33 to 800 quintales. Of 37 producers, all used fertilizer (average investment \$249/hectare) and 34 used insecticide or other agrochemicals (average investment \$48/hectare). Labor use averaged 186 days per hectare, of which 86 percent was contributed by hired workers. The average area planted was 2 hectares, with a range of 1 to 4 hectares. To an even more significant degree than with onion and potato, 28 of 37 producers sampled had to rent the land they used to grow tomato. Most of the tomato production was marketed to the Nestle Company with factory outlets in Coclé and Los Santos.

Comparing co-op growers with the control group (4 producers) we find that 041 Project beneficiaries achieved slightly higher net income per hectare: \$1,193 vs. \$1,167 for a 2 percent advantage. Co-op growers used 16 percent more fertilizer and 28 percent more labor than non-member producers, but these investments failed to translate into a commensurate advantage in yield or net income. Overall, the comparison suggests that the advantages of co-op membership among tomato growers were not dramatic. This can be explained because the Nestle Company also provides credit and technical assistance as well as a ready market for tomato production. But once again, the key benefit of the co-op is that it makes available production credit to small farmers who would otherwise have no access to financing (possibly even from Nestle) and would therefore have no chance to participate in the income opportunity represented by industrial tomato, a high-value and high profit enterprise.

As before, O41-financed tomato production generated significant rural employment. Among 37 sampled growers, 86 percent of all labor used was provided by hired workers--a total of 4,995 man-days in 74 hectares. Co-op members who sold labor services undoubtedly benefitted from such employment as a source of additional cash income.

#### E. Name

Onion, potato, and tomato constitute a distinct group of high-value, capital-intensive, and highly profitable crop enterprises which also enjoy rather secure market outlets. In contrast, beginning with Name we encounter the first of several relatively low-value, low-cost, and low-profit traditional crops, all sharing as well the deficiency of insecure markets. In descending order of income potential this second category of crops consists of Name, yuca, rice, sorghum, and corn.

Only three Name growers were sampled, one of them a control. All three made a profit. The average net income was \$579 per hectare against an expenditure of \$888 per hectare. (There does not exist a COOPLEX projection for Name). This suggests a return of 65 cents for every balboa invested. The average yield was 126 quintales per hectare with a range of 50 to 177. Two of three growers used fertilizer (\$73/hectare) and all three used insecticide (\$31/hectare). Labor use averaged 40 days per hectare, 80 percent consisting of hired workers. The average area planted was 2.2 hectares with a range of 2 to 2.5 hectares. Two of the three Name growers rented the land on which they produced the crop. The control farmer did significantly worse than his two co-op counterparts. He used no fertilizer, the least amount of insecticide, and half the labor input of co-op growers; his was the lowest yield and his net profit was only \$112, or 25 cents for every balboa of expenditure. The comparison is by no means conclusive, but it suggests a decided advantage for co-op growers, and shows the impact of credit.

#### F. Yuca

Only four growers of yuca were sampled, all of them co-op members. All four earned a net profit, the average being \$490/hectare against expenditures of \$514 for a return of 95 cents per balboa of expenses. Average income was 7 percent below the COOPLEX estimate while expenditures were 70 percent of the COOPLEX budget. The average yield was 377 quintals per hectare with a range from 250 to 500 quintals. Three of the four yuca growers used fertilizer (average: \$70/hectare) and two of the four used insecticide (\$5/hectare). The area planted averaged 3.2 hectares with a range from 1.25 to 5 hectares, all on self-owned farmland.

### G. Rice

Out of 53 growers sampled only two lost money growing rice. Average net income was \$337/hectare against expenditures of \$416 per hectare. Thus the average rice grower earned 81 cents of net income for each balboa of expenditure. The net income result was 35 percent above the COOPLEX estimate while the cost result was 18 percent below the COOPLEX projection. The average yield was 68 quintals per hectare with a range of 8 to 313 quintals. Of 53 producers, 51 used fertilizer (average investment: \$66/hectare) and 50 used insecticide (\$50/hectare). Labor use was only 29 days per hectare; in contrast, machinery use constituted the single largest production cost, with an average of \$137 worth of machinery services used per hectare. The average area planted was 7.6 hectares, with a range of 1 to 33 hectares. Of the 53 co-op producers, 11 rented the land on which they grew their rice crop.

Control group farmers (5) fell significantly below the performance norms cited above. This group earned net income of only \$280/hectare or 17 percent below the average for co-op farmers. Non-members also experienced higher average costs of production (\$434/hectare) and lower yields (46 quintals/hectare) than co-op growers. These figures suggest a clear advantage in support of co-op membership. This result is quite plausible for two reasons. In the first place, 33 of the sampled growers belong to the large and long-established San Antonio Credit Cooperative of Puerto Armuelles (Chiriquí). This co-op has not one but two full-time agronomists providing technical supervision to its large farmer membership, and it also supplies required inputs to farmer-members on an efficient, decentralized sales basis. Secondly, this co-op establishes supply contracts with regional rice mills for the delivery of member production, which strengthens commodity prices to the grower and improves his net income.

### H. Sorghum

Out of 11 co-op growers of sorghum there were no losses. Average net income was \$251/hectare against expenditures of \$379/hectare for a return of 66 cents per balboa of investment. Average net income was 96 percent above the COOPLEX estimate, which suggests an error either in the evaluation data or the COOPLEX; expenditures were 7 percent above the COOPLEX projection. The average yield was 69 quintals/hectare with a range of 48 to 94 quintals. All growers used fertilizer (average investment \$115/hectare) and 10 out of 11 used insecticide (\$23/hectare). Sorghum production in Panama is highly mechanized, with labor use averaging less than one half day per hectare. The average area planted was 17 hectares with a range of 5 to 40 hectares. Five of the 11 growers interviewed rented the land on which their sorghum was produced.

Although not reflected precisely by the data, co-op membership brings two benefits for sorghum producers. Credit access gives them the capital to purchase or rent tractor services, without which this enterprise is difficult to make a profit at. In the second place, co-op growers of sorghum have a reasonable market outlet because the COAGRO operated cattle feed plant in Los Santos (MIDARINA) buys some 80 percent of its sorghum supplies from co-op growers. At present these purchases range as high as 35,000 quintals.

### I. Corn

After rice, the single largest crop grown by co-op members is corn. Of 44 co-op growers interviewed, 11 lost money producing this crop, which gave corn the lowest average net income per hectare of all crops evaluated--\$92/hectare, which was 18 percent below the COOPLEX estimate. Corn was also the crop which adsorbed the least expenditure: \$341 per hectare, or 27 percent below the COOPLEX projection. On the average, co-op growers of corn earned only 27 cents for each balboa of expenditure on this crop. The average yield was 46 quintals per hectare, with a range (excluding total loss) of 10 to 82 quintals. Of the 44 growers, all used fertilizer (average expenditure:\$114/hectare) but only 34 used insecticide. Labor was very scarcely used, and after fertilizer the major production cost component was mechanization. Area planted averaged 11 hectares with a range from 2 to 50 hectares. Of the 44 growers sampled, 21 rented the land they used for corn production.

The control group (4) fell well below co-op growers in net income (only \$56 vs. \$92), incurred higher average production costs (\$368 vs. \$341), and experienced slightly lower yields (43 vs. 46 quintals. The data would suggest that co-op membership is advantageous for reasons similar to those given in the case of sorghum. It may be added that the MIDARINA cattle feed plant in Los Santos also purchases about 80 percent of its corn raw material requirements from co-op farmers, or about 24,000 quintals per year.

### J. Some Concluding Remarks on Crop Enterprises

The net summaries of production and income by crop enterprise conducted for some 150 co-op farmer-members allow us to draw a number of general conclusions. First, the summaries reflect a bewildering variety of production strategies even within the same crop enterprise. Some producers use more labor-intensive practices, others more mechanization; fertilization is widespread but application rates (presumed from expenditure data) vary considerably; there are large differences in insecticide and other agrochemical applications; and inevitably, there are huge differences from one co-op farmer to another with regard to yields and net income. Faced with this infinite variety, it is imperative that Panamanian cooperatives improve their data collection

capacity concerning production systems: What happens to credit at the farm level? How are crops actually grown? What are the real costs of production? What are the real yields? In sum, what is the result of production credit? The Project has no business introducing new technology when its field staff are still unable to measure the results of their recommendations, or even the results of farming practices currently preferred by co-op growers.

Secondly, the wide range in yields within any given crop enterprise suggests not only that there are many bad farmers but many good ones as well. These are the producers with the highest yields, the highest net income per unit of expenditure. Their performance demonstrates that appropriate technology is already available, already exists at the local level, for rapid expansion of small farmer productivity and income. If all less successful farmers did was to imitate the example of their more successful neighbors, yields and income of the poorer producers could be easily doubled or tripled without introducing any new technology. It is urgent that the Project begin to measure and identify who are the most successful producers. These farmers should then be incorporated into the agricultural extension process as teachers and demonstrators. A methodology for measuring results and identifying the most successful farmers already exists: the COOPLEX. It only needs to be applied after each year's harvest. In this way planned performance can be compared with actual performance. Planning and evaluation must go hand in hand. One without the other is next to worthless, and represents a waste of valuable staff time.

Finally, it is the conviction of the evaluators that the most critical area for improving Project benefits to small farmers lies not on the production side but on the marketing side. It is our consistent experience in other countries as well as Panama (and the data collected in Panama support the conclusion) that the fastest way to achieve a breakthrough in productivity and income is to provide farmers with a secure market for their produce. Given a secure market, farmers will automatically begin to intensify their use of yield-increasing cash inputs. Given a secure market, farmers will rent additional land to expand their commercial production. Given a secure market, farmers will diversify into higher value commodity production. But securing the market must be the first step; it must occur even before credit. No production loan should ever be approved for a cooperative or for its member farmers until a marketing plan for the sale of the commodities to be financed has been completed and tentative buyer commitments obtained. In a word, marketing--not production--must become the Project's foremost priority.

K. Feeder Cattle Operations: Ganadería de Ceba

The O41 Project has financed hundreds of loans for cattle raising. One of the most prominent models is that of ganadería de ceba or simple cattle fattening operations. The rancher buys young steers, fattens them for 12 months or so (usually in pasture rather than in a feedlot), and then sells them for the best price he can arrange. The advantages of this kind of operation are that it requires very little labor, is relatively low in risk, and permits the owner to obtain a return for his investment in a fairly short period of time, i.e. one year. The principal disadvantage is that the cattle herd to be fattened must be purchased at the outset, and this can represent a serious problem for the rancher with limited resources.

Out of 22 feeder operations sampled (no control group), only two experienced a deficit. The total herd size of these producers--consisting of animals bought and sold during the evaluation period--was 486. Of these, eight animals died. Thus, the mortality rate is a mere 0.14 percent. The average net income per head of livestock was \$97. Since the average herd size was 25 animals, this suggests an average net income per rancher of \$2,417. Average total costs were \$4,179 per herd, which means that for every balboa of expenditure the average rancher received 58 cents in net income.

Table IV provides a breakdown of performance indicators by herd size. A small herd is defined as 1-10 animals, a medium herd as 11-20 animals, and a large herd as 21 or more animals.

TABLE IV: PERFORMANCE INDICATORS FOR FEEDER OPERATIONS  
BY SIZE OF HERD

<u>Ranch Category</u>	<u>Av. Herd Size</u>	<u>Av. Total Costs*</u>	<u>Input Use: per Head</u>	<u>Av. Net Income</u>	<u>As % Costs</u>
Small (4)	9	\$2,115	\$28	\$2,027	.96
Medium (6)	16	\$2,979	\$15	\$1,381	.46
Large (12)	34	\$5,467	\$13	\$3,512	.64
All Categories	25	\$4,179	\$15	\$2,417	.58

\* Includes purchase price of animals, labor, purchased inputs, and other maintenance expenditures; interest charges on borrowed capital excluded.

Table IV shows that the small rancher fared relatively better than medium and large ranching operations benefitted by O41 financing. For every balboa of expenditure the average small rancher obtained a surprising 96 cents in net income. The Table also shows that the small rancher invested almost twice as much in cash inputs per head of livestock (for salt blocks, medicine, etc.), but even \$28 per head appears to be very low and suggests modest levels of technical management of feeder herds.

The data collected in the 22 feeder cattle summaries also permit an analysis of comparative differences in purchase and sales price of feeder animals between large, medium, and small ranchers. The large ranchers bought their herds for an average price of \$137 per animal, sold them for an average price of \$260, and realized a gain of \$123. The medium rancher bought for an average price of \$150, sold at \$248, and gained \$98. The small rancher paid an average of \$185 per animal, sold at \$277, and realized a gain of \$92. These data either reflect a significant marketing advantage on the part of large ranchers, or could signify that small ranchers buy somewhat older animals and perhaps sell them at an older age as well.

#### L. Breeder Cattle Operations: Ganadería de Cría

More popular than fattening operations is the raising of breeder livestock, or ganadería de cría. In this model the rancher breeds his own herd. He can breed for beef, for dairy, or for mixed purpose cattle. He can reserve the option of selling off his young animals to other ranchers (beef or dairy) or he can fatten them to be sold as adults. The advantage of this model is that the rancher does not have to purchase his herd outright; rather, he allows it to increase through natural breeding. The disadvantage is that it usually takes much longer to make any income from the operation.

A total of 37 net income summaries (including 5 controls) were collected on breeder cattle operations. These have in turn been divided into two groups: (1) herds where no sale has yet occurred, and (2) herds where a portion of the animals have been sold.

**BREEDER CATTLE WITHOUT SALE:** In this group are 18 producers including 2 controls. Collectively they own 369 animals, the average herd size being 21 animals and the range between 4 and 53 animals. Of this total herd 15 animals died during the evaluation period (12 months), which indicates a 4 percent mortality rate. The average value per head of livestock at the beginning of the period was \$206, and at year's end \$271, for a net gain of \$65 per head. The average rancher realized a (paper) net income of \$861 against total expenditures for the period of \$467; this suggests a return of \$1.84 net profit for every balboa invested in the operation. The two control ranchers did

significantly poorer than the average. While their average level of expenditure was not unreasonable--\$441 per herd--net income was a mere \$92 because one of the operations produced a deficit due to deaths of two animals plus poor growth in the value of the herd inventory. This result suggests a mere 21 cents of net income for every balboa of expenditure. There would therefore appear to be an income advantage associated with co-op membership.

**BREEDER CATTLE WITH SALES:** Included in this group are 19 producers and 3 controls. Collectively they achieved a maximum herd size of 485 animals, with an average of 26 per rancher and a range per herd of 5 to 82 animals. A total of 16 animals died during the year for a mortality rate of 3 percent; all deaths occurred in the larger herds. A total of 99 animals were sold during the year, which gives an average of 5 sales per herd at an average sales price of \$206. The average rancher earned total income of \$1,650, of which 65 percent came from cash sales and 35 percent represents a (paper) increase in the inventory value of his herd. Average operating expenses per herd were \$499, leaving a net profit of \$1,151. This suggests a net return of \$2.31 for every balboa of expenditure.

The control ranchers did not fare nearly as well. Their average herd size was 41 animals, but sales reached only 46 percent of total income, average operating expenses per herd were of course much higher --\$638 vs. \$498--and net profit was only \$638, suggesting a return of \$1.03 per balboa of expenditure.

Table IV shows a breakdown of performance indicators by herd size. Once again the data indicate the ability of the small rancher to compete successfully with larger producers in the operation of this kind of livestock enterprise. Regarding input use (an indicator of the extent of technical herd management) we find that small rancher expenditures per head of livestock far exceed those of larger ranchers.

TABLE V: PERFORMANCE INDICATORS FOR BREEDER OPERATIONS  
BY SIZE OF HERD

<u>Ranch Category</u>	<u>Av. Herd Size</u>	<u>Av. Total Costs*</u>	<u>Input Use per Head</u>	<u>Av. Net Income</u>	<u>As % Costs</u>
Small (6)	8	\$228	\$11	\$551	2.42
Medium (3)	15	\$337	\$12	\$368	.98
Large (10)	39	\$716	\$3	\$1727	2.41
All Categories	26	\$499	\$4	\$1151	2.31

\* Land rental, if any, and interest charges on borrowed capital are excluded.

#### M. Dairy Cattle

Six dairy farmers were interviewed (no control farmers) with a total collective herd of 659 animals. The average herd size was 109 animals, with a range of 14 to 313 animals, indicating relatively large dairy operations. During the period of operations evaluated (12 months) there were 32 deaths recorded, which gives a mortality rate of 05 percent. The sampled operations were mixed beef and dairy ranching, with sales of fattened animals and old cows representing 68 percent of total income and 32 percent from milk sales. There was a net(paper) decline in the value of animal inventories as deaths and sales exceeded increments through births and value added. Average total income per dairy farm was \$8,815 against expenditures of \$1,693 for a net income of \$7,122 and a return of \$4.21 for every balboa of expenditure. These figures may represent an exceptionally high income year caused by large numbers of animals sold. It is also noteworthy that investment costs in fixed plant and equipment are not considered in the calculation. Within operating costs the level of expenditure on inputs was minimal--a mere 89 cents per head--while labor costs (particularly for milking) reached 94 percent of total costs.

With the exception of two dairy farmers operating herds of 14 and 26 animals respectively, none of the producers sampled could be considered small or medium operators. They should not have been considered as qualifying clients for 041 production credit. The same problem can also be seen in a number of cases for large ranchers operating feeder and breeder cattle operations.

## N. Swine Production

The 041 Loan financed many swine raising projects. These were generally of two types: (1) fattening operations, with the herd purchased and eventually sold within a 3-6 month period, and (2) breeder stock operations utilizing several resident sows producing up to two litters a year. Income summaries were completed for 22 feeder swine operations (with 2 control producers) and 6 breed stock operations (no control).

Of the feeder swine operators, the total animals purchased for fattening were 341, for an average of 16 per operation (range 5-30 animals). During the evaluation period (6 months or one purchase-sale cycle) there were only 5 deaths, suggesting a mortality rate of 0.15 percent. The average purchase price per pig was \$31, the average sales price \$99, for a net gain per animal of \$68. The average operator earned sales income of \$1,514 from each production cycle against operating expenditures of \$1,274, for a net income of \$240. Operations were highly risky with 11 of 22 producers experiencing a deficit. For the average operator, his net income was only 19 cents per balboa of expenditure. The principal cost component was feed, representing 54 percent of total expenditures, followed by the cost of purchasing the feeder stock (38 percent). The two control producers did worse than the average, one operating at a deficit while the other exactly broke even. Both raised herds smaller than the average--of 5 and 8 animals only. The average sales price reported by the non-members was only \$76 per fattened pig; their feed expenditures were higher than co-op producers--\$60 per head vs. \$44. The data suggest distinct advantages for co-op swine producers in regard to lower-cost feed and improved market prices. This, indeed, reflects the case of the multiple service cooperative of Juan XXIII in Santiago, the principal sponsor of swine fattening operations. This co-op has its own feed mill for sales exclusively to members. It also markets its members' swine production on an advance contract basis, a system which is coordinated with a planned production component so as to avoid excess supplies of swine marketed.

The six breed stock swine operations describe a somewhat different reality. Collectively they have a breed stock of 34 sows, which averages 6 per operation (range is 3-10). The end-of-year value of this stock averaged \$412 per sow, with an average increase in value per sow of \$178. The total breed stock produced a total of 251 piglets or an average of 7 per sow. There were 26 deaths for a mortality rate of 10 percent. The average sales price per fattened pig was \$84. Average total income for each rancher was \$3649, of which 67 percent came from sales and the remainder reflected a (paper) increase in the value of the breed stock. Net income of the average swine producer was \$1,547

against expenditures of \$2,103, indicating a net return of 74 cents per balboa of operating costs. Surprisingly, average labor use and feed per head was almost identical between the fattening and breed stock swine operations. None of the breeder operations lost money.

#### O. Concluding Remarks on Animal Enterprises

As was the case with crop enterprises, the livestock summaries reflect a wide variety of operating strategies--some more labor-intensive, others more capital-intensive. Each of these strategies constitutes a producer's response to a particular set of constraints and market options. In some cases the livestock operation is a complementary activity to crop production, but in the majority of instances the livestock enterprise represented the single most important source of cash income to the rural household. These considerations make it imperative that the Project undertake two responses. First, as was the case with crops, it must begin to implement information systems that measure the production results of O41 credit and not simply plan what they might be. One of the outcomes of gathering such evaluation data will be an improved understanding of the dynamics and variety of existing livestock operations. Second, the Project must make a sharper distinction between farmers and ranchers within its client population and prepare credit activities (and credit policies) that match the specialized needs of these two fundamentally different types of rural producers.

The livestock data demonstrate dramatically that "time is money", and that the slower-maturing breeder livestock operations are much more profitable to rural households than animal fattening operations. Breeder operations also require less up-front investment capital and are therefore less risky from the viewpoint of the small-scale producer. In terms of straight return for every balboa of investment, breeder stock operations out-earn fattening operations by a 2:1 ratio. Moreover, livestock operations in general (with the exception of feeder pigs) out-earn most agricultural investments evaluated by at least a 2:1 ratio. With these considerations in mind, the Project would do well to conduct a comprehensive study of the production credit needs of its rural clients, with the possibility in mind of joint credit packages to farmers covering both crop and livestock enterprises. The Project should also consider the placement of more of its resources into medium-term livestock lending.

But if the Project gives renewed emphasis on livestock operations, it must also establish very strict controls, including explicit loan qualification criteria, to guarantee that livestock financing be given exclusively to small and medium-sized ranchers. A cut-off on loan projects exceeding 20 head of livestock may be necessary.

#### IV. COOPERATIVE-LEVEL IMPACT OF THE 041 LOAN

The information for this chapter is drawn from two sources. The first source consists of an in-depth questionnaire administered to a representative sample of 24 co-ops (out of 46) which received 041 Loan financing or technical assistance. Data was also collected on some indicators for two additional cooperatives. For each indicator the data was collected on an annual basis for five years--from 1976 through 1980--which allows us to monitor changes in co-op performance over the project period. In the first two sections of this chapter we present a summary of 12 indicators of economic performance and 8 indicators of social performance of the sampled cooperatives.

