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EVALUATION OF  
LAAD DE CENTROAMERICA  
A Subsidiary of  
LATIN AMERICAN AGRIBUSINESS  
DEVELOPMENT CORPORATION

Contract AID/otr-C-1378, Work Order 7, Project No. 596-0000

Submitted to:

Regional Office for Central American Programs  
Agency for International Development  
Guatemala City, Guatemala, C. A.

Submitted by:

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I.

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**INTRODUCTION**

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## I. INTRODUCTION

Checchi and Company welcomed the opportunity in the summer of 1977 to evaluate again the progress of the Latin American Agribusiness Development Corporation and, in particular, the operations of its subsidiary in Central America. The first evaluation took place three years ago after the initial loan by the Agency for International Development (AID) to LAAD. At that time, LAAD's primary objectives were to forge missing links in a chain of Central American agribusiness enterprises in the field of non-traditional agriculture and, at the same time, to develop markets for its own shares and for those of companies it financed. LAAD also saw its activities as bringing new employment opportunities for the rural population and other less advantaged groups.

The findings and recommendations of the first evaluation need not be repeated here. Suffice it to say, the achievements of LAAD in Central America were sufficiently impressive to justify its continued support by its shareholders and by AID.

In 1975, LAAD received a second loan of \$5 million from AID to be accompanied, as was the first loan, by \$2 million of new equity. The loan was to be drawn down by November 1978. LAAD-Central America is well ahead of this schedule and only \$475,000 of the loan now remains to be committed.

## 2.

The second loan also was to be used to support the non-traditional agricultural activities of LAAD. But it also was to increase the participation of the rural poor in these activities. Both loans looked towards developing a self-sufficiency or viability on the part of LAAD which would enable it to continue growing without the further infusion of AID funds.

The Checchi team organized itself to study these aspects of LAAD's activities in Central America and commenced its work on July 11, 1977 upon its arrival in Guatemala City. The work to be performed was divided among the three team members in the following manner:

Mr. Jack C. Corbett - In addition to overall responsibility for the project, Mr. Corbett was specifically concerned with the financial results obtained by LAAD-CA and its prospective viability after the disbursement of the second AID loan.

Mr. Ronald J. Ivey - Mr. Ivey was responsible for review of the sub-projects financed under the second AID loan, the viability of these projects and their contribution to the objectives and goals of LAAD-CA.

**Dr. Kenneth Kusterer - As the socio-anthropologist, Dr. Kusterer was responsible for determining the economic and social impact of the LAAD-CA projects upon the rural poor and unemployed. He was particularly concerned with the cultural implications induced by the implementation and development of the LAAD-CA sub-projects. In addition, Dr. Kusterer made an intensive, in-depth study of one selected area to determine the social-cultural impact on the participating small farmers in a specific project.**

The foregoing tasks required, along with orientation and debriefing periods in Guatemala City with the Regional Office for Central American Programs (ROCAP), an average of more than one week in each country of Central America. A considerable period of time was spent with the officers of LAAD-CA reviewing its operations, files, and the expectations and outlook for the future. At the same time, extended discussions were held on the individual sub-projects to be visited by the team. In each country, the actual sub-projects were visited and structured interviews with the borrowers were conducted. Following these interviews, arrangements were made for the socio-anthropologist to visit and interview small farmers selected at random and in such a manner as to give the best approximation possible to a valid sample of small farmers. Very nearly 100 such interviews were conducted.

Dr. Kusterer visited the field area where his in-depth study was conducted in a pick-up truck or a van thus allowing him to participate in the transport of agricultural products to market. This significantly enhanced his rapport with the interviewees who spoke with him freely of their views regarding the projects and how they were affecting their lives.

There is attached to this report the interview forms that were used to conduct the investigations of the sub-projects and to determine the attitudes of the small farmers. While Checchi and Company retains the individual responses to these interviews, the results are categorized and interpreted in the report.

The Checchi team believes that the procedures and methodologies used to review, study and analyze the operations of LAAD-CA insure a fair and balanced evaluation. Sub-projects financed by the first AID loan were not studied except in connection with our review of the financial results obtained by LAAD-CA. However, all intermediate credit institutions (ICIs) receiving loans from LAAD-CA during the second AID loan, and all but \$140,000 (two projects) of specific sub-projects loans made or committed under the second loan were visited by the team. Therefore, we believe our interpretations and

conclusions regarding LAAD-CA's use of and accomplishments with the second AID loan are well grounded.