The second source of information for this chapter comes from personal observations by the evaluators which resulted from one or more visits to all of the cooperatives in the sample. Based on these observations we present a review of observed strengths among the co-ops visited followed by a section identifying co-op deficiencies with recommendations for their correction.

##### A. Indicators of Cooperative Economic Performance

1. TOTAL ASSETS: Total assets of the sampled cooperatives increased from \$6.8 million to \$15.0 million, which represents a growth of 119 percent compared with the base year 1976. This means that the sampled co-ops increased their assets by \$2 million a year, signifying a growth rate of 30 percent. By type of cooperative, Credit Co-ops accounted for 64 percent of the gross increase in assets, followed by Agricultural Cooperatives with 18 percent, Consumer Cooperatives with 9 percent, and Multiple Service Cooperatives with 8 percent. In relative terms the largest increase in assets occurred among Consumer Cooperatives, which grew by 278 percent, whereas Credit Cooperatives grew by 141 percent, Agricultural by 77 percent, and Multiple Service by 60 percent.

2. MEMBER SHARE CAPITAL: During the Project period member share capital in their cooperatives increased by \$2.8 million, which represents a 96 percent growth compared with 1976. The annual average rate of growth was 24 percent, which is approximately double the rate of inflation and therefore signifies a significant net increase in member share capital. In absolute terms some 85 percent of the growth in share capital was contributed by Credit Cooperatives; in contrast, only 7 percent came from Agricultural, 5 percent from Multiple Service, and 3 percent from Consumer cooperatives. However, in relative terms share capital grew by 97 percent in Credit, 91 percent in Multiple Service, 89 percent in Agricultural, and 78 percent in Consumer co-ops.

3. GROSS INCOME: During the Project period gross income (from sales, interest on loans, etc.) increased from \$8.9 million to \$16.2 million, which represents an 82 percent increase in relation to the base year or an annual growth rate of 21 percent. In absolute terms the increase was generated by Multiple Service (37 percent), Agricultural (36 percent), and Consumer cooperatives (22 percent) because Credit co-ops are almost solely dependent on interest income earned from lending operations. In relative terms, however, the fastest growth was registered by Consumer co-ops (124 percent), followed by Credit (88 percent), Multiple Service (78 percent), and Agricultural (70 percent).

4. NET INCOME: Out of 25 cooperatives sampled, only seven ever registered a deficit income in any one or more years of the Project period. Five of the seven experienced only one deficit year. Net income of the sampled cooperatives increased from \$1.0 million to \$1.9 million per year, which represents an 81 percent growth with respect to the base year of 1976. In absolute terms, 41 percent of the total net income increase was generated by Multiple Service, 28 percent by Agricultural, 16 percent by Credit, and 14 percent by Consumer cooperatives. However, in relative terms the fastest growth in net income was registered by Credit Cooperatives (225 percent), followed by Multiple Service (99 percent), Consumer (79 percent), and Agricultural (28 percent).

5. SURPLUS FOR DISTRIBUTION TO MEMBERS: Over the period the amount of surplus income distributed to co-op members totaled \$1.3 million. The surplus generated in any given year ranged from \$206,000 (1977) to \$328,000 (1980). This indicator is extremely significant because it measures the total amount of additional income earned by co-op members from their participation in these organizations--income which is in addition to any net earnings obtained from their crop and livestock enterprises financed under the Project. Expressed differently, for every balboa of share capital invested in their cooperatives (i.e. \$2.8 million--see Indicator No.2) co-op members earned 46 cents on the average.

However, when surplus earnings are broken out by type of cooperative the distribution is quite uneven. In absolute terms, 49 percent of the surplus went to Agricultural co-op members, 30 percent went to Multiple Service members, 25 percent went to Credit members, and a negative surplus of 4 percent was generated by Consumer Cooperatives. If we divide the surplus by the number of active members per each type of cooperative we find that the average Agricultural co-op member earned an impressive \$90.43, the Multiple Service member \$52.24, the Credit member \$8.77, while the Consumer co-op member actually lost \$4.73 of his invested capital.

6. OPERATING COSTS: Turning to liability accounts, we see that Operating Costs in the sampled cooperatives increased from \$1.0 million per year in 1976 to \$2.0 million in 1980, which represents an increase of 97 percent with respect to the base year. For the five year Project period, for every balboa invested in operating costs the cooperatives generated 85 cents in net profits (see Indicator No.4, Net Income). In absolute terms, 33 percent of the increase in operating costs must be credited to Multiple Service co-ops, followed by 26 percent for Credit, 23 percent for Agricultural, and 19 percent for Consumer. In relative terms, the fastest growth in operating costs was registered by Consumer co-ops (126 percent increase), followed by Multiple Service (122 percent), Agricultural (83 percent), and Credit (76 percent).

7. SHORT-TERM INDEBTEDNESS: Between 1976 and 1980 the sampled cooperatives increased their short-term debt burden from \$2.4 million per year to \$3.9 million per year, which represents an increase of 66 percent. Of the total indebtedness in 1980, almost half (46 percent) is found in Agricultural co-ops, while another 36 percent is owed by Credit co-ops; Multiple Service and Consumer co-ops carry only 10 and 8 percent respectively of total short term debt obligations among the sampled cooperatives. In relative terms, however, the reverse is true. The fastest increase in short-term indebtedness during the Project period was registered by Consumer co-ops or 132 percent. This corresponds very closely to the growth rate of Consumer co-op operating costs. Short-term borrowing by Credit co-ops increased by 82 percent, Agricultural by 65 percent, and Multiple Service by only 8 percent.

8. LONG-TERM INDEBTEDNESS: During the Project period the total long-term indebtedness of the sampled cooperatives increased from \$705,000 to \$3.0 million, which represents a growth of 328 percent. By the same token, long-term indebtedness has grown from a 23 percent share of total debt to a 43 percent share. In absolute terms, 63 percent of total long-term indebtedness is held by Credit co-ops, which reflects their greater emphasis on medium to long-term production credit for livestock enterprises. In relative terms, long-term debt during the Project period has grown fastest among Consumer co-ops--a one hundredfold increase in five years--followed by Credit (587 percent), Agricultural (99 percent) and Multiple Services (a decline of 1 percent).

The structure of the debt portfolio and its growth can be somewhat misleading unless placed in per-capita terms--i.e., debt per active co-op member. It is also useful to describe debt in relation to member share capital subscribed. These relationships are presented in Table VI.

TABLE VI. CO-OP INDEBTEDNESS IN RELATION TO ACTIVE MEMBERS AND SHARE CAPITAL INVESTMENT (1980)

<u>Co-op Type</u>	<u>INDEBTEDNESS PER ACTIVE MEMBER</u>			<u>Shares as</u>
	<u>Short-Term</u>	<u>Long-term</u>	<u>Total</u>	<u>% Debt</u>
Credit	\$166	\$221	\$387	1.45
Consumer	\$135	\$249	\$384	.20
Agricultural	\$1,098	\$158	\$1,256	.19
Mult. Service	\$205	\$152	\$357	.47

Table IV dramatically demonstrates the tendency for agricultural cooperatives to become dangerously over-financed relative to member share capital subscription. The picture is even more disquieting when one considers that Agricultural co-ops registered the largest surplus distribution (\$90.43) of any other type (see Indicator No. 5, page 29) while contributing next to the smallest share (7 percent) in member share capital contributions.

9. INDEX OF SOLVENCY: This indicator measures current assets as a percentage of current liabilities, i.e., for every balboa of current obligations how much the co-op has in hand to meet these obligations. Overall, the sampled cooperatives registered a high level of solvency in 1976 (6.76) which only continues to grow (15.45 in 1980). By co-op types, Credit had by far the highest average solvency, growing from 15.5 to 42.17 over the Project period. Multiple Service grew in solvency from 2.51 to 3.89, Consumer from \$1.16 to 1.82, while Agricultural registered a slight decline from 1.38 to 1.09. Five cooperatives registered an average solvency of less than 1 for the period, which is considered a danger signal. Of these, four were Agricultural co-ops and one Multiple Service. From a financial perspective the weakest sector of the rural cooperative movement is that of the Agricultural, although the movement as a whole appears quite healthy.

10. RAPID LIQUIDITY TEST: This is a second solvency indicator which measures strictly liquid assets (current assets less inventory) as a percentage of current liabilities. The indicator is not applicable to Credit co-ops. Out of 15 cooperatives tested, the movement passed the test with an average score of 1.08. However, in reality only four co-ops passed (average score 2.26) and 11 failed (average score 0.65).

11. INDEX OF DEBT CAPACITY: This indicator measures the total indebtedness of a business (short-term and long-term debt) as a percentage of total assets. There exists no hard and fast rule as to what the most desirable debt/asset ratio should be, but generally speaking any level beyond 75 percent of total assets should be considered undesirable. By this standard the rural cooperative movement passed with an aggregate average score of .60 for the Project period. Of 24 co-ops, 5 exceeded the maximum acceptable score (average was 1.02). Again in support of a trend signaled by other indicators, 4 of the excessively indebted co-ops were Agricultural and one was a Multiple Service.

12. FINANCIAL AUTONOMY: This indicator measures member share capital contributions as a percentage of total co-op assets. Out of 26 co-ops sampled, the average score was .27, indicating that for the rural cooperative movement as a whole, slightly more than one quarter of its assets are owned by co-op members and the remainder by their creditors. Breaking down the scoring by co-op type gives a very favorable picture of rural credit cooperatives, a barely acceptable picture of Consumer, and a very poor picture of Agricultural and Multiple Service cooperatives. The average score for Credit was an excellent .47, with a range of .37 to .74. Consumer co-ops registered .23, with a range of .13 to .30. Agricultural co-ops averaged .11 (range .01 to .18) and Multiple Service averaged .16 (range: .03 to .21). From a development viewpoint, the financial autonomy indicator should be considered the "acid test" of cooperative institution-building. In the case of Panama its application has yielded very mixed results, suggesting a collection of very successful cooperatives mixed with others that are financially quite precarious. Fortunately, the "average" picture is one of strength and rapid economic growth.

#### B. Indicators of Cooperative Social Performance

1. REGISTERED MEMBERS: Out of 24 cooperatives sampled there was an increase of 5,078 members during the Project period. From a total of 12,653 members in 1976 the number of registered co-op participants reached 17,731 in 1980, which represents a growth of 40 percent or 10 percent per annum. The registered membership of Credit co-ops grew by 49 percent, Consumer by 37 percent, Agricultural and Multiple Service by 26 percent. In 1980 the average Credit co-op had 1,262 members, Consumer 948, Multiple Service 506, and Agricultural 282.

2. **ACTIVE MEMBERS:** Of the same 24 sampled cooperatives the number of active members as a percentage of total registered members was 78 percent in 1976 and 81 percent in 1980. The active membership of Credit co-ops averaged a high 87 percent in 1976 and slipped slightly to 85 percent in 1980. Consumer co-op active members increased from 66 to 80 percent over the Project period, Multiple Service from 66 to 75 percent, and Agricultural from 69 to 73 percent.

3. **MEMBERSHIP ATTENDANCE AT GENERAL ASSEMBLIES:** For 24 co-ops sampled, an average of 28 percent of total active members attended their cooperative's annual General Assembly in 1976. In 1980 the average attendance was 36 percent. Having relatively much fewer members, Agricultural and Multiple Services co-ops achieved the highest attendance levels for the Project period: Agricultural--62 percent--and Multiple service--52 percent. This compares to attendance levels of 36 percent for Credit and 27 percent for Consumer co-ops. It is noteworthy that the highest attendance levels for all types of co-ops were reached in years prior to 1980, when the O41 Project was in full implementation. Since the financing of the institution-building components of the Project terminated in March 1980, the impact of that cut-off appears to be clearly registered at the cooperative level.

4. **MEETINGS OF THE ADMINISTRATIVE COUNCIL:** For 21 of the 24 sampled co-ops for which data is available, their Administrative Councils met an average of 18 times in 1976, 19 times in 1977 and 1978, 22 times in 1979, and slipped back to 18 in 1980. The highest average frequency of meetings was recorded by Agricultural co-ops (25 times per year during the period), followed by Multiple Service with 19, Consumer with 17, and Credit with 14. An average of 12 would be considered acceptable, i.e., an administrative council that meets monthly.

5. **MEETINGS OF THE VIGILANCE COMMITTEE:** For 16 co-ops with available records, their Vigilance Committees met an average of 8.5 times in 1976, gradually increasing to 12 times in 1979. However, with the cessation of O41 Loan-sponsored institution-building in 1980 the frequency of Vigilance Committee meetings declined once more to 9 per year.

6. **MEETINGS OF THE CREDIT COMMITTEE:** For 15 co-ops with available records (note: Consumer co-ops do not use this committee), their Credit Committees met an average of 23 times in 1976 and gradually increased to an average of 27 meetings in 1979. But following the same trend cited above, meeting frequency slackened to 26 in 1980.

7. **MEETINGS OF THE EDUCATION COMMITTEE:** One of the most disappointing areas of Project performance was that of cooperative education activities. The lack of intensive emphasis on education by government agencies and cooperative federations was reflected at the local level by a nearly total absence of co-op member education activity. Out of

24 sampled cooperatives, only ten had any record of their Education Committee having met during the Project period. Of these, 5 had a committee that held meetings in only one of the five years of the Project. None of the cooperatives had an Education Committee which met consistently in all five years.

8. MEMBERSHIP TRAINING ACTIVITIES BY COOPERATIVES: As above, only ten of 24 co-ops had any record of ever organizing membership education activities. The absence of data for this indicator speaks eloquently for the designation of Membership Education as one of the most deficient areas of Project activities.

### C. Observed Strengths Among Rural Cooperatives

The foregoing indicators generally describe a rural cooperative movement which demonstrated rapid economic growth during the Project period; and with the exception of the indicators of educational activity, they show significant strengthening of member participation in their cooperatives. Of course, it is impossible to demonstrate from the figures a direct and explicit causality between O41 Loan activities and cooperative performance per se. Some of the movement's growth would undoubtedly have occurred anyway despite the Project. But the fact remains that the cooperative-level data show extremely impressive growth--growth which coincided with the Project period and which, by association, must be credited at least in part as a positive impact of the O41 Loan. In sum, the very positive and impressive characteristics of the survey data allow us to conclude that the Project was highly successful, and this reality constitutes one of the most important strengths observed in the movement by the evaluators.

A second strength observed is the fact that the movement can boast of some truly exceptional human resources. Here and there the evaluators encountered a number of highly dedicated and talented cooperative managers; here and there we meet co-op directors, employees, and members of exceptional intelligence, leadership capability, and experience. Most of these individuals do not have more than a primary school education; but theirs are diplomas earned in the classroom of life and the School of Hard Knocks. Panamanian rural cooperatives have made many mistakes, lost money to dishonest employees, suffered poor leadership, and survived sometimes disastrous technical advice from outside advisors. These cooperatives are intimately familiar with the endless difficulties of requesting production loans, supervising credit use by their members, arranging for input procurements, locating market opportunities, constructing buildings, and resisting the tax bite of municipal authorities. But rarely have these cooperatives made the same mistake twice. In many instances their leaders and employees may be considered as experts in running a cooperative business. They may lack specific bookkeeping, accounting, and management skills, but they have generally vast experience

in addressing the problems which most afflict the rural poor. In general, these individuals have more to teach outsiders than the latter have to teach them. And in the future co-op leaders must be used increasingly as teachers and trainers.

A third strength area of the rural cooperatives is the quality of their services to members. Among farmers interviewed, 80 percent said they had been recipients of multiple production loans, while 86 percent expressed satisfaction with the services offered by their cooperatives. Among livestock ranchers interviewed, 52 percent had received multiple production loans and 100 percent expressed satisfaction with co-op services. In sum, the rural cooperative movement has created a successful service delivery system. There is much room for improvement, but the system works.

The federations of COAGRO, FEDPA, and FECOPAN were established to integrate the cooperative movement along the functional lines of agricultural, credit, and consumer services. In FEDPA's case the federation developed over many years, largely as the result of initiatives from the bottom-up, with only modest resource contributions from external donors. This self-help, bottom-up model largely explains why FEDPA is by far the strongest cooperative federation in Panama. In contrast, both COAGRO and FECOPAN were relatively recent initiatives, heavily subsidized with external resource contributions, and generally top-down in their program approach. FECOPAN never really got off the ground and finally collapsed in 1978. COAGRO is in extremely delicate health, is severely undercapitalized in terms of equity owned by its affiliates, and presently requires emergency financial assistance.

However, with little fanfare and without spectacular institutional investments, the Agricultural and Consumer co-ops of rural Panama have begun a process of integration from the bottom-up. The growth process seems to center around one primary co-op institution--the strongest and best capitalized--which draws into its service network a set of smaller and weaker co-ops of the same type. The result is a "mini-federation" at the regional level. In this regard the most successful prototype is Juan XXIII in Santiago (Verraguas), a Multiple Service Cooperative, which has established 16 branches or sucursales. Other examples include Maria Auxiliadora in David (Chiriquí) with 12 rural consumer store branches; Hortícola de Mercadeo in Boquete (Chiriquí) which is establishing a vegetable marketing distribution center in Panama City with prospects for serving the vegetable growers of other co-ops as well; Agrícola Santeña in Los Santos with 2 sucursales; and Agricultores Palmeños in Las Palmas (Verraguas), a network of 6 rural consumer stores which in turn is affiliated to Juan XXIII.

Among Credit cooperatives there were a number of strengths that greatly impressed the evaluators. First, FEDPA has enforced a narrow relationship between member savings and the amount of credit a member can receive, i.e. a ratio of 1:5. It has instituted a forced savings program wherein a loan recipient must capitalize 10 percent of his loan proceeds as share investment. These measures have been very instrumental in making the credit cooperative sector at least twice as solvent and financially autonomous as the rest of the movement. Furthermore, the rural credit co-ops are addressing one of the most serious constraints facing rural producers: the scarcity of land. As documented earlier (see Chapter III), some 39 percent of all farmers interviewed had to rent the land on which they grew their principal commercial crop. In some cases (e.g. tomato) renters reached 76 percent of total producers. The rural credit co-ops have been providing an increasing number of loans for land purchase and land rent, and they are doing so from their own capital resources. Credit co-ops have also given consumer credit loans for two-week periods to assist zafreiros (laborers) in the sugar cane harvest; they have been giving great emphasis to the development of market arrangements for financed crops before approving production loans; and overall these co-ops have provided quite efficient agronomic technical assistance. Overall, as a sector, Credit co-ops have performed exceptionally well.

Among Agricultural and Multiple Service Cooperatives several organizations stood far above the norms for this sector. The marketing activities of the Hortícola y Mercadeo in Boquete establish an extremely important precedent for the cooperative movement in general, and serves as an example for other co-ops to study, imitate, or integrate with. The powerful Agrícola Industrial (also of Boquete) presents an outstanding model of input supply and consumer goods services to the rural population. It also has an employee incentive system worthy of emulation. The excellent performance of Juan XXIII--socially as well as economically --makes it a model worthy of replication not merely in Panama but throughout Latin America. Among its many special features: the programming of livestock production and marketing, excellent educational program activities, creative visual aids for teaching illiterate members about co-op performance and results, a member insurance program, a subsidized employee lunchroom, and the fact that this institution's notable achievements have indeed been engineered by farmers, most of whom have had less than five years of primary education.

Among Consumer Cooperatives, the major strength observed is that this sector, following a period of very rapid growth, is entering a consolidation stage. The branch system is getting established, joint buying and procurement arrangements are occurring, and both supply and demand linkages to other sectors of the rural cooperative movement are presently being planned. The physical infrastructure of Consumo Verraguas and María Auxiliadora are outstanding; the human and particularly managerial resources of these co-ops must now grow quickly to keep pace with the opportunities created by their physical plant and equipment.

#### D. Observed Cooperative Deficiencies

At the outset it must be stated that many cooperatives have had to face an extremely hostile environment for their institutional development. Some co-op leaders have been jailed as subversives for their promotion activities. A parish priest who is virtually considered the father of the rural cooperative movement in Verraguas was kidnapped and never heard from again. Cooperatives have received frequent intimidation from large landowners, merchants, and others whose interests were threatened by co-op organization. Local municipalities have been particularly aggressive in their (almost punitive) taxation of co-op businesses; because these institutions are required to keep up-to-date and auditable records they often become a more vulnerable target for taxation than are private firms. Finally, some cooperatives have been virulently attacked in the radio and press by local Chambers of Commerce which accuse them of unfair and illegal business practices. Let there be no question in anyone's mind: promoting cooperatives in Panama is no picnic. And rural cooperatives particularly are engaged in a difficult struggle against vested interests seldom before challenged. At times this struggle has become extremely dangerous to the lives and property of co-op leaders.

**RECOMMENDATION:** Mere Government sponsorship and external technical assistance and financing is sometimes not sufficient to overcome the local opposition that some co-ops face. At times they need high-level support, even direct intervention, on very short notice. It is recommended that IPACOOOP should have a "hot line" telephone number that rural cooperatives can call when they have an emergency requiring special outside help.

The biggest observed deficiency in the performance of almost all co-ops visited was their lack of educational activity for their own members, as well as inadequate training opportunities for co-op employees and directors. Cooperative Education Committees rarely meet. This central fact would suggest there exists little appreciation for the role and importance of member education, almost no awareness of what kind of education is needed, and few skills for conducting educational activities or preparing teaching materials.

**RECOMMENDATION:** The only cooperatives with anything resembling a successful education program are Juan XXIII and Despertar Campesino, both of Verraguas. These co-ops both employ group discussion activities held in rural districts on a rotating basis. It is recommended that both co-ops be awarded funds to subsidize the costs of developing training programs for leaders of other co-ops. The funds would finance visits by other co-op leaders to observe education activities at Juan XXIII and Despertar; they would also finance advisory visits by staff of these co-ops to assist organizations in the same and other regions to establish education programs for their members.

A second deficiency area within education is that of management training. Courses organized for co-op managers by IPACOOOP and the federations have committed the mistake of mixing participants of widely differing levels and experience. Courses have also been reported to be far too theoretical. In general, management training has been conducted and controlled by outsiders who in many instances no less about the day-to-day problems of running co-op businesses than their trainees.

RECOMMENDATION: Management training activities by IPACOOOP must be given on a far more selective, decentralized basis. Whenever possible it should be conducted on a mobile basis, co-op by co-op, with programmed follow-up visits. Management trainers should not be assumed competent to teach until they have spent several weeks each year in local level field work learning from co-op managers and directors about their real management problems, needs, and resources.

RECOMMENDATION: Several managers of rural cooperatives are at this moment highly qualified (by their experience and their tested skills) to teach other managers. These individuals include the managers of San Antonio (F. Armuelles), Educadores Verraguences (Santiago), and José del C. Dominguez (Las Tablas) among Credit Cooperatives; the managers of Consumo Veraguas and Juan XXIII (Santiago) among Consumer Cooperatives; the managers of Horícola y Mercadeo (Boquete), Agrícola Industrial (Boquete), and Agropecuaria Santeña (Las Tablas) among Agricultural Cooperatives; and again the manager of Juan XXIII and the ex-manager of Esperanza de Los Campesinos (San Juan) for Multiple Service Cooperatives. It is recommended that funds be made available by IPACOOOP to finance the participation of these managers in cooperative management training programs conducted at the regional or local level. At the very least, these managers should be used to train IPACOOOP trainers, and to assist in the design of IPACOOOP-sponsored management training activities.

A third deficiency area involves cooperative record-keeping. Much has been accomplished during the Project period just to get co-ops to keep up-to-date records. But there is still much room for improvement. In most recipients of O41 financing there exists no separate accounting of O41 funds, which are co-mingled with co-op funds or resources from other sources. This same problem has occurred at the federation level in the case of FEDPA. Many co-ops (possibly the majority) do not have copies of their loan contracts prepared by the BDA, and they are therefore ignorant about their repayment schedule and interest payments. For these reasons it is extremely difficult to know what is the unpaid balance on O41-financed loans, how much is overdue, and what is the delinquency rate, if any. It is surprising that USAID could be so strict about designing O41 loan restrictions and prerequisites, yet have been so lax in making sure O41 funds--once lent--were properly accounted for at the cooperative and federation levels.

**RECOMMENDATION:** Cooperatives receiving O41 funds (including federations) should be required to place loan proceeds in a separate bank account so that their use and repayment can be adequately monitored.

Credit Policy constitutes another deficiency area. Lending for livestock enterprises should be made less restrictive in terms of time (at least 48 months for breeder operations) but more restrictive regarding who can qualify for a loan. At present there exists a very real danger in rural credit cooperatives that members (like teachers) whose secondary profession is farming or ranching are qualifying for livestock loans that should be made available exclusively to members whose primary occupation is farming/ranching.

Elsewhere in credit policy there exists an inadequate association between amounts lent and member share capital. With the exception of FEDPA and its affiliates--where a minimum 5:1 credit/share capital ratio exists--the rural cooperative movement has borrowed relatively large amounts of capital compared to what it has mobilized in member equity investment. Several examples are notorious. Agropecuaria Santeña has 11 cents of member investment per balboa of assets, Avícola (David) has 4 cents, La Libertad (El Valle) 2 cents, and La Constancia (Puerto Gago) only 1 cent.

**RECOMMENDATION:** Livestock loans should be made exclusively to producers whose primary occupation is ranching or farming, and loan projects should be restricted to small and medium-size operators with a maximum herd size to be financed of 20 head of cattle. Loans financing breeder cattle operations should require repayment beginning no sooner than 48 months.

**RECOMMENDATION:** Any O41-financed loan should be tied to the recipient's level of share capital investment. Within the current absolute loan maximum (\$12,500), a borrower should only be able to qualify for maximum credit of five times the value of his share capital investment in the cooperative.

Marketing presents a final area of serious deficiency with some co-operatives. Happily, many co-ops have from necessity worked out rather successful marketing arrangements. But serious problems remain. For example, co-op relationships with the National Marketing Institute (IMA) are becoming unworkable in several instances because this agency sometimes takes as long as two months to pay for produce delivered. Meanwhile the farmers are responsible for payment of the interest charges incurred meanwhile on their production loans. IMA has also been uncooperative with O41 beneficiaries (for example, Los Productores of Natá) because it gives preference to private suppliers for its onion dehydration plant at Chitré. Overall, the so-called "Co-

operative Marketing System" which was to have resulted from the O41 Loan never materialized. The marketing services responsibility was to have been shared by COAGRO and FECOPAN but in practice was addressed by neither. Faced with continuing market constraints, some co-ops have simply left the marketing responsibility to individual members. Others have suggested expensive agro-industrial processing schemes (e.g. coffee) but without defining the structural arrangements required to sell the product to the ultimate consumer.

RECOMMENDATION: IPACCOOP and the BDA should initiate discussions with IMA to encounter a more equitable solution to the problem of interest charges incurred by co-op growers which are the result of delayed payment by IMA to the seller. It is recommended that a study be conducted to identify the average amount per quintal sold of additional interest rate charges resulting from delays for which IMA is responsible. A second alternative may be to transfer ownership of the commodities sold to IMA from the grower to the BDA as of the date of delivery, with accrual of interest to cease as of that date.

RECOMMENDATION: A renewal of the "Cooperative Marketing System" should be attempted. However, it is recommended that this responsibility should not be assigned to COAGRO, which has enough problems as it is, but rather to the Hortícola y Mercadeo of Boquete. The vegetable marketing distribution center being established by this cooperative in Panama City deserves support and subsidy so that its services can be offered to other co-ops as well.

## V. FEDERATION-LEVEL IMPACT OF THE O41 LOAN

### A. National Federation of Credit Cooperatives

1. SOCIAL INDICATORS: FEDPA's affiliates consist of both urban and rural credit cooperatives. The Federation began the Project period with 83 co-op affiliates in 1976 with a combined membership of 22,400. In 1980 FEDPA had 91 affiliates representing 32,800 members. Growth in aggregate membership was therefore 46 percent. All the new affiliates were urban co-ops. During the period the number of rural co-ops remained stable at 35. However, membership in these same co-ops increased from 11,500 to 16,100, an increase of 40 percent, while the share of rural co-op members relative to total FEDPA membership dipped only slightly from 52 percent to 49 percent. In general we can conclude that the rural sector of FEDPA "held its own" and in fact showed signs of significant consolidation because their membership expanded significantly within the same cooperatives.

The attendance of FEDPA affiliates at the Annual General Assemblies improved from 71 percent (59 out of 83 co-ops) in 1976 to 78 percent (71 out of 91 co-ops). Frequency of Administrative Council meetings increased from 6 to 9 per annum during the period. FEDPA's Vigilance Committee, which met only 5 times in 1976, met 23 times in 1979 and for the entire period averaged 11 meetings per year. The Credit Committee increased its frequency of meetings from 16 in 1976 to 22 in 1980, with an average for the entire period of 21 meetings per year. All the above indicators indicate significant evidence of institutional strengthening during the Project period. With regard to education and training activities, FEDPA does not have an Education Committee; rather it has a Department of Education with a full-time director. Between 1976 and 1980 the Department's activities notably intensified. Training Courses to co-ops grew from 71 to 118 per year with an increase in participation of from 1,666 to 2,010 participants. Visits to co-ops grew from 1,054 to 1,249; seminars from 11 to 19 per year with an increase of 199 to 343 participants.

2. ECONOMIC INDICATORS: The Federation's economic indicators reveal a veritable "take-off" for FEDPA during the Project period. Between 1976 and 1980 FEDPA's total assets increased from \$3.2 million to \$7.8 million, a growth of 141 percent. Member share capital investment in the Federation expanded from a modest \$336,000 to \$1,767,000, which represents an increase of 426 percent. Total Federation income (from interest on lending, deposits, audits, accounting services, etc.) grew from \$315,000 in 1976 to \$800,000 in 1980, an increase of 154 percent. Even though operating costs increased by an even faster rate (189 percent), the Federation registered a net profit in all five years and generated an average annual surplus for distribution of some \$28,000.

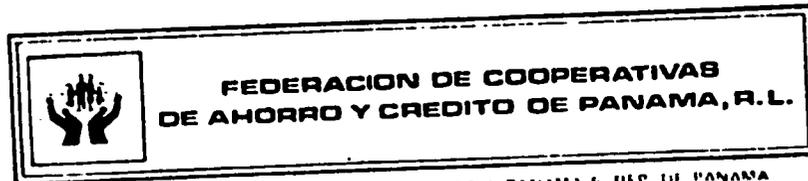
FEDPA's index of solvency declined during the Project period from 9.52 to 2.43, indicating a sharp increase in external borrowing; however, the decline in the index is not worrisome since anything above 1 is acceptable. FEDPA still has \$2.43 in assets for every balboa of liability. Over the period FEDPA's financial autonomy indicator--the acid test of institutional consolidation--increased from 0.17 to 0.22. This means that for every balboa of FEDPA's total assets, 22 cents are owned by FEDPA's affiliates and the balance by its creditors.

3. USE OF REVOLVING LOAN FUNDS: Of FEDPA's 35 rural co-op affiliates, 17 received loans financed by O41 resources. Of the total \$2.0 million in O41 resources received from the Revolving Loan Fund, some \$1,750,000 (88 percent) was on-lent to co-ops for agricultural and livestock production credit. The balance was lent for "Rural Industry" financing. The breakdown of loan use and repayment performance, by co-op, is shown in Table VII. As of December 31, 1980 a total of \$961,778 against obligations due of \$1,024,893 had been paid. Of this latter amount, the total of delinquent balances was \$13,329, which suggests a delinquency rate of only 1.3 percent.

Table VIII gives the breakdown of total O41 loans on-lent by FEDPA affiliates to their individual members. Of the original \$2 million received, these 17 co-ops generated an aggregate volume of credit (including multiple use of reflows) totaling an astounding \$4,166,724. A total of 1,306 loans were made between July 1976 and February 1980. Of these, 1199 loans were made for crop and livestock production for an aggregate value of \$3.9 million (94 percent of the total) while 107 were made for Rural Industry with a total value of \$258,000. The average production credit loan was \$3,260. The average rural industry loan was \$2,409. What is quite amazing about the observed doubling in aggregate value of lending from \$2.0 million to \$4.1 million is that this result was achieved with only a fraction of the original \$2 million received from the Revolving Loan Fund. In the first place, from 1976 to 1979 FEDPA only received about half its \$2 million commitment from the BDA. But secondly, an estimated 40 percent of all resources received went into livestock production loans with a slow pay-back period.

4. SERVICE INDICATORS: With O41 Loan financing through MJDA, the Federation provided 5 agronomists (4 field staff and 1 supervisor) to provide technical supervision to credit co-op members using O41-financed production loans. All eight credit co-ops visited by the evaluators reported positively about this assistance. For the average co-op, estimated assistance was about 40 man-days per year. In the sampled co-ops alone, these agronomists supervised a total of 841 crop and 311 livestock loans during the five-year period. Through the accounting and manager services (loan) program FEDPA provided 10 account-

TABLE VII



FEDERACION DE COOPERATIVAS  
DE AHORRO Y CREDITO DE PANAMA, R.L.

LA TABLAS  
74.6757  
NATA  
93.5557  
DAVID  
75.4508



Detalle de los Saldos de las Cooperativas de los Fondos Préstamo 525-T-041

Cooperativa	Saldo según Libro	Saldo según Plan de Pago	Saldo Moroso al 31.12.80	Cantidad Pagada al 31.12.80	= Proyecto Agropecuario	Empresas Rurales	Total
	31.12.80	31.12.80	31.12.80	31.12.80			
Mariquitos Unidos, P. L.	5,513.66		5,513.66	28,449.34	33,963.00		33,963.00
San Antonio, R. L.	360,324.32	360,324.32		284,082.68	644,407.00		644,407.00
Glades d. de Durasa, R. L.	121,956.46	121,956.46		133,168.83	181,275.29	73,850.00	255,125.29
José Del Carmen Domínguez, R. L.	80,370.04	80,370.04		101,377.03	162,747.07	19,000.00	181,747.07
Burienos Unidos, P. L.	35,274.40	35,134.49	139.91	39,046.00	60,150.40	14,170.00	74,320.40
Santa Bárbara, P. L.	62,968.08	59,539.92	2,528.96	16,931.12	60,000.00	19,000.00	79,000.00
San Sebastián, P. L.	33,171.40	33,171.40		45,829.60	72,001.00	7,000.00	79,001.00
Fric Del Valle, P.L.	27,311.75	27,311.75		31,106.25	38,318.00	20,100.00	58,418.00
El Educador Santeiro, R. L.	85,980.06	85,980.06		13,250.94	98,021.00	1,210.00	99,231.00
Santiago Apostol, P. L.	166.55		166.55	4,808.45	4,975.00		4,975.00
Educador Veraguense, R. L.	186,624.73	186,624.73		201,225.27	312,850.00	75,000.00	387,850.00
Unión de Clubes Agrícolas Santeiros	3,572.65	1,650.00	1,922.65	26,000.59	22,823.24	6,750.00	29,573.24
Santa Unión, R. L.	3,327.41	3,327.41		6,672.59	10,000.00	10,000.00	10,000.00
Santa Elena, R. L.	5,657.75	2,600.00	3,057.75	12,791.25	14,449.00	4,000.00	18,449.00
El Provenir de Guarimal, R.L.	26,902.00	26,902.00		9,000.00	9,000.00		9,000.00
				8,038.00	34,940.00		34,940.00
<b>Total</b>	<b>B/. 1,038,222.06</b>	<b>1,024,892.53</b>	<b>13,329.48</b>	<b>961,777.94</b>	<b>1,749,920.00</b>	<b>250,080.00</b>	<b>2,000,000.00</b>

Nota: Para determinar el total de préstamos concedido a cada una de las cooperativas beneficiarias con los Fondos 525-T-041 se deberá utilizar las siguientes fórmulas:

1. Saldo según Libro + Cantidad Pagada = Total (Proyecto Agropecuario + Empresas Rurales).

2. Saldo según Plan de Pago + Saldo Moroso + Cantidad Pagada = Total (Proyecto Agropecuario + Empresas Rurales).

Fuente: Departamento de Crédito División Financiera.

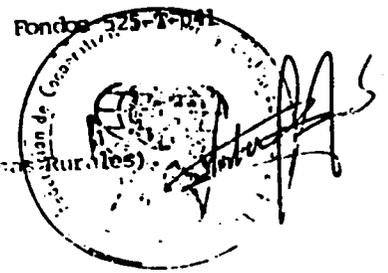


TABLE VIII.

FEDERACION DE COOPERATIVAS DE AHORRO Y CREDITO DE PANAMA, R. L.  
 DETALLE DE SOCIOS DE COOPERATIVAS DE AHORRO Y CREDITO  
 BENEFICIADOS CON SUB-PRESTAMOS DEL FONDO ROTATIVO COOPERATIVO 525-T-041  
 DE JULIO 1976 a FEBRERO 1980

Nombre de la Cooperativa	Prestamos	Agropecuario	Empresas	Rurales	Total	
	Socios Beneficiarios	Monto Prestado	Socios Beneficiarios	Monto Prestado	Socios Beneficiarios	Monto Prestado
Purrieños Unidos, R. L.	45	74,833.89	7	14,170.00	52	89,003.89
Unión de Clubes Agrícolas Santeños, R. L.	13	23,192.40	5	6,750.00	18	29,942.40
El Educador Santeño, R. L.	63	220,374.54	1	1,210.00	64	221,584.54
Santa Elena, R. L.	11	16,049.00	2	4,000.00	13	20,049.00
Santa Bárbara, R. L.	54	98,921.65	23	19,000.00	77	117,921.65
José del Carmen Domínguez, R. L.	136	297,474.50	6	19,000.00	142	316,474.50
Gladys B. de Ducasa, R. L.	49	164,825.70	29	81,575.00	78	246,400.70
San Sebastián, R. L.	49	75,001.00	2	7,000.00	51	82,001.00
Santiago Apostol, R. L.	9	4,975.00	-	-	9	4,975.00
Avance, R. L.	2	9,000.00	-	-	2	9,000.00
El Educador Veraguense, R. L.	73	300,716.25	24	75,000.00	97	375,716.25
El Porvenir de Guarumal, R. L.	37	83,030.00	-	-	37	83,030.00
De Educadores Coclesanos, R. L.	10	39,861.00	-	-	10	39,861.00
Natariegos Unidos, R. L.	67	99,301.45	-	-	67	99,301.45
Eric Delvalle, R. L.	26	59,349.00	7	20,100.00	33	79,449.00
San Antonio, R. L.	555	2,342,013.84	-	-	555	2,342,013.84
Nueva Unión, R. L.	-	-	1	10,000.00	1	10,000.00
<b>Total</b>	<b>1,199</b>	<b>3,908,919.22</b>	<b>107</b>	<b>257,805.00</b>	<b>1,306</b>	<b>4,166,724.22</b>

ants with O41 financing and 4 more accountants out of FEDPA's own resources. All eight credit co-ops visited by the evaluators received at least one FEDPA audit during the Project period. Of these, 5 received annual audits while the remainder may have received more than 1-2 audits but there were no local records available to prove this was the case. In the education field, 7 of the 8 co-ops reported receiving annual training courses from FEDPA for employees, particularly managers; 6 of 8 reported FEDPA-sponsored training courses for co-op directors; and 2 of 8 reported membership training activities organized by FEDPA. Overall, both from its own records as well as from the results of the evaluation field survey, FEDPA demonstrated intensive service delivery during the Project period.

5. OVERVIEW OF FEDERATION STRENGTHS: Some of FEDPA's many strengths have already been identified previously in this evaluation report. The excellent general performance of rural credit co-ops relative to those of Consumer, Agricultural, and Multiple Service is itself dramatic evidence of FEDPA's success in supporting its affiliates. But this is a symbiotic relationship: FEDPA strengthens its affiliates, but the affiliates greatly strengthen the Federation in return. Overall FEDPA enjoys excellent professional management. It is relatively solvent, fairly well capitalized, and is operated at a profit. It owns its own two-story building in Panama City (which it will soon outgrow). It has installed a centralized computer-processed accounting system for its affiliates; and the print-outs reach the co-ops within 30 days from the close of business for the previous period on which the computer is reporting. FEDPA pays its agronomists better-than-MIDA salaries, including an extra cuota paid by each beneficiary co-op. The Federation's auditing program works very well, particularly because FEDPA audits must be paid for by affiliates rather than received on a subsidized basis as is the case with similar services provided by IPACCCP. Generally, FEDPA has an excellent activities reporting and evaluation system, particularly for education activities, although these are not separated for O41 beneficiaries. A system of short-wave radio communications greatly facilitates feedback between the field and the central office. But finally, the wellspring of FEDPA strength is based--in the opinion of the evaluators--on a trilogy of principles which the Federation has never abandoned: (1) intensive and continuous education of affiliates, (2) almost militant insistence on constant member investment in share capital, and (3) credit policies which limit borrowing to five times what a member has saved in his co-op.

6. DEFICIENCIES: It has been demonstrated in this report that the economic benefits of O41-financed agricultural and livestock credit have been very substantial. It has also been shown that FEDPA utilized O41 Loan resources very efficiently, while local co-op affiliates managed to double the aggregate value of credit disbursed because of excellent repayment performance and relending from reflows. Finally, by linking credit availability to member saving the Federation and its affiliates have created a veritable explosion in membership share capital investment. All these factors combined have produced a demand for credit which FEDPA can not meet from its available resources. As of December 31, 1980 the Federation estimated its excess credit demand at \$3.5 million. This figure represents the difference between its loan capital (member equity plus external financing)--calculated at \$7 million--and the total credit demand (existing loan balances plus loan requests approved)--calculated at \$10.5 million.

RECOMMENDATION: FEDPA would make excellent use of additional financing--as a follow-up to the O41 Loan--of at least \$2 million, which is roughly equivalent to the rural portion of its excess demand cited above.

The evaluators encountered inconsistencies between the way FEDPA charges interest on loans to affiliates, and the way affiliates collect interest on loans to their members. For example, on a joint agricultural and livestock production loan to a co-op, the repayment plan is sometimes based on an averaging of repayment dates between short-term (crop) and medium-term (livestock) sub-loans which differs from the actual repayment dates specified in the repayment plans between the co-op and its member borrowers. The result is that FEDPA usually calls in its repayment obligations from affiliates before the latter has collected theirs from sub-borrowers. This produces occasional liquidity crises for affiliates, or forces them to tie-up prematurely resources which might have otherwise been available for lending but are retained in anticipation of interest payments falling due before those of the co-op.

RECOMMENDATION: FEDPA should strive to make sure its repayment plans on loans to co-op affiliates match, as closely as possible, the repayment plans of sub-loans from co-ops to their members. It is suggested that FEDPA loan analysts refrain from averaging repayment periods in preparing credit packages combining short and medium-term uses. It would be more appropriate to make two separate loans to the affiliate, one for short-term use and one for medium- or longer term use.

It is the opinion of the evaluators that the FEDPA agronomists who supervise O41-financed borrowers (and others too) are in some cases spread too thin (must cover too many co-ops over too large an area) or in others provide coverage over too few rural producers to justify the cost involved. In interviews to two FEDPA agronomists it was found that one covered five co-ops and the other six; the former supervised 148 producers, the latter 122. The number of producers supervised per co-op varied from 66 in "large" cooperatives to 3 in "small" co-ops, with the average being 25. Agronomist visits to the larger co-ops occur twice a week and to the smaller co-ops twice a month. The agronomists believe that as a general norm, farmers require supervision every 8-10 days, while ranchers should be visited 2-3 times per year.