It will be noted that the report pays particular attention to the Congressional and AID mandates that LAAD-CA use the second AID loan in ways that bring benefits and a sense of participation to the small farmer and the rural poor. The consultants appreciate the difficulty of an investment company bringing small landholders and agricultural workers into the orbit of modern industrial organizations in a meaningful way. Our conclusion is that not only is this possible but, in fact, it may become one of the strengths of the new businesses being financed by LAAD-CA.

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**II.**  

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**CONCLUSIONS AND RECOMMENDATIONS**

## II. CONCLUSIONS AND RECOMMENDATIONS

### **A. CONCLUSIONS**

#### **1. Access to Resources and Opportunities**

##### **a. Raw Material Purchases**

(1) LAAD-CA's maximum potential impact on small farmers results from loans that open new markets for products that have not traditionally been grown on a large commercial scale. Loans to processing plants are likely to accomplish this most directly.

(2) Small farmers benefit most when processing plants are able to offer contracts that offer the farmer greater price stability and an assured market for all he can grow on the contracted acreage.

(3) Small farmer participation is maximized when the processing plant takes charge of transportation arrangements.

(4) Although many processors have not traditionally dealt directly with small farmers nor taken responsibility for transportation, it is in their interest to do so. Such arrangements may stabilize raw material supplies, lessen dependence on individual suppliers, and allow for raw material to be purchased at a slight discount below the average open market price.

(5) By making loans to processors of non-traditional products, LAAD-CA does help to create new opportunities for economic and social advancement to both the landed (primarily through raw material purchases) and landless segments (through employment) of the rural poor, whose only previous access to such opportunities was through migration. Analysis of LAAD-CA's direct loan and intermediate credit institution subprojects seem to indicate that greater economic impact is created through raw material purchases rather than employment at somewhat capital intensive, processing plants.

(6) The small farmers affected by LAAD-CA's activities tend to be those who are already active in commercial agriculture. They already possess rational and even entrepreneurial economic attitudes. Cultural incompatibility between their new agricultural activities and their native culture is therefore not an issue.

(7) Participation in LAAD-CA-sponsored projects does result in even further changes in farmers' cultural attitudes and value systems. The farmers involved do not seem to regret these changes, and they are the ultimate judge of the desirability or undesirability of such cultural change.

(8) The raw material scarcity faced by some processors occurs because: (a) the processor is attempting to introduce into the

area a completely new crop; (b) he is not using purchasing arrangements which act as an incentive for steady and adequate supply; (c) the normal supply-and-demand operation of the market has led farmers to grow other more profitable crops; or (d) farmers mistrust the processor as a result of previous mismanagement. Such scarcity is not due to a conservative or non-receptive attitude on the part of small farmers. Nor is it due to a lack of production credit, except in the case of such crops as fruits, which require a separation of several years between the initial investment and the first harvest.

b. Employment

(1) Participation by small farmers in LAAD-CA's projects leads to increases in family labor time, increases in the productivity of such labor, and increases in the family's agricultural investments.

(2) Although AID/ROCAP has strongly emphasized the landed segment of the target group, LAAD-CA-sponsored commercialization of non-traditional agricultural products can also benefit, although to a lesser extent, the landless segment of the rural poor.

(3) The projects evaluated seemed to be capital-intensive, requiring \$16,303 to create one full-time job. This represents a slight shift towards capital intensiveness compared to that found in the first Checchi evaluation of LAAD-CA activities.

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(4) A major proportion (64 percent) of LAAD-CA's projects create direct employment opportunities in rural areas. Indirect rural employment is likely to be even greater.

(5) Non-traditional processors may have a significant indirect effect on rural employment as the result of the encouragement they give to non-traditional medium and large farmers, who offer a new type of more skilled, year-round employment. These jobs are qualitatively different from the unstable, highly seasonal, or migratory jobs offered by large farmers in many traditional crops.

(6) Small farmers do not generally utilize labor beyond their families when initially making the transition from traditional to non-traditional production, but do create labor opportunities in the medium term.