We do not claim this coverage is inadequate; we are merely concerned about its cost. Including his travel costs and the co-op financed bonus, an agronomist costs about \$535 per month. Assuming he covers 6 co-ops of 25 borrowers each, the agronomist's cost is \$21.40 per client per month, or almost \$260 per client per year. Assuming further an average value per production loan of \$3,260 (see page 42) and one loan per year, the supervision cost represents 8 percent of the loan value, which makes the supervision system too expensive to be potentially financed by the co-ops themselves out of their normal interest income on lending. What is needed is a mechanism for increasing the total number of clients supervised per agronomist while reducing the intensity of supervision without destroying its current effectiveness.

**RECOMMENDATION:** FEDPA is urged to consider the selection and use of farmer-paratechnicians on a part-time basis. Based on production performance, co-ops would identify the most successful producers (those achieving highest yield per unit of land, or highest net income per unit of investment, etc.). These producers would be asked to participate in the extension and supervision system, teaching other producers how to imitate their results. In large co-ops, perhaps one paratechnician for every 12 farmers should be selected, with 3-6 farmers per paratechnician in smaller co-ops. The paratechnician would visit his neighboring co-op loan clients at least once a month. Visitation costs would be reimbursed by FEDPA. A modest honorarium for his services may also be paid to the paratechnician. By using such individuals it is possible to provide equal if not more intensive supervision of clients, while reducing the frequency of visitation by the more expensive agronomist; this, in turn, frees more time of the agronomist to allow coverage of an expanded number of total loan clients.

**RECOMMENDATION:** In conjunction with the above initiative, FEDPA agronomists are urged to apply the COOPLEX methodology after the harvest or market sale to measure the results of production credit and their own technical advice. However, the methodology must be expanded to collect information on yields.

A final deficiency involves FEDPA monitorship of O41 resources. Resources received from the Revolving Loan Fund have been lumped by FEDPA with its own and other external financing in the same accounts. The situation is repeated at the local level, where the separation between O41 and other resources is not always made. At the request of the evaluators, it took FEDPA personnel several days to disaggregate O41 loan volume, repayments, balances not yet due, and delinquent balances. However, lack of a separate record-keeping and accounting system for O41 funds is not FEDPA's fault because USAID monitors never requested that such procedures be implemented.

RECOMMENDATION: All Revolving Loan Fund disbursements of O41 resources should go into a separate FEDPA bank account with its own checkbook and records. At the local level, all O41-financed credit packages to co-ops should also be deposited in a separate bank account and accounted for separately from resources provided by other sources.

#### B. National Federation of Agricultural Cooperatives (COAGRO)

1. SOCIAL INDICATORS: Between 1976 and 1980 COAGRO's affiliates increased from 29 co-ops to 30. Their aggregate membership grew from 6,570 to 8,115, which represents an increase of 24 percent. Attendance of COAGRO affiliates at Annual General Assemblies actually slipped during the period, from 27 out of 29 in 1976 (93 percent) to 25 out of 30 (83 percent) in 1980. Frequency of meetings of COAGRO's Administrative Council also dropped, from 29 meetings per year in 1976 to 17 meetings in 1980, with the average for the period 21 meetings per year. Performance of the Vigilance Committee was better in relative terms, registering an improvement from 17 to 19 meetings per year over the period with the average being 18. COAGRO's Credit Committee is composed of the same directors who comprise the Administrative Council; hence, this committee does not meet separately. Furthermore, since COAGRO affiliates receive their O41 loans directly from the Agricultural Development Bank there has not existed to date a strong incentive for COAGRO to maintain a Credit Committee that meets separately. In all its history (10 years) COAGRO did not get around to forming an Education Committee until 1980. This Committee consists of one member representing each of COAGRO's three regions, where COAGRO has also organized Regional Education Committees to which a full-time COAGRO education officer has been assigned. COAGRO's national-level Education Committee met 5 times in 1980. Among the regional committees, the Eastern Region met 9 times (2 more than 1979), while the Central and Western Regions met for their first year of operations in 1980 4 and 2 times respectively. Overall, the picture offered by COAGRO's

social indicators is one of significant consolidation in terms of membership, declining participation with respect to General Assemblies and Administrative Council, improved functioning of the Vigilance Committee, and a significant new departure in the area of Education.

2. ECONOMIC INDICATORS: COAGRO's economic indicators show a mixed bag of results: modest economic growth mixed with precarious financial health. COAGRO's total assets during the Project period grew from \$9.6 million in 1976 to \$11.2 million in 1980, an increase of 17 percent. Member share capital investment in the Federation grew from \$105,500 to \$358,000, a gain of 239 percent. Although member equity growth was impressive in relative terms, it must be seen as dangerously inadequate because for every balboa of COAGRO assets only 3 cents are owned by the members. COAGRO's total income has grown from \$7.7 million per year in 1976 (94 percent from farm supply sales) to \$10.7 million per year in 1980. Net income on sales income has been negative in all five years of the Project; however, in three of the five years a very modest surplus was generated thanks to other income. These surpluses, combined with an inventory writeoff in 1978, have allowed COAGRO to reduce its accumulated deficit from \$827,000 to \$388,000 over the Project period.

From 1976 to 1980 COAGRO's solvency has been precarious but shows some improvement. Its solvency index grew from a dangerous 0.85 in 1976 to 1.36 in 1980, with an annual average for the period of 1.43. COAGRO's capacity for supporting additional indebtedness is virtually exhausted in the absence of some scheme for refinancing. Total debt (long and short-term) as a percentage of total assets was 1.01 in 1976 and 0.99 in 1980. COAGRO's financial autonomy has improved but remains dangerously low. In 1976 COAGRO's affiliates owned 1 cent of every balboa of Federation assets; in 1980 they owned 3 cents.

With the soaring interest rates of the last year COAGRO has found itself increasingly trapped by its external debt burden. Upon repaying operating capital loans from the O41 Revolving Credit Fund which only cost 5 percent, COAGRO must frequently replenish its operating capital with commercial loans at interest rates ranging from 17-21 percent per annum. In 1978 COAGRO paid \$763,253 in interest payments while in 1980 the Federation paid \$1,166,676, an increase of 53 percent in only two years. As a percentage of operating costs, interest payments comprised 45 percent in 1978 and 56 percent in 1980. The cost of its debt burden is now beginning to soar geometrically. In the first four months of 1981 alone, COAGRO's interest payments reached \$478,000; if this trend is projected for the entire year, total interest payments will exceed \$1.4 million, a 23 percent increase over the year before. Clearly, without a refinancing of its debt with lower-cost capital, COAGRO's prospects for survival are not bright.

TABLE IX  
 MINISTERIO DE DESARROLLO AGROPECUARIO  
 PROYECTO DE DESARROLLO COOPERATIVO  
 MIDA-BDA-AID 525-T-041

- 2 -

ANEXO: A-1  
 TÍTULO: DESEMBOLSOS EFECTUADOS A COAGRO Y AFILIADAS  
 PERIODO: AL abril de 1981

COOPERATIVAS	TOTAL	CREDITO DE PRODUCCION	CAPITAL DE TRABAJO	INFRAES. Y EQUIPO	RECUPERACIONES	
					AMORTIZACION A CAPITAL	INTERESES
Blanca Flor	523,077.77		523,077.77		434,330.49	14,848.96
La Constancia	479,080.57	479,080.57			471,157.02	12,078.71
S. M. Chiriquí	40,000.00		40,000.00		40,000.00	400.23
Libertad del Valle	83,975.21	59,761.97	9,330.00	14,883.24	34,075.50	6,708.23
Agropecuaria Santeña	616,439.80	514,685.00	69,975.80	31,779.00	471,871.25	16,734.68
El Progreso	459,749.62	402,011.39		57,738.23	353,980.42	20,019.79
Juan XXIII	399,022.00	86,361.00	212,661.00	100,000.00	239,791.52	43,502.65
Fé y Progreso	96,119.87		65,155.87	30,964.00	72,367.63	5,688.50
Productores de Leche	451,600.00		394,600.00	57,000.00	318,600.00	8,491.75
COAGRO	2,185,656.55		1,910,656.55	275,000.00	594,226.31	190,155.82
Bejuco, Chame, San Carlos	247,147.49	13,274.82	157,284.67	76,588.00	120,775.19	9,803.92
ICACAL	500,000.00	250,000.00	250,000.00			
COCABO	871,409.61	182,000.00	689,409.61		772,220.09	22,271.08
Ganadera Chiricana	94,096.92		94,096.92		16,934.72	4,138.33
TOTALES	7,047,375.41	1,987,174.75	4,416,248.19	643,952.47	3,940,333.14	354,842.63
OBSERVACIONES:						

TABLE IX  
 MINISTERIO DE DESARROLLO AGROPECUARIO  
 PROYECTO DE DESARROLLO COOPERATIVO  
 MIDA-DIA-AID 525-T-041

ANEXO: A-1  
 TITULO: DESEMPEÑOS EFECTUADOS A COAGRO Y AFILIADAS  
 PERIODO: AL abril de 1981

Consolidado

- 2 -

COOPERATIVAS	TOTAL	CREDITO DE PRODUCCION	CAPITAL DE TRABAJO	INFRAES. Y EQUIPO	RECUPERACIONES	
					AMORTIZACION A CAPITAL	INTERESES
San Sebastian	18,917.39	5,000.00	5,617.39	8,300.00	1,751.99	748.01
Hortícola Mercadeo	565,513.63	300,000.00	265,513.63		315,518.63	45,634.16
Despertar Campesino	2,886.00			2,886.00	1,443.00	164.93
Coclesana	25,000.00		25,000.00		6,249.99	1,951.06
Agrícola Industrial	51,000.00			51,000.00	14,100.00	4,654.25
Agrícola Palmeños Unidos	7,200.00		7,200.00		2,155.61	363.11
Esperanza Campesina	20,363.00		20,363.00		11,363.00	336.95
Productores de Natá	199,626.57	166,920.57		32,706.00	179,157.39	14,737.83
Nuestro Porvenir	10,000.00	10,000.00				
<b>TOTALES</b>	<b>7,947,882.00</b>	<b>2,469,095.32</b>	<b>4,739,942.21</b>	<b>738,844.47</b>	<b>1,472,072.75</b>	<b>123,432.93</b>
OBSERVACIONES:						

3. USE OF REVOLVING LOAN FUNDS: The breakdown of total borrowing by COAGRO and its affiliates from the O41 Revolving Loan Fund is presented in Table IX. As of April 1981, total loans were \$7.9 million of which \$2.2 million (27 percent) was borrowed by COAGRO itself and \$5.7 million by its affiliates. Of Revolving Fund loans to COAGRO, \$1.9 million was for operating capital and \$275,000 was for infrastructure construction and equipment. The BDA was unable to provide a report showing either delinquent balances or loan balances not yet due. It is therefore impossible to determine from the information available whether COAGRO's repayment performance has been satisfactory. All we can say is that repayments by COAGRO on its borrowings (as of April 1980) reached \$594,000 or about 27 percent.

In contrast, COAGRO affiliates borrowed a total of \$5.8 million. Of this amount \$2.5 million (43 percent) was for production credit, \$2.8 million (49 percent) was for operating capital, and \$464,000 (8 percent) was for infrastructure and equipment. The overall repayment rate on total borrowings by affiliates was 67 percent. The available information suggests a superior repayment performance by COAGRO affiliates than by the Federation itself; however, without knowing the current loan balances (not-yet-due as well as delinquent) it is necessary to regard such a conclusion as impressionistic only.

4. SERVICE INDICATORS: With O41 funds (managed through MIDA) COAGRO obtained for its affiliates the services of 15 agronomists. Of the sampled co-ops visited by the evaluators, 10 out of 13 had received the services of full-time resident agronomists assigned exclusively to one co-op. Two more of the 13 co-ops received part-time agronomic assistance and the third received none (it already had a MIDA veterinarian). Information at the co-op level was available on the work of 7 agronomists: collectively, they supervised 1,191 production loans during the five-year Project period, which suggests an average of 34 loans per agronomist per year. (This compares with an average of 58 loans per year for FEDFA agronomists). Through the accountants and manager services program, COAGRO affiliates some 8 accountants and 12 managers in 1976. There was an attrition of 5 managers in 1977, and before the program was terminated in 1978 there were only 4 accountants and 6 managers. Since 1978 several co-ops have hired back the personnel formerly assigned to them on a subsidized basis.

COAGRO has no auditing responsibility with regard to its affiliates. This service as been performed by DINACOOOP (now IPACOOOP). Of the 13 co-ops visited by the evaluators, 12 had been audited by DINACOOOP during the Project period, and all of them on no less than three occasions. With regard to Education, COAGRO organized two innovations of great merit: (1) Regional Inter-Cooperative Committees, and (2) Regional Education Committees. The first entity consists of a membership of co-op managers and presidents that meets once every 1-2 months with COAGRO top management to discuss problems, air complaints, and plan strategy.

Two of the three Inter-Cooperative Committees were organized in 1979 and the third in 1980. Collectively, these committees met 10 times in 1979 (average: 5 meetings per committee) and in 1980 they met 26 times (average: 9 meetings per committee). As for the Regional Education Committees, one was formed in 1979 and two more in 1980. Collectively they met 6 times in 1979 and 15 times in 1980. COAGRO records show they organized 51 educational activities in 1979 and 88 activities in 1980. Of the 13 sampled co-ops visited by the evaluators, however, only 7 gave any indication of having received a COAGRO-sponsored education activity.

COAGRO's primary service to its affiliates is the supply of production inputs, particularly fertilizer, agrochemicals, and animal feed. In 1976 COAGRO's total input sales were valued at \$7.2 million, of which 43 percent represented sales to affiliates, 27 percent to group farms (asentamientos), 16 percent to the Government (MIDA), and 14 percent to private farmers. In 1980 COAGRO's input sales had reached \$10.1 million, with the relative share sold to co-ops unchanged. However, sales to private farmers have more than doubled to a 32 percent share of total shares, with the Government and the asentamientos sharing one-quarter of the total. This development suggests a progressive distraction of COAGRO energies from their appropriate purpose: service to cooperatives. It can be argued that COAGRO has become overly-specialized as a farm input supplier. In its rush to operate on a profitable basis it has progressively expanded its sales volume beyond the demand level of its own affiliates. Now, stuck with large supply inventories that are financed by commercial credit at extremely high interest rates, COAGRO must sell increasingly to non-members (who are willing to pay on a cash basis) simply to meet its accounts payable.

5. OVERVIEW OF FEDERATION STRENGTHS: The miracle of COAGRO is that it has survived for as long as it has, which is testimony to the administrative talent of its managers and directors. The present COAGRO manager--Orlando De Vicente--and his predecessor have done much to consolidate COAGRO administration. The sales push of recent years is beginning to be complimented with a long-postponed concern for education and tight working relationships with affiliates. The evaluators did not sense great enthusiasm for the Federation among affiliates, and we heard many complaints against Federation policies, but in the last analysis we sensed a reluctant support and adhesion by its affiliates to COAGRO; because they do feel benefitted, and the benefits are too substantial for them to think of withdrawing from the Federation. The formation of the Inter-Cooperative Committees has served as an excellent way for affiliates to make their opinions and needs known. COAGRO's completion of a fertilizer mixing plant in Coclé is a great source of pride to the membership. COAGRO's consignments of farm supplies on a credit basis is very much appreciated. Recently COAGRO received a \$300,000 grant from the Inter-American Foundation to acquire its own business computer, establish a centralized accounting system for its affiliates, and provide specialized accounting services to co-ops on a regional basis. COAGRO may still be in precarious financial health, but the patient definitely has the will to survive and is gaining strength.

6. DEFICIENCIES: Most of COAGRO's principal deficiencies have already been mentioned previously--most of them attributable directly or indirectly to the Federation's overemphasis on sales of farm inputs as its principal reason for existence. The Federation was originally established to be a full-service organization. It was to provide such services as marketing of member produce, production credit mediation, agro-industrial processing, etc. In the long run COAGRO must become a provider of multiple services if it is to meet the needs of its affiliates and sustain their loyalty.

RECOMMENDATION: As soon as possible COAGRO must, like FEDPA, begin to provide a credit brokering service to its affiliates. The fact that COAGRO affiliates must directly deal with the BDA regarding the procurement and repayment of production loans results in the loss, for COAGRO, of one of its most important opportunities for meeting a top priority service need for its affiliates. It is recommended that COAGRO request technical assistance from FEDPA in designing a credit services program along the credit cooperative model, including a strategy for rapid mobilization of member share capital and the formulation of credit regulations. Preliminary conversations by the consultants with the BDA suggest that the Bank would welcome COAGRO's participation in providing credit intermediation services to its affiliates.

COAGRO has created excess capacity for input supply that goes far beyond the needs of its affiliates. A conscious policy of halting further expansion of this function, and progressively reducing the volume of input sales (and the external borrowing required to finance them) is long overdue. Far preferable to selling inputs to private farmers would be their sale to co-op members of FEDPA.

RECOMMENDATION: COAGRO is urged to engage in discussions with FEDPA to determine the input needs of FEDPA borrowers, and to discuss whether COAGRO can meet these needs less expensively than private suppliers.

COAGRO is dangerously--almost hopelessly--over-indebted to outside creditors, who own 97 cents of every balboa of its assets. This huge dependency on external capital must be financed with exorbitantly high interest charges which are inexorably consuming larger and larger shares of COAGRO's total operating expenses and driving those costs sky high. COAGRO urgently needs a refinancing of its external debt, but unless such financing is coupled with improved mobilization of member equity it will provide COAGRO only temporary relief.

RECOMMENDATION: USAID/Panama is strongly urged to consider measures for refinancing COAGRO's burden of high-cost debt to commercial sources. In the short-run this might include discussions with the BDA for relaxing or postponing COAGRO repayment obligations to the O41 Revolving Credit Fund. In the event of a follow-on loan to the O41 Project, up to \$3 million should be considered as a set-aside for COAGRO debt refinancing but exclusively on a matching basis. In other words, for every balboa of new membership share capital invested in the Federation, the refinancing fund would match it ~~ca~~, say, a 2:1 basis.

Even before input supply and credit intermediation services, COAGRO should have become involved long ago in providing its affiliates with commodity marketing services. There is probably no service more critical to farmer success, or more appreciated by them, than that of marketing. Under the auspices of the O41 Project COAGRO was supposed to have assisted in the creation (along with FECOPAN) of a "Cooperative Marketing System". This never happened. The failure to develop such a system must be considered one of the greatest deficiencies of the O41 Project, and of COAGRO itself. Unfortunately, at this time COAGRO is beset by such financial difficulties that it can not afford to inaugurate a major new initiative in marketing services. Nor does it have the staff or the expertise to manage such a service.

RECOMMENDATION: It is recommended that COAGRO begin to acquire experience in the commodity marketing field by filling a market brokerage function for its affiliates. Without major infrastructure investments, COAGRO would simply explore market opportunities--domestic and external--identifying potential buyers of commodities produced by affiliates. The Federation would also make available its legal counsel to assist in establishing commodity purchase and supply contracts between interested buyers and COAGRO affiliates.

According to available data (collected during the evaluation), the unit cost of COAGRO agronomist services per farmer or rancher assisted are considerably higher--perhaps double--those of FEDFA.

RECOMMENDATION: The use of farmer-paratechnicians--suggested for assisting in the supervision of O41 Project beneficiaries of FEDFA--is appropriate for consideration by COAGRO as well. COAGRO-assigned agronomists are also urged to implement the COCPLEX system on a post-harvest basis, thereby adding an evaluation capability to an instrument heretofore used for credit planning only.

### C. The National Federation of Consumer Cooperatives (FECOPAN)

Little attention will be devoted to FECOPAN in this report. Despite multiple inquiries, the evaluators were unable to find anyone who knew where FECOPAN's records were. Not even IPACCOOP had copies of the Federación's Annual Reports or financial statements for the 1976-1978 period. What little we learned about the Federación consists of an inventory of its problems--gleaned from previous evaluation reports--and a list of the loans FECOPAN and its affiliates received from the Revolving Loan Fund.

1. GROWTH INDICATORS: FECOPAN never really grew, never got off the ground. It was born in September 1972 with 21 co-op affiliates who reportedly contributed some \$2,000 in share capital. The number of affiliated co-ops increased to 32 in 1976, and share capital investment peaked that year at \$3,780. It was alleged by several respondents to the evaluators that FECOPAN pushed the affiliation of new co-ops in the early days of the O41 Project precisely to qualify for a larger share of that Project's resources.

2. USE OF REVOLVING LOAN FUNDS: According to the O41 Loan Project Paper, FECOPAN was to receive \$300,000 for working capital and \$211,000 for infrastructure and equipment. In practice the Federación only received \$371,551--as shown in Table X. Of this sum, \$241,551 was for working capital and \$130,000 for infrastructure and equipment. However, it is noteworthy that only \$90,000 of the above funds, (all for infrastructure) came from the AID-financed contribution to the Revolving Loan Fund. The balance came from BDA contributions to the Fund. AID actually rejected \$136,050 in reimbursement requests from the BDA in the name of loans to FECOPAN. Considering FECOPAN's extremely poor solvency, AID was undoubtedly correct in identifying the Federación as a poor risk. Of the \$371,551 eventually borrowed by FECOPAN from the O41 Revolving Loan Fund, no capital has yet been repaid.

As for FECOPAN affiliates, of its 30 members eventually 11 co-ops qualified for O41 financing for a total of \$1.3 million. Of this sum \$725,000 (56 percent) was for working capital and \$573,100 (44 percent) was for infrastructure and equipment. The two big users of infrastructure money were María Auxiliadora (Chiriquí) and Consumo Veraguas, both of which have built excellent facilities which will provide growth opportunities for many years to come. The third biggest client for O41 lending was Juan XXIII, this time for operating capital. It is relevant to note that in 1977 FECOPAN designated María Auxiliadora and Juan XXIII as its regional distribution points. But this was something of a joke since both these co-ops were, from the beginning, far larger and much better capitalized than FECOPAN itself.

TABLE X.  
 MINISTERIO DE DESARROLLO AGROPECUARIO  
 PROYECTO DE DESARROLLO COOPERATIVO  
 MIDA-BDA-AID 525-T-041

Consolidado

- 3 -

ANEXO: A-1  
 TITULO: DESARROLLOS EFECTUADOS A FECOPAN Y AFILIADAS  
 PERIODO: AL abril de 1981

COOPERATIVAS	TOTAL	CREDITO DE PRODUCCION	CAPITAL DE TRABAJO	INTERES. Y EQUIPO	RECUPERACIONES	
					AMORTIZACION A CAPITAL	INTERESES
FECOPAN	371,550.86		241,550.86	130,000.00		
La Cabima	44,826.03		17,781.73	27,044.30	2,458.25	2,429.07
CONSUBARU	98,000.00		98,000.00		14,922.38	3,951.45
Domingo Cordoba	36,896.37		22,498.92	14,397.45	8,020.74	18,353.13
Mercedes Campodónico	7,030.58		2,001.08	5,029.50	4,337.78	660.06
CITRICOOP	61,458.37		61,458.37		63,458.37	2,804.18
San Juan de Dios	23,500.00		2,813.17	20,686.83		652.30
María Auxiliadora	370,000.00		200,000.00	170,000.00	28,248.99	25,073.27
Juan XXIII II	193,517.72		177,370.72	16,147.00	28,563.00	5,028.77
Consumo de Veragues	394,853.27		112,800.27	282,053.00	127,565.62	16,374.91
Consumo de Azuero	40,800.00		15,200.00	25,600.00	9,050.00	2,903.59
Los Milagros	27,142.00		15,000.00	12,142.00	5,129.00	1,327.97
TOTALES	1,669,575.20		966,475.12	703,100.00	291,754.13	79,558.70
REDUCCIONES:			724,924			

Of the total of \$1.3 million in O41-financed borrowings by FECOPAN affiliates, as of April 1981 some \$292,000 (22 percent) had been repaid. Once again, the BDA was unable to provide either a report on delinquent balances or balances not-yet-due. It is therefore impossible to confirm whether the repayment performance of FECOPAN affiliates is satisfactory or not.

3. FINAL COMMENTS: The brevity of this section results from the fact that FECOPAN no longer exists. It was apparently liquidated in July 1980. The reasons for its demise have been documented in previous reports and need only be summarized here: (1) FECOPAN was a paternalistic initiative imposed from the top-down: Rather than being an outgrowth of the felt needs of consumer co-ops themselves, FECOPAN was created even before many of its eventual affiliates yet existed. (2) Not representing an expression of their own needs, FECOPAN affiliates never contributed more than token share capital investment in the Federation. (3) For the same reason, few consumer co-ops used FECOPAN as a wholesale supplier. In some cases the affiliates were far larger, better capitalized, and more efficient than the Federation itself, so it was much easier for them to arrange for their own commodity supply directly. (4) Accustomed to a high level of subsidy from the beginning of its existence--soft credit, donations, personnel costs paid by other institutions--FECOPAN never really had to discipline itself. It did little to control operating costs which, relative to income, were considered excessive by previous evaluation reports. (5) FECOPAN sold on credit and was lax about enforcing timely repayment. For these and many other reasons FECOPAN was doomed to fail.

Although FECOPAN disappeared, this does not mean that there no longer exists a rural Consumer cooperative movement. To the contrary, the movement is stronger than it ever was and is growing rapidly. The principal consumer co-op borrowers of O41 funds have established themselves as engines of growth--or growth poles--around which many smaller (particularly rural) consumer stores are beginning to cluster. Soon at the regional level (Chiriqui and Veraguas) there will exist in effect one or more "mini-federations" of consumer co-ops. This positive development should be allowed to expand at its own pace, and irregardless of external assistance it most likely will. This is the way the consumer co-op movement should have grown in the first place--from the bottom-up.

## VI. OTHER INSTITUTIONS: THEIR PERFORMANCE UNDER THE O41 LOAN

### A. Agricultural Development Bank

1. SIGNIFICANCE OF THE O41 LOAN: Prior to the O41 Project the BDA did not have a lending program specifically for cooperatives. It lent to individual or group borrowers, but the latter category consisted predominantly of asentamientos or group farms. There existed few BDA employees with co-op experience. No regulations governing co-op lending and sub-lending had been formulated. And client or credit project approval criteria definitely favored larger rural producers with clear title to their land.

The O41 Project changed this situation permanently. A so-called "Co-operative Window" now exists in the BDA. The Revolving Credit Fund represents 10 percent of the Bank's outstanding loan portfolio (which totals about \$72 million) and 32 percent of its entire lending to group borrowers. Moreover, according to the Bank's Annual Report for 1980, the delinquency rate on cooperative loans does not exceed 5 percent. Formerly a section of the Group Loans Division of the BDA, Cooperative Credit has been elevated to the status of a separate department. This Cooperative Department has its own Director, an Auditor-Accountant, Secretary, and five regional supervisors. From both an institution-building and economic development perspective, these achievements under the O41 Project are very significant.

They also developed very slowly. The Revolving Credit Fund was established in February 1975. Loan regulations and procedures were designed by March of that year, and the first \$860,000 disbursement of AID loan funds was made in June. Nonetheless, only four loan projects were formulated in 1975, and only eight more in each of 1976 and 1977. It was only in 1978 that O41 Project lending began to catch fire: 20 projects were formulated that year and 23 in 1979. Today the awakened demand for production credit, working capital, and infrastructure/equipment loans on behalf of rural cooperatives is much too large to be satisfied with the resources presently assigned to the Revolving Credit Fund. The Manager of the Group Credit Division of the BDA (Credito Asociativo) estimates that the cooperative portfolio should expand by \$4 million to meet present demand.

2. OBSERVED STRENGTHS: The evaluators were very impressed with the quality of BDA staff assigned to the Group Credit Division, and particularly its informed Director, Rodrigo Botello, who has provided excellent support to the 041 Project and displays an enlightened willingness to coordinate closely with IFACCOOP, COAGRO, and FEDPA. The Bank appears to be quite open about admitting its deficiencies and is implementing some very important corrective innovations at this time. Thanks to a BID loan the BDA is installing a Computer Processing Division to expedite loan processing operations. It is creating a computerized data bank to enlighten its choices about which borrowers deserve priority assistance, and to evaluate the impact of its loans on the clients it finances. To improve co-op client use of 041 Revolving Loan Funds, the BDA is preparing a simple-language version of the Fund's credit regulation's for distribution to co-op management and directors. The BDA has backstopped some of its 041 loans with the assignment, at bank expense, of professional managers (five in all) to recipient cooperatives. In conjunction with MIDA it has sponsored technical seminars for co-op personnel in crop and livestock production practices for which they have received financing. It has assisted several co-ops with the design of their credit packages, and several cooperatives can now prepare these packages without assistance. BDA field supervision of co-ops with 041 financing is generally conducted on at least a monthly basis.

Perhaps what most impressed the evaluators about Botello and his staff is that they are truly enthusiastic about lending to cooperatives, and truly proud of BDA achievements in this area. They wish to do even more. The Group Credit Division is planning intensified training of BDA central and regional staff in cooperative subjects. It plans to hire an agronomist to help support technical training and supervision of co-op borrowers. It is designing a model contract committing co-op borrowers of 041 funds to the purchase of audit services, and it plans to develop with IPACCOOP an auditing format which more closely meets the Banks needs. Regarding the federations, the BDA would be delighted to support COAGRO's involvement as an intermediary (like FEDPA) in providing credit to its affiliates. And finally, the Bank is willing to discuss arrangements with IPACCOOP, FEDPA, and COAGRO to assist in the financing of their credit supervision costs.

3. OBSERVED DEFICIENCIES: The BDA has already overcome many deficiencies, including its own inexperience in co-op lending. It has progressively decentralized loan supervision and local analysis and approval of loans at the regional level. Loan approval delays are fewer and loan disbursement is becoming much more agile. Still there remains considerable room for improvement. Local and regional-level coordination remains a problem. It is theoretically possible for a co-op farmer in Natá, for example, to get four separate production loans for the same (tomato) crop: from his credit co-op, agricultural co-op, the Nestle Company, and from the BDA as an individual farmer.

The evaluators encountered several cases where recipient co-ops of O41 resources did not have a copy of their BDA loan contract (because all copies had remained at the regional Bank office) and were ignorant of the interest and repayment terms of what they had borrowed. One co-op paid derechos de tramite (loan request expenses) of \$228.49 and subsequently had its approved loan cancelled, but the derecho was not refunded. The BDA penalizes co-op borrowers who sell to IMA because it continues to charge them interest on their loans even though IMA takes delivery of their harvest but does not pay off the Bank for several weeks and even months. And finally, the BDA does not yet have a system of reporting O41 loan balances which are overdue, and by how long (days, months). Despite verbal assurances that the rate of delinquency on O41 loans did not exceed 3 percent, and the 1980 Annual Report statement that the rate did not exceed 5 percent, the Bank was unable to provide the evaluators with a report showing the actual amount of delinquent balances as of a given date.

RECOMMENDATION: It is recommended that the BDA--together with IPACOOOP, FEDPA, and COAGRO representatives--establish a Co-ordinating Committee in each region to screen sub-borrowers of O41 funds and prevent the occurrence of multiple production loans made to the same individual.

RECOMMENDATION: Upon initial approval of a loan contract, the BDA regional supervisor should make certain the co-op borrower receives a copy. Even if the contract is retained at the Bank for additional signatures, the co-op's representative should be given a xerox copy of the document that has been initially signed. In their subsequent visits to co-ops for loan supervision purposes, BDA supervisors should make sure that the co-op's copy of loan documentation is complete, properly understood, and loan records adequately stored. BDA technical assistance to co-op borrowers in organizing their files appears necessary in many instances.

RECOMMENDATION: In the event of cancelation or disapproval of a co-op loan request, the BDA should immediately refund that client's derecho de tramite.

RECOMMENDATION: Once a harvest delivery from co-op members to IMA has been made, for which the BDA retains first claim for repayment of loan obligations, interest charges to the co-op borrower must cease as of the delivery date or they must be transferred to IMA. For the co-op producer to pay extra interest to subsidize IMA's inefficiency and delays is highly inequitable.

RECOMMENDATION: Every co-op recipient of O41 loan funds should be required to place these resources in a special bank account so that use and repayment of sub-loans to individual borrowers can be monitored more effectively.

RECOMMENDATION: The BDA should establish the capacity to report O41 loan balances on a monthly basis. Overdue balances should be classified as less than 30-days, 30-60 days, and more than 60 days delinquent. The delinquency report should be made by type of cooperative--Credit (if applicable), Consumer, and Agricultural or Multiple Service. Each cooperative federation as well as IPACCOOP should receive a monthly report of O41 delinquency and balance available for lending (net of funds already committed but not disbursed) from the Revolving Credit Fund.

### B. Autonomous Institute of Panamanian Cooperatives

One of the primary purposes of the O41 Loan was to strengthen the institutional capability of the Ministry of Agriculture (MIDA) to support the rural cooperative movement. At the time the Loan was designed and approved, Panama did not have a cooperatives promotion agency as such. Rather, what existed was a National Department of Cooperatives (DENACOOOP) located within MIDA's Social Promotion Division. In those days DENACOOOP was an inconsequential operation consisting of some 12 employees. Once the O41 Loan was approved, DENACOOOP was upgraded to a Division and became DINACOOOP in June 1976 with a staff of 100 (80 professionals and 20 support personnel). Over the Project period DINACOOOP organized three regional offices and gradually acquired a staff of 150 by 1980--111 professionals and the rest support personnel. Included in this growth were several units contemplated in the O41 loan: an Auditing Department, a Statistics and Evaluation Department, and a Department of Education. Simultaneously, the O41 Loan established a Project Authority known as PRODECOOP, also located within MIDA. PRODECOOP's primary responsibility was coordinating Project implementation activities, particularly institutional development investments such as the agronomic technical assistance and management subsidy components. In July 1980 a single cooperative promotion agency called IPACCOOP was formed to replace both DINACOOOP and PRODECOOP.

1. PERFORMANCE INDICATORS: Like the BDA, DENACOOOP/PRODECOOP got off to a fairly rapid in meeting initial conditions for loan disbursement. A Project Coordinating Committee--consisting of the Ministries of Agriculture, Planning, Commerce, the BDA, COAGRO, FEDFA, FECCOPIAN, and USAID--was initiated in early 1975. A Project Implementation Plan with budget and activity targets, a comprehensive evaluation and quarterly reporting system, and both the Audit and Statistics Units were established by May 1975. But then, as was the case with the BDA, Project implementation bogged down. Only 6 co-op audits were completed in 1975; 11 months passed without a single Project implementation letter between 1975-1976. By the end of the Project's second year less than a quarter of its Institutional Development budget had been spent, and by the end of 1978 expenditures had barely reached a third of budgeted re-

Project implementation was delayed for a variety of alleged reasons including (1) a very unstable international political environment between the U.S. and Panama; (2) high turn-over in USAID personnel, including four changes of Mission Director in four years; (3) the adsorption of PRODECOOP within the Ministry of Agriculture, with a consequent distraction of energies and resources intended for Project use; (4) unsuccessful leadership in the Project Authority (first, a passive Director, followed next by a conflictive one); (5) the delayed arrival of external advisors; and other reasons. In general it can be said that prior to 1979 PRODECOOP/DINACOOP displayed little institutional effectiveness.

In January 1979 Euclides Tejada (an ex-assistant manager of the BDA) was appointed Director of PRODECOOP. Under his energetic leadership the O41 Project caught fire. In the 13 months following Tejada's appointment nearly half of all Revolving Credit Fund resources were finally disbursed; in this same period 46 percent of all Institutional Development funds were spent. In 1979 the Auditing Department of DINACOOP covered 29 co-ops; the achievement was repeated in 1980. In 1979 the First Cooperative Census was implemented, the Project reporting and evaluation system was redesigned (for the third time), an Annual Plan of Activities was established, and the COOFLEX production credit planning instrument was introduced. Finally, Tejada has supervised the reorganization of DINACOOP and PRODECOOP into a single cooperative promotion agency, IPACCOOP.

2. OBSERVED STRENGTHS: The appointment of Euclides Tejada to direct the O41 Project in 1979 was an excellent choice. As an agronomist he has practical familiarity with rural production; he is a cooperative specialist; he also has extensive experience with production credit, having worked many years for the BDA. It is hard to imagine a more qualified candidate for providing the Rural Cooperative Development Project with the leadership it has always required. As Acting Director of IFACCOOP, he has surrounded himself with a quite excellent group of dedicated and talented staff. Under Tejada IPACCOOP is expected to embark soon on a decentralization plan designed to reduce the number of specialized personnel assigned to Panama City (the Central Office) and to reassign them to four regional offices: Western Zone (Chiriquí, Bocas del Torro), Central Zone (Veraguas, Coclé), Azuero Zone (Herrera, Los Santos), and Eastern Zone (Panama, Darien, Colón, and San Blas). This decentralization is intended to place legal, auditing, accounting, education, management, and agronomic services as close as possible to the co-ops themselves--this to reduce service delivery costs and make possible more intensive assistance with better follow-up.

A major strength of the actual and proposed IPACCOOP operations consists in the fact that this agency is, as its name says, an autonomous cooperative promotion institution. Its policies and general execution is monitored by a Board of Directors composed of Government and cooperative movement representatives. Furthermore, by law all co-ops in Panama will be expected to set aside each year 5 percent of their net profits as a contribution to financing IPACCOOP activities. This excellent arrangement inevitably makes IPACCOOP quite accountable to the cooperatives it was created to serve, and such accountability can be expected to protect the Institute from slipping into a traditional bureaucracy of the government type.

3. DEFICIENCIES: The evaluators found IPACCOOP field staff to be generally quite dedicated, fairly stable (there are many with 4 or more years in service to cooperatives), and with a high respect for the co-ops they serve. At the same time we found some IPACCOOP employees inadequately trained to provide the specialized kinds of services that co-ops require. On the other hand, there exists a small number of co-op managers and other employees who, by reason of their extensive practical experience in day-to-day co-op operations, are more qualified to teach co-op management skills than are IPACCOOP personnel.

RECOMMENDATION: It is recommended that IPACCOOP technical staff, particularly those expected to teach management and accounting skills to co-ops, be required to spend 2-3 weeks of in-service training per year working at rural co-ops to familiarize themselves with the problems faced by these organizations and to benefit from the teachings of experienced co-op managers or other staff. These would be "work-study" assignments, with the trainee expected to do a lot of listening, not telling. His or her professors would be co-op personnel who should design different learning experiences for the trainee.

RECOMMENDATION: It is recommended that IPACCOOP technical staff identify which co-op personnel have the best experience and teaching skills to be selected for participation in IPACCOOP-sponsored training activities as instructors. The ideal is for co-op personnel to share knowledge and skills, to teach each other. The preferred role for IPACCOOP staff is not that of trainers but rather of catalysts who assist co-op personnel to learn from each other.

IPACCOOP field staff may be fairly stable with regard to continuous service to the cooperative movement, but the normal situation is for such staff to be transferred frequently, if not between regions than reassignment of coverage responsibility to different cooperatives. In the case of highly-specialized IPACCOOP personnel--like auditors--it is not productive for co-ops to receive constantly changing advice from different professionals. Some degree of continuity requiring the

same professional to assist the same co-op clients over-periods of 1-2 years would appear to be useful, if not a prerequisite, for the effective communication of technical skills.

RECOMMENDATION: Auditors should be assigned on a decentralized regional basis to the greatest extent possible. Each auditor should compliment his audit of a co-op with at least two follow-up visits to ascertain whether audit recommendations are being implemented.

RECOMMENDATION: All field staff should have a coverage responsibility for a minimum number of co-ops (say 4-5) that they are responsible for visiting several times a year irregardless of the specialized skill of the employee. Such continuity is vital to improved communications because repeat visits breed greater trust, more honesty, better willingness to learn as well as listen.

IPACOOOP has made a good beginning with its Annual Work Plan and activities reporting system, but there is room for improvement. At the present time the majority of activity goals are expressed by non-quantifiable indicators. For example, the goal--"teach bookkeeping to treasurer"--could be achieved by a single one-day or one-hour visit, or it might entail many training sessions and many visits; however, the existing IPACOOOP reporting system would classify both responses with an identical check-mark signifying "activity achieved". Similarly, the goal--"organize Education Committee"--would receive the same check-mark whether or not the Committee, once organized, ever bothered to meet or organize educational activities. In other words, the reporting system should endeavor to quantify activity indicators in a meaningful way so that relative intensity of assistance can be measured.

RECOMMENDATION: Co-op visits and other IPACOOOP service activities should be quantified in terms of person-days.

RECOMMENDATION: Each co-op assisted should be encouraged to keep a book in which are recorded the names and dates of all visitors, purpose of the visit, general comments (including recommendations or agreements reached), and signature of the visitor.

The statistics-gathering instruments used by IPACCOOP to date leave much to be desired. The Cooperative Census has yielded very incomplete results. When the evaluators requested an up-to-date list of Panamanian cooperatives, by region, IPACCOOP statistics gave us a total of 218 co-ops. However, of these there existed membership estimates for only 143 (65 percent), while the number of co-ops with data on estimated share capital, total assets, or other basic information was considerably less. Many reasons were given for the inadequacy of the Cooperative Census, among them: (1) lack of interest by co-op leaders and employees, (2) lack of support from co-op federations, (3) ambiguity of the questionnaire format, (4) lack of sufficient staff resources, and most importantly (5) lack of up-to-date financial records at the co-op level.

The last reason is not the fault of the co-ops necessarily but rather the result of existing accounting regulations that allow co-ops in Panama to close their fiscal year after any 12-month period they like. Of the cooperatives visited by the evaluators, only about half of them used the conventional calendar year of January to December. Other options encountered--in order of popularity--were July to June, April to March, February to January, March to February, August to July, and September to August. In the absence of a law requiring all cooperatives to use the same fiscal year, the only solution from the census viewpoint is to collect financial data on the operations of the most recent completed year.

RECOMMENDATION: The five-year format used by the evaluators to collect basic co-op performance data appears to be more useful and less trouble than the Census format which requests a comparison of the last two years. If a copy were always left on file at the co-op, and up-dated little by little as fiscal years end and financial statements are completed, census data would be much less work to collect. The five-year format also allows a better perspective of co-op performance trends.

RECOMMENDATION: IPACCOOP might encounter more interest in census data collection among co-ops if (1) a copy of the questionnaire (fully completed) were left with the co-op, and (2) IPACCOOP took the trouble to teach co-ops how to use these data to analyze their own performance, set more realistic performance targets, and diagnose weaknesses.

## VII. RECOMMENDATIONS FOR A FOLLOW-ON COOPERATIVE LOAN PROJECT

### A. Justification

The O41 Loan was an extremely successful development project. It took the existing rural cooperative movement and reoriented it to assisting much smaller and poorer rural producers. It provided a mechanism whereby many of Panama's small farmers and ranchers acquired access for the first time to production credit. This credit, in turn, allowed hundreds of rural households to invest in high-value commodity production--utilizing yield-increasing cash inputs on an intensive basis--to capture income opportunities never before available to them. The development bang for the buck was extraordinary: (1) in farm income, (2) in member share capital investment, (3) in co-op membership growth, (4) in co-op profits, and (5) in expansion of fixed assets and equipment. For every balboa in loan capital disbursed from the Project's Revolving Loan Fund, there were generated two balboas of aggregate lending to farmers. Loan repayment performance was so good that co-op borrowers have become the preferred client of the Agricultural Development Bank. Two strong cooperative federations were consolidated by the Project, and the union of their combined interests forced the establishment of a new, autonomous cooperative promotion agency together with a new Cooperative Law. Projects this successful are rare in the development business. When they occur, it is imperative that they be expanded and replicated.

Now that it is off the ground, now that it has generated great momentum, there are very compelling reasons why the Rural Cooperative Development Project--with a follow-on loan--could become an even greater success:

1. CREDIT DEMAND: The O41 Project has awakened a huge demand for production credit. FEDPA estimates its excess credit demand at \$3.5 million while the BDA estimates that of Agricultural cooperatives at \$4.0 million. This demand is very real and growing rapidly. It is coming from cooperatives which have now handled a number of credit packages and are experienced. In part the demand comes from borrowers who are also experienced with production credit because they have had multiple loans; and the majority of these are investing in co-op share capital at an accelerating rate (currently about 22 percent growth per year) to acquire ever larger claims on their co-ops' loan resources. To stifle this demand will destroy a development opportunity that, at least among small farmers, is relatively rare.

2. MULTIPLIER EFFECT: Even with late disbursement of Revolving Credit Fund resources (half of which were delayed until 1979), the O41 Project still achieved an aggregate lending level of \$13.9 million (see page 9) against Fund resources of \$7.25, which represents almost a doubling. With experienced co-ops now approaching an experienced BDA, disbursements would undoubtedly move much more quickly and reflows would be relet with even greater efficiency. A triple or even quadruple expansion of aggregate lending from Revolving Fund resources is a definite possibility.

3. INCOME IMPACT: As documented in Chapter III, crop investments generated net incomes ranging from 27 to 95 cents per balboa of expenditure, with an average of 67 cents. Livestock investments ranged from 19 cents to \$4.21 per balboa of expenditure, with an average of \$1.65. Meanwhile, the average FEDPA sub-loan was \$3,260 and the average COAGRO sub-loan was \$2,612 according to data gathered in the co-ops sampled. For the sake of simplicity, let us assume an average sub-loan of \$3,000 for all co-op sub-borrowers. Because the sub-borrower is required to put up 10 percent of the total credit package, the average sub-borrower investment increases to \$3,300. At the above average rates of return the typical sub-borrower would earn between \$2,211 and \$5,445 in net income. Seldom in the developing world have income opportunities this dramatic been documented. They are so dramatic, in fact, that some 30 percent of all farmers interviewed rented the land on which they grew their principal commercial cash crop. Truly, here is an opportunity to generate handsome income opportunities for disadvantaged rural producers.

4. INSTITUTION-BUILDING: It took the O41 Project quite a while to become successful. DINACoop did not begin to be effective until 1979, and neither did the BDA. Both now have the momentum to become even more effective. IPACoop plans a decentralization which will locate co-op support professional services much closer to their intended clients. BDA is developing computerized accounting and evaluation systems to improve its loan processing efficiency. Designation of COAGRO as a credit intermediary, support for agronomic services, and partial subsidy of IPACoop and federation loan supervision costs are all initiatives programmed for realization by the BDA in the near future. With this quality of enthusiasm and coordination, an outstanding institutional support system could emerge in benefit of the rural cooperative movement.

5. BOTTOM-UP CONSOLIDATION: In the fields of Credit, Consumer, or Agricultural and Multiple Service, the stronger co-ops of each type are beginning to assert their strength in consolidating service linkages with smaller co-ops. Joint buying and marketing operations are emerging. Joint educational and technical assistance initiatives lie in the near future. Here is a unique opportunity for external assistance agencies to support ambitious development models conceived

by farmers for farmers.

6. COAGRO'S SURVIVAL: If a follow-on Cooperative Development Loan is not approved, one of the costs to be paid for this decision will be the loss of COAGRO. This Federation was the direct outgrowth of a GOP/AID project undertaken in 1967 to provide technical assistance to subsistence farmers. Since COAGRO's legal creation in 1969, USAID/Panama has consistently supported and otherwise encouraged COAGRO for more than a decade. Most of COAGRO's major investment decisions were made with USAID knowledge and approval. The Agency therefore has a debt of conscience to continue supporting the Federation. A refinancing plan conducted on a matching basis with share capital investments by affiliates would once and for all give the Federation the breathing space it needs to recuperate its financial health. On the other hand, if COAGRO fails it will be a disaster many times larger than FECOPAN's. Its loss would certainly neutralize any credibility gained by USAID with the O41 Loan, and it could permanently tarnish the newly-achieved positive reputation of the rural cooperative movement. Finally, it would constitute a severe economic shock to many affiliated co-ops because they would lose not only a significant equity investment but the very input delivery system on which their high levels of technification are so heavily dependent.

B. The Volcán Conference: Field Staff Ideas for a Follow-On Cooperative Loan

For three days (May 1-3) the evaluators met with their Panamanian research assistants in a conference held in Volcán (Chiriquí). During the first two days the eight research assistants gave individual verbal presentations describing the strengths, weaknesses, and problems facing the co-ops they had been assigned to interview. Each assistant was asked to give three scores for every co-op visited-- scores based on his or her subjective overall impression of the cooperative's social and economic performance. Finally, on the last day of the Volcán conference the research assistants were asked to meet in two separate work groups to discuss their recommendations for a follow-on Cooperative Loan Project. In particular, they were asked to identify (based on their research at the co-op and farm levels) what should be the Project's objectives, its geographic coverage, what problems it should address, and what activities it should undertake. Since six of the eight research assistants are IPACCOOP field staff, their opinions represent an extremely timely host-country contribution to Project design. We therefore summarize them below.

SOCIAL AND ECONOMIC PERFORMANCE INDICATORS: Fundamental to the conclusions of the Panamanian research assistants were their subjective perceptions of the social and economic performance of the co-operatives they visited. For each of three indicators they were asked to score cooperative performance on a scale of 1 to 10, with the highest possible score being a ten. The results were as follows:

PERFORMANCE SCORES FOR 23 COOPERATIVES SURVEYED

<u>CO-OP IDENTIFICATION</u>		<u>SOCIAL PERFORMANCE SCORES</u>			<u>ECON.</u>	<u>TOTAL</u>
<u>Name/Location</u>	<u>Type</u>	<u>Co-op to</u>	<u>Members</u>	<u>Average</u>	<u>SCORE</u>	<u>SCORE</u>
		<u>Members</u>	<u>to Co-op</u>			
<b>CHIRIQUI</b>						
San Antonio	Cr	8	3	5.5	8	13.5
Hortícola	Ag	6	2	4.0	10	14.0
Avícola	Ag	10	3	6.5	6	12.5
Ag. Industrial	Ag	10	10	10.0	10	20.0
María Auxil.	Con	8	4	6.0	7	13.0
Total		<u>42</u>	<u>22</u>	<u>32.0</u>	<u>41</u>	<u>73.0</u>
Average		8.4	4.4	6.4	8.2	14.6
<b>VERAGUAS</b>						
Porv. Guarumal	Cr	9	4	6.5	7	13.5
Ed. Veraguence	Cr	7	9	8.0	10	18.0
Despertar Cam.	AMS	4	4	4.0	7	11.0
Esperanza Cam.	AMS	9	8	8.5	9	17.5
Juan XXIII	AMS	10	10	10.0	10	20.0
Consumo Verag.	Con	4	3	3.5	8	11.5
Total		<u>43</u>	<u>38</u>	<u>40.5</u>	<u>51</u>	<u>91.5</u>
Average		7.2	6.3	6.8	8.5	15.3
<b>HERRERA-LOS SANTOS</b>						
San Sebastian	Cr	7	7	7.0	6	13.0
Gladys DuCasa	Cr	9	9	9.0	9	18.0
José Gutierrez	Cr	8	8	8.0	7	15.0
Agua Buena	Ag	7	3	5.0	5	10.0
Santeña	Ag	8	8	3.0	8	16.0
Consumo Azuero	Con	7	7	7.0	8	15.0
Total		<u>46</u>	<u>42</u>	<u>44.0</u>	<u>43</u>	<u>87.0</u>
Average		7.7	7.0	7.3	7.2	14.5
<b>COCLE</b>						
Eric del Valle	Cr	10	8	9	10	19.0
Natariegos Un.	Cr	8	5	6.5	7	13.5
Productores	Ag	7	4	5.5	6	11.5
La Constancia	Ag	6	5	5.5	5	10.5
Behuco-Chané	Ag	8	7	7.5	8	15.5
La Libertad	AMS	7	4	5.5	5	10.5
Total		<u>46</u>	<u>33</u>	<u>39.5</u>	<u>51</u>	<u>80.5</u>
Average		7.7	5.5	6.6	8.5	13.4
<b>OVERALL AVERAGE</b>		7.7	5.9	6.8	8.1	14.4

Several general observations about these scores are relevant. First, in each region there exists at least one outstanding cooperative (with a score of 18-20) that could be considered a "model". Second, there is at least one outstanding representative of each co-op type, with the possible exception of consumer. Third, overall the average scores for economic performance are significantly higher than scores for social performance, which reflects the generalized neglect of emphasis on member education within the cooperatives surveyed. And finally, within the area of social performance, the indicator of co-op services to members shows generally higher scores than the performance of members in support of their co-op. This last tendency reflects inadequate membership investment in share capital (and other measures of participation).

OBJECTIVES FOR A FOLLOW-ON COOPERATIVE LOAN PROJECT: As their first and foremost objective for a follow-on loan project (hereafter identified as "the Project"), the Panamanian research assistants suggested: "The strengthening of those cooperative organizations that show deficient economic and social performance indicators." The singular importance of this objective is that it emphasizes the need to establish priorities, not only between weaker and stronger cooperatives but between social and economic activities. It also implies the establishment of a viable information system that permits timely measurement of performance deficiencies.

The second Project objective was "to promote cooperative integration, by type and by region". In this regard the research assistants identified a strategy of selecting the "model" co-ops as a focal point or growth pole around which to build integrative relationships with smaller or weaker cooperatives. Integration is viewed in terms of economic services (joint buying, selling, processing, transporting, etc.) and social services (education, training, technical assistance).

The third Project objective was "to recruit qualified personnel for institutions that support the cooperative movement (particularly IPA-COOP), and to provide them with intensive in-service training".

PROJECT COVERAGE: The research assistants believed the Project should be on a national scale. All provinces except San Blas were included in the coverage area. In addition to the co-op types covered under Loan O41 (Credit, Agricultural, Multiple Services, and Consumer) the research assistants suggest that Fishing, Forestry, and Salt-mining cooperatives also be included.

PROBLEMS TO BE ADDRESSED: The research assistants identified 14 key problems which the Project should address, as follows: (1) need for more aggressive and intensive education of co-op members, (2) lack

of adequate co-op information systems, both to monitor cooperative performance and services to members as well as to measure benefits (income, yields, etc.) at the farm level; (3) low levels of member share capital investment in their cooperatives; (4) lack of secure market outlets for co-op member production at remunerative prices; (5) lack of sufficient resources to meet existing credit demand of co-ops for production credit, working capital, and infrastructure or equipment investments; (6) lack of adequate technical assistance in the areas of farming, co-op administration, accounting, auditing, and marketing; (7) lack of separate accounting controls for O41 Loan financed resources at the co-op level; (8) excessive delay in global loan disbursement from the BDA, Revolving Loan Fund; (9) excessively short repayment periods for livestock loans; (10) lack of financing for land purchase; (11) land scarcity, lack of title, or insecure land tenure for many co-op members; (12) excessively inflexible lending criteria; (13) inactivity of co-op directors in some instances; and (14) lack of transportation facilities for IPACOOOP personnel providing technical assistance to co-ops in the field.

PROJECT COMPONENTS OR ACTIVITIES: The principal Project components recommended by the research assistants were: (1) an expanded Revolving Credit Fund, operating under reformed loan criteria; (2) intensified cooperative education and training; (3) a marketing program; (4) more careful monitorship and control of Project resources; (5) a program to assist co-op members in acquiring secure tenure to land, or to increase their present holdings; (6) intensified technical training of IPACOOOP field staff; and (7) establishment of a practical methodology or information system for Project planning, monitoring, and evaluation.

### C. Consultants Recommendations for a Follow-On Cooperative Loan

In the following pages is presented a tentative Project profile for a follow-on Cooperative Loan. This profile seeks to combine the observations and recommendations of the Panamanian research assistants who participated in the present evaluation with those of the principal consultants. The profile also incorporates suggestions for a follow-on loan received from representatives of the different cooperatives visited, the cooperative federations, and BDA and IPACOOOP.

The proposed Project consists of four large areas of activity which are subdivided into many sub-components. Of the sub-components, some represent continuation of existing O41 Loan activities while others are brand new. The total loan-financed budget for the Project is \$11.3 million for a three year period. A Project Logical Framework is included at the end of the descriptive narratives on suggested Project components.



### E. Project Objectives

Each of the four broad areas of Project activity would have a specific objective and one or more indicators of achievement of that objective. The four primary objectives would be as follows:

1. **REVOLVING CREDIT FUND:** To provide sufficient credit to rural cooperatives and sub-borrowers, on a timely basis, for use in production credit, operating capital, and infrastructure/equipment investment.

Achievement Indicators: (a) Each year at least 80 percent of co-op member demand for credit (farmers and ranchers only) is satisfied. Demand is defined as the total value of loans approved by co-op Credit Committee. (b) Approval of global loan requests by Project fiduciary agent (BDA) do not entail delays which average more than 45 days, from date of submission to date of approval.

2. **SPECIAL ASSISTANCE TO MOST DEFICIENT CO-OPS:** To identify those cooperatives with the most deficient performance indicators and provide them with assistance on a priority basis.

Achievement Indicator: For all co-ops assisted, achievement of a minimum of 25 percent financial autonomy (membership equity as a percentage of total assets), monthly meetings by all co-op committees, and the existence of an active membership education program.

3. **COOPERATIVE INTEGRATION:** To promote cooperative integration, by type and by region, based on the sharing of economic services (joint buying, selling, transport, processing, etc.) and social services (education, training, and technical assistance on an inter-cooperative basis.

Achievement Indicator: Existence of at least six "mini-federations" built around "model" co-ops which offer smaller and weaker cooperatives of the same type or region a variety of support services.

4. **INSTITUTION-BUILDING COMPONENT:** To strengthen the recruitment, training, and mobilization of IPACOOOP field staff so that they can offer more effective services to co-ops on a decentralized basis.

Achievement Indicator: The existence of four regional IPACOOOP offices, and of the staff of each office a unit of four professionals (auditor, agronomist, sociologist, economist-accountant) will work exclusively with co-ops directly assisted by the Project.

F. Project Component : Revolving Credit Fund (\$9,000,000)

REFINANCING OF COAGRO'S COMMERCIAL DEBT: A sum of up to \$3 million of the additions to the Revolving Credit Fund would be designated for the refinancing of COAGRO's commercial debt. The funds would be made available exclusively on a matching basis, or 2 balboas of refinancing money for every balboa of new member share capital contributed by COAGRO. Any unused balance from these funds would, after one year, enter the Revolving Credit Fund for general lending purposes. Refinancing would be offered at 5 percent interest with a repayment period of five years.

OTHER CONTRIBUTIONS TO THE REVOLVING CREDIT FUND: Of the remaining \$6 million in resources to expand the Fund, \$2.5 million would be designated for on-lending to COAGRO and its affiliates, with not less than 75 percent (\$1.9 million) to be reserved for production credit loans to individual farmers. Another \$2.5 million would be designated for on-lending to FEDPA affiliates. Finally, \$1 million would be reserved for loans to Consumer cooperatives.

COAGRO AS CREDIT INTERMEDIARY: Under the Project, COAGRO would acquire the responsibility of credit intermediation services along similar lines as those presently offered by FEDPA. In other words, COAGRO (with IPACOOOP help) would: (1) assist its affiliates to prepare credit project requests; (2) would review and correct these loan proposals, aggregate them for several affiliates, and present them to the BDA for approval and disbursement; (3) would redistribute the EDA loan disbursements, supervising their use and distribution as sub-loans; and (4) would be responsible for loan collection and repayment to the Revolving Fund.

REVIEW AND REFORM OF CREDIT CRITERIA: As a complementary action to expanding the Revolving Credit Fund it is necessary to review and improve credit policies and loan criteria. One proposed innovation is to increase the required borrower contribution from 10 percent to 20 percent of the value of the credit project requested. This contribution would be in the form of member share capital investment in the co-op. It is already a prerequisite of FEDPA loans and has worked very successfully as a capital mobilization mechanism. Other credit policy or loan criteria revisions would include (1) specification of prerequisites for approval of loans for land purchase; (2) lengthening repayment periods for livestock loans; (3) placing a herd size limitation on livestock financing; (4) standardization of interest payment due dates between sub-loans and co-op global loan obligations to their federation; and (5) other changes, as appropriate.

G. Project Component : Special Assistance to Deficient Co-ops  
(\$100,000)

The purpose of this component is to concentrate technical assistance on selected cooperatives which need the most help, i.e., which have the most deficient indicators of economic and social performance. They would be identified using a data collection instrument similar to that employed in the 041 Project Evaluation (see Annex C) combined with a scoring system such as that shown on page 65. In each regional office of IPACCOOP, a four-person team would be assigned to work (exclusively if necessary) with the problems of the selected cooperatives. This unit would consist of (1) an auditor, (2) an economist-accountant, (3) an agronomist, and (4) a sociologist or education specialist. Salaries and travel expenses for this personnel would be paid by IPACCOOP; vehicles and limited maintenance (gas and oil) would be provided by the Project (see Institution-Building Component).

It is proposed that 12 co-ops be selected for top-priority special assistance in the first year of the Project, 16 co-ops in the second year, and 20 in the third year. Whether a co-op receives more than one year of intensified technical assistance would depend on the decision of IPACCOOP based on end-of-year evaluation of the co-op's performance. Essentially there would be four areas of technical assistance, as follows:

1. AUDIT: Each selected co-op would be audited on two occasions during the year: an initial intensive audit at the beginning of the year plus a follow-up audit after six months. The same auditor would conduct both audits whenever possible, and every effort would be made for this professional to continue auditing the same cooperatives throughout the Project period. Following each audit a detailed meeting with co-op directors and employees would be held to review audit findings and discuss required actions to overcome deficiencies. The auditor would be assigned a training responsibility. For each audited co-op he/she would provide two days of technical assistance and training services per trimester to help co-op personnel overcome the deficiencies identified in the audit. The achievement indicators for a single auditor over the Project period would be the following:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
PER AUDITOR				
Co-ops audited	3	4	5	5
Total audits	6	8	10	24
Tech.assistance and training (days)	24	32	40	96

Auditor salaries would be paid by IPACCOOP but each co-op assisted would be charged an auditing fee to partly finance the costs of this service. As a prerequisite for receiving credit, every co-op would be required to sign an agreement which commits them to receiving and financing

2. ECONOMIST-ACCOUNTANT: Each co-op selected for intensive assistance would be assisted by an IPACOOOP economist-accountant. His/her duties would be the following: (1) to work on a continuing basis with the co-op manager and accountant to solve general problems of co-op administration, (2) to make sure co-op records are properly organized and kept up-to-date, (3) to work with the Credit Committee to design credit project proposals, teach credit supervision and evaluation skills, (4) to train principal co-op directors in basic accounting concepts, budgeting, financial planning, and the analysis of financial statements; and (5) serve as a technical liaison between the co-op and outside institutions such as the BDA, IMA, MIDA, and IPACOOOP. In conducting these functions, the IPACOOOP economist-accountant will serve as a credit project analyst who will screen co-op proposals before they are submitted to the federation or the Bank. During the year, for each co-op assisted, the economist-accountant will provide three days per month of technical assistance, and he/she will provide at least three two-day workshops to co-op directors and employees concerning accounting skills and credit management. The achievement indicators for a single accountant-economist over the Project period would be the following:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
PER ACCOUNTANT				
Co-ops assisted	3	4	5	5
Credit proposals reviewed	3	4	5	5
Co-op level technical assistance (days/yr)	99	132	165	396
Co-op level workshops in credit and accounting	9	12	15	36

3. AGRONOMIST: Each co-op selected for intensive assistance would receive special supervision from an IPACOOOP agronomist/livestock specialist. His/her duties would be the following: (1) to assist the co-op in technical aspects of designing its production and credit plans; (2) to provide technical training workshops for credit users; (3) to provide assistance to federation-sponsored agronomists in the introduction, supervision, and post-harvest use of farm management record-keeping systems; (4) to assist in the supervision of farmer-paratechnicians utilized by the co-op; (5) to serve as a liaison between the co-op and IMA or other market outlets to promote cooperative marketing activities. In conducting these functions the IPACOOOP agronomist would provide at least three days per month of technical assistance at the co-op level, and he/she would visit all co-op farmer-paratechnicians at least once a month. The agronomist would also be responsible for summarizing data gathered in the farm management record-keeping system, and for using its results in co-op credit planning and evaluation. Finally, the agronomist would be expected to organize no less than 4 farmer-level technical training activities per co-op per year. The achievement indicators for a single agronomist are the following:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
PER AGRONOMIST				
Co-ops assisted	3	4	5	5
Credit proposals reviewed	3	4	5	12
Co-op level technical assistance (days/yr)	99	132	165	396
Paratechnicians supervised	12	16	20	20
Farmer-level technical workshops organized	12	16	20	48

4. EDUCATION SPECIALIST: The final member of the IPACCOOP special assistance team for cooperatives with deficient performance indicators would be an Education Specialist. Among his/her duties would be the following: (1) to work with each co-op's Education Committee, assisting it to become active; (2) to help each Education Committee design an Annual Education Plan, and to implement education activities called for by the plan; (3) to teach Education Committee members and co-op employees skills in the preparation of visual aids, group discussion techniques, and other teaching methods; (4) to coordinate with and assist other members of the IPACCOOP special assistance team in planning and implementing co-op training activities. The Education Specialist would provide at least three days of technical assistance per month to each co-op within his/her responsibility. He/she would be expected to help organize and participate in at least six membership education activities per co-op per year. The achievement indicators for a single Education Specialist are the following:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
PER EDUCATION SPECIALIST				
Co-ops assisted	3	4	5	5
Education Committees activated	3	4	5	5
Education Programs organized	3	4	5	12
Co-op level technical assistance (days/yr.)	99	132	165	396
Membership education activities organized	18	24	30	72

5. FUND FOR CO-OP LEVEL EDUCATION/TRAINING ACTIVITIES: Under the Project a fund to support costs of co-op level training and education activities would be established with an initial capital of \$100,000. Assuming a total of 20 co-ops identified for special technical assistance, there would be \$5,000 available per cooperative. The resources would be used on a straight 1:1 matching basis, with the co-op assisted providing one balboa for every balboa received from the fund. These resources would be available to help finance the education and training activities organized by IPACCOOP personnel of the special assistance team: namely, the auditor, economist-accountant, agronomist, or education specialist.

H. Project Component: Cooperative Integration (\$200,000)

This component is based on the discovery that in each sector of the rural cooperative movement--Credit, Consumer, and Agricultural --there exists at least one co-op of each type which has demonstrated superior growth, offers effective and well-managed services to its members, and is characterized by excellent management staff resources. These co-ops can be considered "models". The objective of the Cooperative Integration Component would be to use these model co-ops as sources of technical assistance, training, and services to other co-ops of the same region or of the same type. Each model co-op would thus become a growth pole around which other co-ops might cluster, creating a "mini-federation" based on jointly shared services and common interests. An average mini-federation might consist of 5 co-ops.

1. INTER-COOPERATIVE EDUCATION/TECHNICAL ASSISTANCE:

With the participation of IPACCOOP staff (particularly the unit for special assistance to deficient co-ops) several model cooperatives would be identified--at least four during the first year, four additional co-ops in the second year, and four more in the third year for a total of 12. For each model cooperative at least two directors or employees will be identified who are considered excellent human resources for providing technical assistance and training to the staffs of other co-ops. An IPACCOOP education specialist will assist the representatives of each model co-op to design an inter-cooperative training and technical assistance proposal to assist at least five other co-ops. Such proposals will program workshops or 6-12 day training visits for personnel of other co-ops to learn management skills, economic and social activities, etc. as practiced by the model cooperative. The costs of transportation, room and board, and miscellaneous training expenses incurred by these inter-cooperative activities will be financed on a grant basis out of an Inter-Cooperative Training Fund managed by IPACCOOP. The training staff will consist of staff of the model cooperative, who will receive modest honorariums for their services. The Fund will also pay the travel costs and honorariums of these instructors while visiting other co-ops to provide follow-up technical assistance on a scheduled basis. A preliminary estimate of achievement indicators and budget for this component is given below:

<u>Description</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
<b>ACTIVITY INDICATORS</b>				
Model co-ops (mini-feds)	4	8	12	12
Total co-ops assisted	20	40	60	60
Total trainees: other co-ops	40	80	120	120
Training workshops (days/yr)	48	96	144	288
Co-op instructors	8	16	24	24
Instructor days/yr (20 each)	160	320	480	960
<hr/> <b>BUDGET</b>				
Education Fund Expenditures	\$16,400	\$32,800	\$50,800	\$100,000

2. PROMOTING INTER-COOPERATIVE ECONOMIC SERVICES: A second \$100,000 fund would be established under the Project to finance the research and development costs of inter-cooperative economic services. Such services might include joint procurement of supplies, marketing, storage, transportation, and processing facilities. The Fund would be utilized to finance the costs of feasibility and market studies, initial service promotion, hiring local consultants, and financing specialized technical training of co-op personnel. It is expected that each model co-op or mini-federation would develop at least one joint project for the provision of economic services to its co-participant cooperatives. This would mean that there would be slightly more than \$8,000 in research and development financing from the Fund for each project. A preliminary estimate of achievement indicators and budget for this sub-component is as follows:

<u>Description</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
ACTIVITY INDICATORS				
Model co-ops	4	8	12	12
Joint projects developed	4	4	4	12
BUDGET				
R and D Fund Expenditures	\$33,000	\$33,000	\$34,000	\$100,000

I. Project Component: Institution-Building Elements (\$2,000,000)

This fourth and final component of the Project would consist of a cluster of activities which largely represent a continuation of the Institutional Development agenda of the O41 Loan. However, a number of strategic additions have been included.

1. DECENTRALIZATION OF IPACCOOP: As a service-providing agency, and particularly one which seeks to provide assistance on a priority basis to the rural cooperative movement, it is of critical importance that IPACCOOP employees entrusted with providing services be located as closely as possible to the co-ops they hope to assist. While location of field staff is important, it is equally necessary that there be continuity in the technical assistance relationship--that is to say, that the same technicians work with the same co-ops for extended periods of time. Without such continuity co-ops receive conflicting advice from different technicians, while the technicians themselves feel less of a sense of responsibility to the co-op and less accountable for the results of their recommendations.

Under the Project IPACCOOP will complete its present process of decentralization of its technical staff. There will be four regional offices, as follows: (1) Western Zone (Bocas del Torc, Chiriquí), (2) Central Zone (Veraguas, Coclé), (3) Southern or Azuero Peninsula Zone (Herrera, Los Santos), and (4) Eastern Zone (Panamá, Darien, Colón, and San Blas). Each zonal office will have a director, an administrator of general services, clerical staff, and from 8-10 technical staff including a law-

yer, 2-3 auditors, 2 accountants, 2 agronomists, 2 education specialists, and an information specialist (for statistics, special studies, data-collection in general). In other words, IPACCOOP would not maintain a pool of specialized technicians at the central office level but would give this personnel a permanent regional assignment. Whether the Eastern Zonal office will be maintained separate from IPACCOOP central headquarters in Panama City remains to be decided. Basically, the idea of the decentralization scheme is to get away from the concept of "national technical specialists". The only national-level staff of IPACCOOP would be the Director, Deputy Director, four divisional directors (Planning and Evaluation, Audit, Promotion, and Administration), appropriate support staff, and four national supervisors (for auditors, accountants, agronomists, and education specialists).

Of IPACCOOP's total decentralized field staff--which is officially responsible for assisting some 218 Panamanian cooperatives at the present time--special units of four staff members each will be organized to work exclusively with those co-ops identified for highest priority assistance. The activities of these units have been detailed previously (see Section G).

IPACCOOP will complete its decentralization with existing staff for the most part. No loan-funded resources are allocated for salary support to decentralized staff. However, the Project would contribute loan-funded financing for staff vehicles--8 per regional office and three for national supervisors.

2. EXTERNAL TECHNICAL ASSISTANCE: In this area some 48 man-months of external technical assistance by long- and short-term consultants are estimated. Of this amount, 24 man-months would be provided to COAGRO and FEDPA affiliates in the area of agricultural marketing via the services of a resident advisor. The short-term consultants would provide continuing support in the areas of staff training, farm management record-keeping, training and supervision of farmer-paratechnicians, and general Project support services. Tentatively, the external consultant inputs might be programmed as follows:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
SHORT-TERM CONSULTANTS (in man-months)				
Initial Project design assistance	3	-	-	3
IPACCOOP Staff Training	2	2	2	6
Information Systems and Farm Management	2	2	2	6
Paratechnician Program	2	2	2	6
General Project Support	1	1	1	3
LONG-TERM CONSULTANT (in man-months)				
Marketing advisor	6	12	6	24
	<u>16</u>	<u>19</u>	<u>13</u>	<u>48</u>

**BUDGET**

Total expenditures for short- and long-term consultants    \$112,000    \$133,000    \$91,000    \$336,000

3. AGRONOMIC TECHNICAL ASSISTANCE: This component would continue to provide the services of agronomists to the rural cooperative movement on a subsidized basis. However, this time their salaries would be loan-funded and their contracts would terminate after three years of service. Such a provision is necessary to emphasize that the primary role of these agronomists is to teach their skills to others, particularly farmer-paratechnicians, so that agronomic assistance does not become a permanent subsidy. Of the 20 agronomists to be financed, 10 would be assigned to COAGRO, 6 to FEDPA, and 4 to IPACCOOP for assignment to the special assistance units of each of the four regional offices. (See Section VII-G-3, pages 72-3 for a description of the agronomist's responsibilities).

The Project would also loan-fund the travel costs and honorariums of up to 150 farmer-paratechnicians. These individuals would be selected from among the farmer members of cooperatives receiving intensive assistance from IPACCOOP or those farmers routinely supervised by agronomists assigned through COAGRO and FEDPA. For each of the 20 agronomists mentioned above, he would have supervision responsibility for at least 4 farmer-paratechnicians in the Project's first year, about 5 paratechnicians in the second year, and 7-8 paratechnicians in the third. To be a paratechnician, the farmer must meet the following prerequisites: (1) be a co-op member, (2) be a full-time farmer or rancher, (3) be recognized as one of the better producers in the co-op, and (4) demonstrate superior performance (as measured by farm records) in terms of yields per hectare, net income per hectare, net income per head of livestock. The function of the farmer-paratechnician would be to teach his/her superior farming practices to other co-op members by (1) participation in methods demonstrations organized by the co-op's agronomist, or (2) providing periodic technical assistance to other co-op farmers during visits to their farms. Each farmer-paratechnician would be given an honorarium of \$50 per month to cover travel expenses and time devoted to visiting other farmers. Each paratechnician would be assigned a coverage responsibility of up to 10 other farmers. The tentative achievement indicators and budget for the agronomic component would be the following:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
Agronomists assigned to IPACCOOP	4	4	4	4
Agronomists assigned to COAGRO	10	10	10	10
Agronomists assigned to FEDPA	6	6	6	6
Farmer-paratechnicians selected	75	100	150	150
<b>BUDGET</b>				
Agronomists (\$400/mo. x 14 mos)	\$112,000	\$112,000	\$112,000	\$336,000
Paratechnicians (\$600/year each)	\$45,000	\$60,000	\$90,000	\$195,000

4. MANAGER AND ACCOUNTANT SUBSIDY PROGRAM: This activity has been very important for many rural cooperatives and should be continued. However, rather than provide the services of managers and accountants on a declining subsidy basis ( as originally designed), the consultants feel the most effective arrangement as well as the easiest to administer is to provide managers and accounts on an interest-free loan basis. FEDFA already operates its management subsidy program this way. The cost of continuing this program, for 20 managers and accountants, is estimated as follows:

<u>Description</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
Managers assigned	10	10	10	10
Accountants assigned	10	10	10	10
<u>BUDGET</u>				
Salaries (\$400/mo. x 14 mos/yr) per manager or accountant	\$112,000	\$112,000	\$112,000	\$336,000

5. IN-SERVICE TRAINING OF IPACOOOP FIELD STAFF: It was found during the C41 Project evaluation, and confirmed by the recommendations which emerged from the Volcan conference, that the present technical expertise of many IPACOOOP field staff is inadequate. To up-grade field staff skills it is proposed that each employee receive a minimum of 15 days of in-service training per year, of which 5 days would be classroom activities. The remaining 10 days of training per year would be spent in a rural cooperative. Each host co-op would be asked to participate in the design of its own applied training program for IPACOOOP staff. The purpose of such training would be to give the trainee exposure to (1) the most common problems faced by the co-op, (2) routine management operations, (3) the production environment and constraints of member-farmers, etc. A training budget for 40 IPACOOOP field staff personnel (roughly 10 per each of the four regional offices) is proposed at a daily cost of \$20/day.

<u>Description</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
IPACOOOP staff trained	40	40	40	40
Training days/year	800	800	800	2,400
<u>BUDGET</u>				
Training costs (\$400/yr)	\$16,000	\$16,000	\$16,000	\$48,000

6. **ADVANCED MANAGEMENT TRAINING:** There currently exist a number of highly qualified managers among the rural cooperatives of Panama, most of them located in the "model" co-ops. Many of these individuals are so knowledgeable they could teach management skills to their colleagues in other cooperatives, and already they know much more than the average IPACOOOP technician assigned to teach management and accounting skills. But these highly talented managers must also continue to grow professionally, and to do so they need access to advanced management training opportunities. At the same time, just to keep up with these managers, IPACOOOP staff must also acquire advanced management skills. Finally, the managers assigned to cooperatives under the subsidy program also need to routinely refresh their expertise with new training.

Under this component an advanced management training fund would be established to finance the participation of skilled managers and IPACOOOP staff in national and international-level training seminars. Estimated participants and budget would be estimated as follows:

<u>Activity</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
<b>PARTICIPANTS</b>				
Model co-op personnel	8	16	24	24
Managers assigned under subsidy program	10	10	10	10
IPACOOOP Staff	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>
	<u>36</u>	<u>44</u>	<u>52</u>	<u>52</u>
<b>BUDGET</b>				
Expenditures (\$600/year per participant)	\$21,600	\$26,400	\$31,200	\$79,200

7. **VEHICLE PLAN:** In the last analysis, providing services to a rural cooperative movement on a centralized basis requires that field staff have adequate transportation to and from the sites where their services are needed. Experience in Panama and many other countries demonstrates that it is not enough simply to make vehicles available to development agencies and ministries. When the assignment of vehicles is to the institution, rather than to individuals, they tend to be mistreated because their occasional users do not feel responsibility for their condition and maintenance.

Under the proposed Project vehicles would be assigned to individual members of IPACOOOP staff. The recipient staff member would sign a contract wherein he/she will assume responsibility for major maintenance and repair of the vehicle, and after 36 months of use the vehicle would become the personal property of its user. Aside from financing the original purchase price of field staff vehicles, the Project would finance gasoline, oil, and minor maintenance up to a maximum of \$1,500 per year. The Project would also finance one complete change of tires during the three-year period covered by the personal assignment contract. The recipient staff member would finance the insurance for the vehicle. A

proposed total of 35 vehicles would be financed under the Project, of which 32 would be assigned to IPACCOOP's regional offices (8 vehicles per office) and three vehicles for national-level supervisors. Small, gas-efficient models would be acquired. The initial purchase cost of each vehicle is estimated at \$10,000.

<u>Description</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
Vehicles purchased for:				
-Regional Offices	32	-	-	32
-National Supervisors	3	-	-	3
<hr/>				
<u>BUDGET</u>				
-Initial purchase of vehicles	\$360,000	-	-	\$360,000
-Gasoline and mainor maint.	\$52,500	\$52,500	\$52,500	\$157,500

8. MISCELANEOUS ACTIVITIES: A small contingency fund of \$152,300 is included in the Project budget. It would be used exclusively in support of the Institution-Building Component of the Project.

#### J. Project Logical Framework

The proposed Follow-On Cooperative Loan Project is summarized below in a single chart utilizing the format of AID's Logical Framework.

In concluding, it is to be emphasized that the foregoing project proposal should be considered merely a first approximation of what a Follow-On Cooperative Loan Project might look like. A detailed project design effort remains to be undertaken. Such an effort must be conducted with the complete participation of Panamanian cooperative institutions. If the present proposal serves as a catalyst for discussion, criticism, and revision on behalf of a more comprehensive project document it will have served its purpose.

A N N E X E S

A N N E X A.

ITINERARY AND ACTIVITIES OF THE CONSULTANTS  
(ITINERARIO Y ACTIVIDADES DE LOS CONSULTORES)

PRIMERA ETAPA: ACTIVIDADES DE AQUILES LANA O FLOPES

FEBRERO

- 2/22 Viaje Lima-Panamá, Branif 970  
2/23 Reunión en USAID/Panama con Coordinador del Proyecto 041  
Reunión en IPACCOOP, con Director y funcionarios  
2/24 USAID/Panama: revisión de documentos  
Reunión en IPACCOOP, y revisión de documentos  
Reunión en FEDPA, con Gerente General y funcionarios  
2/25 USAID: Revisión de documentos  
Selección de candidatos para realizar encuesta a cooperativas  
2/26 IPACCOOP: selección de cooperativas por visitar y itinerario  
Reunión en BDA, con Gerente General y funcionarios  
2/27 Reunión en IPACCOOP, entrevistas con funcionarios  
Reunión en COAGRO, con Gerente General y funcionarios  
2/28 USAID: Revisión de documentos

MARZO

- 3/01 Revisión de documentos en el alojamiento  
3/02 USAID: Revisión de documentos de COAGRO  
3/03 Día feriado en la Republica de Panama  
Revisión de documentos en el alojamiento  
3/04 Duelo Nacional  
Revisión de documentos en el alojamiento  
3/05 Viaje Panama-Chitré, Alas Chiricanas  
Reunión, Oficina Regional IPACCOOP de los Santos, con Jefe y  
funcionarios  
Reunión, Cooperativa de Ahorro y Credito Gladys B. de Ducasa,  
R.L., Las Tablas  
Reunión, Cooperativa Agropecuaria Santeña, R.L., Las Tablas  
Entrevista con Socio No.325, Avidel Saavedra  
3/06 Reunión, Oficina Regional de FEDPA, Las Tablas, con Coordina-  
dor Agropecuario y funcionarios  
Reunión en la Cooperativa de Ahorro y Credito José del Carmen  
Dominguez, R.L.  
Entrevistas con Socio 495, Nilson Garcia; No.161, Victor Díaz;  
y Pastor García, No.104.  
Reunión, Cooperativa Agrícola El Progreso R.L. de Agua Buena  
Entrevista con Socio 39, Ramiro Villarroel  
Viaje Agua Buena-Chitré  
3/07 Reunión, Cooperativa de Consumo Azuero, R.L.  
Reunión, Oficina Regional de IPACCOOP in Chitré con Jefe y  
funcionarios  
Reunión, Cooperativa de Ahorro y Credito San Sebastian, R.L.  
Ocú  
Viaje Ocú-Las Tablas

- 3/08 Reunión, Cooperativa de Ahorro y Crédito Miras del Progreso  
Tonosieño, R.L., Tonosi  
Visita a la Cooperativa de Ahorro y Crédito Santa Elena R.L.,  
Los Asientos  
Visita a la Cooperativa de Ahorro y Crédito Purieños Unidos,  
R.L., Purio
- 3/09 Viaje Las Tablas-Santiago  
Reunión, Planta Central de IPACOOOP, con Sub-Director y funcionarios  
Reunión, Oficina Regional de Veraguas, con Jefe y funcionarios  
Reunión, Cooperativa de Servicios Múltiples Juan XXIII, R.L.  
Reunión, Cooperativa de Ahorro y Crédito El Educador Veraguense, R.L.
- 3/10 Reunión, Planta Central de IPACOOOP con funcionarios de Estadística y Evaluación de Datos  
Reunión, Cooperativa de Servicios Múltiples El Despertar Campesino,  
San José  
Reunión, Cooperativa de Servicios Múltiples La Esperanza de los  
Campesinos, R.L., Santa Fé
- 3/11 Viaje Santiago-David  
Reunión, Cooperativa de Consumo María Auxiliadora, R.L.
- 3/12 Reunión, Cooperativa de Producción y Mercadeo Avícola de Chiriquí  
Reunión, Oficina Regional de IPACOOOP con Jefe y funcionarios  
Reunión, Cooperativa Hortícola de Mercadeo, R.L., Boquete  
Entrevistas con Socio 181, Isaac Castillo, y Socio 46, Wilfredo  
Landao Ríos
- 3/13 Reunión, Cooperativa Agrícola e Industrial, R.L., Boquete  
Viaje David-Puerto Armuelles  
Reunión, Cooperativa de Ahorro y Crédito San Antonio, R.L., Puerto  
Armuelles
- 3/14 Reunión, Cooperativa Productores de Leche, R.L., David  
Reunión en la Sucursal de COAGRO, David  
Diseño de formularios para la encuesta a cooperativas
- 3/15 Viaje David-Santiago  
Diseño de formularios para la encuesta
- 3/16 Viaje Santiago-Natá  
Reunión, Cooperativa de Servicios Múltiples los Productores, Natá  
Reunión, Cooperativa de Ahorro y Crédito Natariegos Unidos, Natá  
Reunión, Cooperativa de Ahorro y Crédito Erick del Valle, R.L.,  
Valle de Antón  
Reunión, Cooperativa de Producción y Mercadeo la Constancia, R.L.,  
Puerto Gago
- 3/17 Reunión, Oficina Regional de IPACOOOP en Penonomé-Coclé, con Jefe  
y funcionarios  
Reunión, Cooperativa de Producción Rural Bejuco-Chamé-San Carlos,  
R.L., San Carlos  
Viaje Capira-Panamá
- 3/18 Viaje Panamá-Icacal-Panamá  
Reunión, Cooperativa Agro-Industrial CAICA, R.L.
- 3/19 USAID, calificación de postulante para realizar encuesta  
Reunión en COLAC-FECCLAC, con Gerente y funcionarios
- 3/20 USAID, diseño de formularios para la encuesta  
Reunión en IPACOOOP, con funcionarios, para establecer futuras actividades

- 3/21 Reunión en IPACOOOP para evaluación de viajes de reconocimiento, y entrenamiento de dos candidatos para realizar la encuesta
- 3/22 Reunión en APEDE con Grupos GTA y candidatos para realizar encuesta
- 3/23 IPACOOOP, revisión de documentos  
Reunión con funcionarios de FEDPA
- 3/24 IPACOOOP, reunión con Director y funcionarios para informar sobre el viaje de reconocimiento del 5-18 Marzo, sobre selección de encuestadores, y entrenamiento de 28 Marzo a 1 Abril en Santiago de Veraguas  
USAID, reunión con Coordinador del Proyecto 041 para informar sobre viaje de reconocimiento y formularios diseñados
- 3/25 Viaje Panamá-Santiago  
Visita a Escuela de Divisa (Instituto Nacional de Agricultura)
- 3/26 IPACOOOP, Planta Central, Santiago: Rediseño y prueba de formularios de encuesta, reunión con Jefe del Dept. Auditoría y reunión con Jefe del Dept. Planificación
- 3/27 Viaje Santiago-Aguadulce-Santiago: asistencia a Asamblea Anual de COAGRO
- 3/28 Prueba de formularios de encuesta en la Cooperativa de Ahorro y Credito El Porvenir de Guarumal, R.L., Soná
- 3/29 IPACOOOP: preparación de documentos para el entrenamiento  
Entrenamiento de tres encuestadores
- 3/30-31 Entrenamiento de encuestadores para entrevistas a productores
- 4/1 Entrenamiento sigue
- 4/2 Viaje Santiago-Panamá  
Reunión en Oficina Regional IPACOOOP en Penonomé, presentando a un encuestador
- 4/3 IPACOOOP/Panamá: reunión con Director y funcionarios para presentar informe verbal sobre primera etapa de la Evaluación  
USAID: reunión con funcionarios, informe verbal sobre la Evaluación
- 4/4 Preparación del Informe de Progreso para AID
- 4/5 Viaje Panamá-Lima, Braniff

SEGUNDA ETAPA : ACTIVIDADES DE AQUILES LANAO FLORES Y JOHN K. HATCH

ABRIL

- 4/28 Viaje New York-Panamá en Braniff 903 (John K. Hatch)
- 4/29 Viaje Lima-Panamá (Aquiles Lanao Flores)  
Reunión con funcionarios de USAID  
Reunión con Director de IPACOOOP y funcionarios  
Revisión de documentos en el alojamiento
- 4/30 Viaje Panamá-David, Aero Perla  
Reunión, IPACOOOP/David  
Visitas a cooperativas María Auxiliadora, Avícola, Hortícola de Mercadeo, y Agrícola e Industrial  
Viaje a Volcán
- 5/1-3 Seminario en Volcán con encuestadores para conocer sus experiencias durante la encuesta y escuchar sus recomendaciones sobre un segundo proyecto de prestamo para cooperativas.

- 5/04 Visita a la Cooperativa de Producción y Mercadeo Cerro Punta  
Revisión de datos de la encuesta  
Viaje Volcán-David
- 5/05 Reunión, Director de MIDA  
Reunión con funcionarios de IPACCOOP/David  
Visita a las cooperativas Productores de Leche (David) y San Antonio (Puerto Armuelles)  
Viaje David-Santiago
- 5/06 Reunión con funcionarios IPACCOOP/Santiago  
Visita a las cooperativas Despertar Campesino y Esperanza de los Campesinos
- 5/07 Visita a las cooperativas El Forvenir de Guarumal y San Juan de Dios (Consumo)
- 5/08 Visita a la Cooperativa Juan XXIII  
Revisión de datos de la encuesta
- 5/09 Visita a las cooperativas Consumo Veraguas y El Educador Veraguence
- 5/10 Visita a la Cooperativa Union de Agricultores Palmeños
- 5/11 Reunión con funcionarios de IPACCOOP  
Revisión de datos de la encuesta
- 5/12 Visita a la Cooperativa San Sebastian  
Visita a la Cooperative Consumo Azuero
- 5/13 Visita a la Cooperativa El Progreso de Agua Buena  
Visita a la Cooperativa José del C. Dominguez  
Visita a la Cooperativa Gladys B. de Ducasa
- 5/14 Visita a la Cooperativa Agrícola Santeña  
Reunión con IPACCOOP/Los Santos, Jefe y funcionarios  
Reunión con FEDPA/Oficina Regional Los Santos, con Coordinador Agropecuario y agronomos  
Viaje Los Santos-Natá
- 5/15 Visitas a las cooperativas Erick del Valle, Los Productores, La Constancia, and Natariegos Unidos  
Viaje Nata-El Valle
- 5/16 Revisión de datos de la encuesta en el alojamiento  
Reunión con la Cooperativa Agrícola Los Libertadores
- 5/17 Revisión de datos de la encuesta en el alojamiento  
Viaje El Valle-Panamá
- 5/18 Reunión con IPACCOOP/Panamá  
Entrevista con Rodrigo Spiegel  
USAID: revisión de datos de la encuesta
- 5/19 Reunión con BDA, Jefe de Credito Asociativo y funcionarios  
USAID: computo de datos de la encuesta
- 5/20 Reunión con COAGRO, con Gerente y funcionarios  
USAID: computo de datos de la encuesta
- 5/21 Reunión con FEDPA, Sub-Gerente y funcionarios  
USAID: computo de datos de la encuesta
- 5/22 Reunión con funcionarios de USAID para informe verbal sobre conclusiones de la evaluación  
Sigue el computo de datos de la encuesta
- 5/23 Salida de John Hatch, Panama-New York, Braniff
- 5/24 Reunión con funcionarios de FEDPA para sacar saldos de prestamos
- 5/25 Reuniones de Dr. Lanac con funcionarios de FEDPA, BDA, y IPACCOOP para recolectar estadísticas faltantes y saldos de prestamo
- 5/26 Salida de Dr. Lanac, Panamá-Lima, Braniff 979

RURAL DEVELOPMENT SERVICESEVALUACION DE IMPACTO-NIDA-AID-525-T-041PERSONAS CONTACTADASA.I.D.

Tomás Chapman

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Vilma Jaén

Oficina Multisectorial\*

Oficina de Desarrollo Agropecuario.

Oficina de Préstamos

Coordinador del Proyecto-041

Oficina de Planificación

Oficina de Planificación

Oficina Multisectorial

Oficina de Control

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Danail García

José Del C. Gutiérrez

Manuel Allé

Idalides de Quinzada

Victor Carrasquilla

Director\*

Oficina Planificación

Desarrollo Cooperativo\*

Administración

Secretaría-Director

Supervisor Crédito Agropecuario

IFACCOOP-PLANTA CENTRALSantiago de Veraguas

Ciro de la Victoria

Carlos Díaz

Alicia Gordón

Juana Pino

Lacdegario Reyes

Aixa de Hinc

José María Herrera

Avis de Delgado

Margarita Arrocha

Carmen Cecilia Tristán

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Fomento Cooperativo

Fomento Cooperativo

Oficina de Planificación

Estadística y Evaluación

Supervisor Agro-Crediticio

Contadora- Fomento

Mercadotecnia

Administración.

BEST AVAILABLE DOCUMENT

Elia de González  
Miguel Sifontes

Auditoría  
Asesor Legal\*

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Ernesto Voughan	Sub-Gerente Técnico
Blas Rodríguez	Jefe del Departamento de Educación
Esteban Sinesterra	Analista Financiero
Humberto Osorio	Supervisor Agrónomos -041
Luis Alfonso Díaz	Agrónomo -041
Dolores Zarravilla	Tec. Agrónomo-041
Leonidas García	Asesor - Coclé.

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Rodrigo Botello	Sub-Gerente de Préstamos Asociativos
José Sigarrista	Supervisor - Los Santos

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Pablo Calvo	Supervisor Técnicos Agropecuarios
Raúl Valdivia	Asesor
Erignio Chac	Gerente -Zona Central
Raúl Espinosa	Gerente Regional David.
Fernán Romero	Asistente Tec. de Ventas-David.
Marlón Sánchez	Asistente de Ventas.
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Librado del Carmen Jaén	Socio Nº 146

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Iris de Ureña	Secretaria Consejo de Administración
Avidel Saavedra	Socio Nº 325

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José-Sigarrista	Supervisor B+D.A.
Ureste Solíz	Contador Particular
Hilda Martínez	Secretaria Consejo de Administración y Secretaria Comite de Educ. COAGRO.
ii	
Raairo Villaruel	Socio Nº 39

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Porfirio Flores

Gerente

Santos González

Gerente-Compra de Productos

Modesto Mojica

Tesorero

Enofio Trejos

Sub-Gerente

Edilberto Donoso

Gerente de Compras

Heriberto Delgado

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Gerente-Sucursales

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Depto. de Educación

Enar Urrutia

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Consumo.

Santiago Barrios

Supermercado Agrícola

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Departamento de Contabilidad

Bernardo González

Técnico Agropecuario-041

Juan De Dios Lujano

Administrador Sucursal El Anón

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Marcel Guardia

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Kubén Alvarado

Sub-Gerente

Técnico Agropecuario-041

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Marcel González	Vocal-Consejo de Administración
Pedro Caballero	Secretario-Consejo de Administración
Jacinto Peña	Ex-Gerente
Leonel Rodríguez	Contador
Florentino Urriola	Auxiliar de Contabilidad.

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Tomás Rodríguez	Gerente
Domingo Rodríguez Mendoza	Vice-Presidente-Consejo de Admón.
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León Pinto Rodríguez	Vendedor.

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Oswaldo Anderson	Presidente del Consejo de Vigilancia
Gerardo Leiva	Jefe de Contabilidad
Francisco Ortega	Vocal Consejo de Vigilancia.

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Domingo Torres	Gerente.
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Miguel Ángel De Gracia      Técnico Agropecuario-041  
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Mario Serrano                Técnico Agropecuario-041  
Mariano González            Sub-Gerente  
Isaac Castillo                Socio N° 181  
Wilfredo Landeo              Socio N° 46  
Graciano Cruz                Presidente del Consejo de Administración

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Edgar Madrid                Técnico Agropecuario por la Cooperativa  
Aclaus Gómez                Técnico Agropecuario por la Cooperativa  
Francisco Rosas              Técnico Agropecuario-041

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Carlos Castillo               Gerente

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José Gordón                Presidente del Consejo de Vigilancia  
Carlos Mayaric              Vice-Presidente Consejo de Admón.  
Alejandro Chanis            Secretario del Consejo de Admón.

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Rafael Pérez	Presidente del Consejo de Vigilancia.
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Tomás Domínguez	Presidente del Consejo de Vigilancia
Damays Díaz	Secretaria Consejo de Administración
Luis Narvaiz	Vice-Presidente del Consejo de Admón.
Idineo Donoso	Comité de Préstamo
Efraín de Gracia	Comité de Préstamos
Tomás Nieto	Comité de Préstamos
Reynaldo Ledesma	Presidente del Comité de Crédito.

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Manuel Cedeño	Presidente del Consejo de Admón.
Ceferino Antunes	Presidente del Consejo de Vigilancia
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Marcos Aurelio Cillas	Presidente del Consejo de Admón.
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**Francisco Moreno**

**Paulo Abrego**

**Pastor Amores**

**Presidente del Consejo de Vigilancia**

**Gerente**

**Asistente Gerencial.**

INSTITUTO PANAMEÑO AUTÓNOMO COOPERATIVO

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Maximino Vergara

Jefe del Departamento\*  
Técnico Agropecuario -041  
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Contador  
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Tomás Higuera  
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Jefe Regional\*  
Depto. Educación -041  
Contador -041  
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Jefe Regional\*

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Jefe Regional \*  
Contador-041. \*

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Rafael Reynoso

Nicolás Vásquez

Elsa Ramos

Jefe Regional

Contador

Trabajadora Social\*

\* Funcionarios con quien se viajó.

**PROYECTO DE DESARROLLO COOPERATIVO**

**MIDA-AID-525-T-041**

**"EVALUACION DE IMPACTO"**

**POR: Rural Development Services**

**Mayo-1981**

**\_\_\_\_\_  
Nombre del Encuestador.**













**11.-ESTADOS DE EXCEDENTES Y PERDIDAS.  
(Cooperativas Agrícolas y de Consumo.)**

	1976	1977	1978	1979	1980
	B/.	B/.	B/.	B/.	B/.
11.1.-VENTAS					
11.2.-INVENTARIO INICIAL					
11.3.-COMPRAS EN EL AÑO					
11.4.-MERCADERIA DISPONIBLE PARA LA VENTA					
11.5.-INVENTARIO AL CIERRE DEL EJERCICIO					
11.6.-COSTO DE LA MERCADERIA VENDIDA					
11.7.-GANANCIA BRUTA EN VENTAS					
11.8.-GASTOS DE OPERACION					
11.9.-EXCEDENTES NETOS EN VENTAS					
11.10.-OTROS INGRESOS					
11.11.-MENOS RESERVAS:					
11.11.1.-Reserva Legal					
11.11.2.-Reserva Provisión Social					
11.11.3.-Reserva Educ.					
11.11.4.-Otras Reservas					
11.12.-EXCEDENTES POR DISTRIBUIR					

**12.-ESTADO DE EXCEDENTES Y PERDIDAS.**  
(Cooperativa de Ahorro y Crédito.)

	1976	1977	1978	1979	1980
	B/.	B/.	B/.	B/.	B/.
<b>INGRESOS</b>					
12.1.-INTERESES SOBRE PRESTAMOS.					
12.2.-					
12.3.-					
12.4.-					
12.5.-					
12.6.-					
12.7.-OTROS INGRESOS					
12.8.-TOTAL DE INGRESOS					
12.9.-GASTOS DE OPERACION					
12.10.-EXCEDENTES EN EL EJERCICIO					
12.11.-MENOS RESERVAS					
12.11.1.- Reserva Legal					
12.11.2.- Reserva Previsión Social					
12.11.3.- Reserva Educ.					
12.11.4.- Otras Reserv.					
12.12.-EXCEDENTES POR DISTRIB.					

13.-ANALISIS FINANCIEROS

	1976	1977	1978	1979	1980
	B/.	B/.	B/.	B/.	B/.
<b>13.1.-INDICE DE SOLVENCIA</b>					
<u>Activo Corriente</u> <u>Pasivo Corriente</u>					
<u>Resultado</u>					
<b>13.2.-PRUEBA DE RAPIDA LIQUIDEZ</b>					
<u>Activo Corriente-Invent.</u> <u>Pasivo Corriente</u>					
<u>Resultado</u>					
<b>13.3.-CAPACIDAD DE ENDEUDAMIENTO</b>					
<u>Deuda Total (P.C.+P.L.P)</u> <u>Total Activos</u>					
<u>Resultado</u>					
<b>13.4.-AUTONOMIA FINANCIERA</b>					
<u>Cap. Aport. por Afil.</u> <u>Total Activos</u>					
<u>Resultado</u>					



**15.-SUB-PRESTAMOS OTORGADOS POR LA COOPERATIVA-041**

1976		1977		1978		1979		1980	
Nº	B/.	Nº	B/.	Nº	B/.	Nº	B/.	Nº	B/.
<b>15.1.-PRESTAMO SOLICITADO</b>									
<b>RUBROS AGRICOLAS</b>									
15.1.1.									
15.1.2.									
15.1.3.									
15.1.4.									
<b>RUBROS PECUARIOS</b>									
15.1.5.									
15.1.6.									
15.1.7.									
15.1.8.									
<b>15.2.-PRESTAMOS APROBADOS</b>									
<b>RUBROS AGRICOLAS</b>									
15.2.1.									
15.2.2.									
15.2.3.									
15.2.4.									
<b>RUBROS PECUARIOS</b>									
15.2.5.									
15.2.6.									
15.2.7.									
15.2.8.									
<b>15.3.-SALDO DE PRESTAMOS</b>									
<b>RUBROS AGRICOLAS</b>									
15.3.1.									
15.3.2.									
15.3.3.									
15.3.4.									
<b>RUBROS PECUARIOS</b>									
15.3.5.									
15.3.6.									
15.3.7.									
15.3.8.									
<b>15.4.-MOROSIDAD</b>									
<b>15.4.1. Agrícola</b>									
<b>15.4.2. Pecuaria</b>									



FOLLOW - ON RURAL COOPERATIVE DEVELOPMENT PROJECT  
LOGICAL FRAMEWORK

PROJECT ELEMENTS	OBJECTIVELY VERIFIABLE INDICATORS OF ACHIEVEMENT
<p><b>A. PURPOSE</b></p> <p>To increase the net income of small- and medium-sized farmers and ranchers who are members of rural cooperatives.</p> <p><u>Definitions</u>            A "small" farmer is a rural producer with title, rental, or usufruct to less than 5 hectares of land; a "medium" farmer: 5-19 hectares.</p> <p>A "small" rancher operates a herd size of 10 animals or less; a "medium" rancher 11-20 animals. Definition applicable to beef and dairy cattle only.</p>	<p><b>A.1</b> An average annual increase of 20 percent in the net income of rural families receiving production credit under the Project, measured by:</p> <ul style="list-style-type: none"> <li>-Net income per balboa of expenditure (1980 baseline = \$0.67, average of 8 crops, \$1.65 livestock average);</li> <li>-Net income per hectare of crop enterprise financed (1980 baseline = \$928/hectare average for 8 crops);</li> <li>-Net income per head of livestock enterprise financed (1980 baseline = \$68/head average for beef and dairy).</li> </ul> <p><b>A.2</b> An average annual increase of 10 percent in the membership of rural cooperatives participating in the Project (1980 baseline = COAGRO: 8,000; FEDPA: 16,000).</p> <p><b>A.3</b> A 25 percent total increase in the percentage of small-farmer members and users of production credit (1980 baseline: 43% of total membership).</p>
<p><b>B. OBJECTIVES</b></p> <ol style="list-style-type: none"> <li>1. To provide sufficient credit to rural cooperatives and sub-borrowers, on a timely basis, for production credit, operating capital, and infrastructure/equipment investment.</li> <li>2. To strengthen cooperative organizations that show deficient social and economic performance</li> <li>3. To promote cooperative integration, by type and by region, based on the sharing of economic and social</li> </ol>	<p><b>B.1</b> Each year at least 80 percent of co-op member demand for credit (total value of approved loans) is satisfied.</p> <p><b>B.2</b> Approval of requested loans by co-ops to fiduciary agent (BDA) do not exceed average delay of 45 days.</p> <p><b>B.3</b> For all assisted cooperatives, by the end of the Project a minimum of 25 percent financial autonomy (membership equity as a percentage of total assets), monthly meetings by co-op committees, and an active membership education program.</p>

1. To provide sufficient credit to rural cooperatives and sub-borrowers, on a timely basis, for production credit, operating capital, and infrastructure/equipment investment.
2. To strengthen cooperative organizations that show deficient social and economic performance
3. To promote cooperative integration, by type and by region, based on the sharing of economic and social services. Economic services include joint buying, selling, processing, transporting, etc. Social services include education, training, technical assistance between co-ops.
4. To strengthen the recruitment, training, and mobilization of IPACOOB field staff to provide more effective services to co-ops on a decentralized basis.

B.2 Approval of requested loans by co-ops to fiduciary agent (BDA) do not exceed average delay of 45 days.

B.3 For all assisted cooperatives, by the end of the Project a minimum of 25 percent financial autonomy (membership equity as a percentage of total assets), monthly meetings by co-op committees, and an active membership education program.

B.4 Existence of at least six "mini-federations" built around "model" co-ops which offer smaller and weaker cooperatives of the same type or region a variety of support services.

B.5 By the end of the Project, the existence of four regional IPACOOB offices. Of the staff of each office, a unit of four professionals will work exclusively with co-ops directly assisted by the Project.

#### C. OUTPUTS (ACTIVITIES AND SERVICES)

##### 1. Revolving Credit Fund

- COAGRO affiliates receiving loans
- FEDPA affiliates receiving loans
- Consumer cooperatives receiving loans

##### 2. Special Assistance to Co-ops with Deficient Performance Indicators

- Cooperatives assisted intensively

###### -Per Cooperative Assisted:

###### In Year

- Membership education activities organized
- Co-op level accounting courses organized
- Co-op level workshops on credit project design, management, and evaluation
- Completed audit, findings discussed with co-op
- Follow-up visits by auditors per year

##### 3. Cooperative Integration

- No. of "model" cooperatives assisting weaker co-ops
- No. of weaker co-ops assisted

##### 4. Institution-Building Components

- Man-months of external technical assistance to COAGRO, FEDPA, IPACOOB
- Agronomists assigned to cooperatives on a subsidized basis
- Farmer-paratechnicians assisting with technical supervision
- Managers and accountants assigned to co-ops on an interest-free loan basis
- In-service training of IPACOOB field staff (av.20 days per year): persons
- Advanced management training: persons trained

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
	25	27	30	30
	20	22	25	25
	12	13	15	15
	12	16	20	20
	72	96	110	278
	24	32	40	96
	36	48	60	144
	12	16	20	48
	24	32	40	96
	4	8	12	12
	20	40	60	60
	24	18	6	48
	20	20	20	20
	75	100	150	150
	20	20	20	20
	40	40	40	40
	36	44	52	52

Co-op level workshops on credit project design, management, and evaluation	3	36	48	60	144
Completed audit, findings discussed with co-op	1	12	16	20	48
Follow-up visits by auditors per year	2	24	32	40	96
<b>3. Cooperative Integration</b>					
-No. of "model" cooperatives assisting weaker co-ops		4	8	12	12
-No. of weaker co-ops assisted		20	40	60	60
<b>4. Institution-Building Components</b>					
-Man-months of external technical assistance to COAGRO, FEDPA, IPACOOOP		24	18	6	48
-Agronomists assigned to cooperatives on a subsidized basis		20	20	20	20
-Farmer-paratechnicians assisting with technical supervision		75	100	150	150
-Managers and accountants assigned to co-ops on an interest-free loan basis		20	20	20	20
-In-service training of IPACOOOP field staff (av.20 days per year): persons		40	40	40	40
-Advanced management training: persons trained		36	44	52	52
-Vehicles individually assigned to IPACOOOP field staff and nat.supervisors		35	35	35	35

#### D. INPUTS (BUDGET)

<b>1. Revolving Credit Fund (\$9,000,000 increment)</b>					
-Refinancing of COAGRO's commercial debt		\$3,000,000	-	-	3,000,000
-Resources to be lent to COAGRO affiliates		2,500,000	-	-	2,500,000
-Resources to be lent to FEDPA affiliates		2,500,000	-	-	2,500,000
-Resources to be lent to consumer cooperatives		1,000,000	-	-	1,000,000
<b>2. Special Assistance to Co-ops with Deficient Performance Indicators</b>					
-Fund to support co-op level education activities		50,000	25,000	25,000	100,000
<b>3. Cooperative Integration (\$200,000)</b>					
-Fund to support inter-cooperative education programs and tech.assistance		16,400	32,800	50,800	100,000
-Fund to finance research and development of joint economic activities		20,000	40,000	40,000	100,000
<b>4. Institution-Building Components (\$2,000,000)</b>					
-External Technical Assistance (\$7,000/month)		168,000	126,000	42,000	336,000
-Agronomists (\$400/month x 14 months/yr x 20)		112,000	112,000	112,000	336,000
-Transportation/honorariums for farmer-paratechnicians(\$600/yr per PT)		45,000	60,000	90,000	195,000
-Managers and Accountants (20 x \$400/mo. x 14 months)		112,000	112,000	112,000	336,000
-In-service training of IPACOOOP Field staff (\$400/yr x 40)		16,000	16,000	16,000	48,000
-Advanced management training (\$600/yr per person)		21,600	26,400	31,200	79,200
-Vehicles: initial purchase cost (\$10,000 each)		360,000	-	-	360,000
-Vehicles: gasoline and minor maintenance (\$1,500/yr. each)		52,500	52,500	52,500	157,500
-Miscellaneous		50,000	50,000	52,300	152,300
		<u>10,023,500</u>	<u>652,700</u>	<u>623,800</u>	<u>11,300,000</u>