**2. Viability of LAAD-CA**

a. The asset base of LAAD-CA is not yet large enough to insure that the organization will continue to grow and become a major factor in the Central American non-traditional agricultural picture.

b. Prospective earnings of LAAD-CA at best will only be sufficient to finance the repayments on AID loans. It is possible that the asset base may shrink which would put LAAD-CA into a wind-down syndrome.

c. LAAD-CA's future lending will become more or less related to the volume of repayment from the subprojects in absence of new resources.

d. LAAD-CA has not yet built up an equity portfolio which promises significant gains in the foreseeable future. It does not appear that fixed income loans will be sufficient to allow LAAD-CA to continue its growth.

e. LAAD-CA prospects for raising additional outside funds from conventional sources do not appear promising. Terms of bank borrowing would require alterations in LAAD-CA lending policies. LAAD-CA likewise would find borrowing in the Central American capital market too costly, if at all possible. Additional equity capital would probably have to be accompanied by funds obtained on concessional terms.

f. LAAD-CA expenses have been rising steadily putting pressure on net earnings.

### 3. Development of Equity Investments

a. LAAD-CA does not have prospects of developing a market for its equity shares in Central America. It has a negligible dividend and earnings record which are preconditions for a successful stock issue program.

b. LAAD-CA has not been successful in developing an equity portfolio in conjunction with its lending program. This was a prime feature of the LAAD-CA program under the first AID loan. While LAAD-CA continues to be interested in equity investments, it has, during the second AID loan, concentrated on fixed interest conventional loans.

c. While LAAD-CA has maintained its contacts with institutions which might assist it in sales of its equity holdings, the fact is the LAAD-CA equity portfolio would be of primary interest to majority shareholders in the subject companies rather than to the investing public at large.

#### 4. Lending Policies

a. LAAD-CA lending policies have undergone significant changes from the period of the first AID loan to the period of the second AID loan.

b. During the first AID loan, there was emphasis on the development of an equity portfolio and upon forging needed links in the chain of production and marketing for non-traditional agricultural products.

c. While a number of loans were made giving LAAD-CA the option to convert such loans into equity, very few of these opportunities materialized and most such options have expired.

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d. LAAD-CA, under the first loan, made a wide variety of sub-project loans in differing fields--aviation, essential oils, food wholesaling, sanitary products, cattle raising, and aerial photography, among others--but its impact on any particular field was somewhat diffused.

e. The project loans under the second AID loan were concentrated on the one hand in food processing and have tended to be, on the average, larger. Substantial loans were made to intermediate credit institutions. There has been much greater emphasis in both cases on increasing the participation of the rural poor in activities flowing from these loans.

f. Very little emphasis has been placed on equity investments in the past three years.

g. Interest rates to subprojects have been increased to 11 percent from 9 percent, and an additional closing fee of 1 percent has been introduced. As a result, LAAD-CA income has been improved.

h. LAAD-CA has had to devote more time to monitoring old loans and working with borrowers to turn around troublesome situations. In addition, some of the old borrowers have required follow-on loans either in connection with refinancing or for expanded activities.

5. Subproject Evaluations

a. Technical Assistance

(1) The technical assistance to small farmers that is most relevant and best utilized is that provided by knowledgeable processing plant representatives who come in repeated contact with the farmers over an extended period of time.

(2) Product-specific technical assistance is actively desired and sought by small farmers, or at least that segment of the small farmer population that chooses to become involved in LAAD-CA projects.

(3) Technical assistance provided by other agronomists, such as bank or government representatives, tends to be less specific, less continuously available, and thus less utilized than technical assistance provided by processing plant representatives.

(4) Since the best advice is that which is product specific, such agricultural technicians need not be highly trained agronomists. Often an informally trained technical representative, a para-agronomist, can be more effective, both because he may possess more detailed product-specific knowledge and because he is less likely to be separated from the farmers by an urbanized, middle class lifestyle.

(5) LAAD-CA, in the course of monitoring loans, has assisted a number of borrowers with management and financial advice. However, in the fields of production, processing and marketing, there is a considerable flow of technical information (processor-grower, government-grower, input supplier-grower, and parent company-processor).

b. LAAD-CA performance is very good in terms of supporting non-traditional production.

c. LAAD-CA funding has concentrated among its direct loan recipients upon production and the overall contribution to agribusiness system building as a result of these projects is viewed as good. The results were far superior to those found in the first Checchi evaluation of LAAD-CA.

d. Although the LAAD-CA direct loan subprojects do not demonstrate solid viability at present, most are still in their start-up phase, and their prospects appear good for the future.

e. If the collective projections of the plant managers are correct, total raw material purchases and small farmer purchases will triple by 1980.

f. The estimate for employment expansion among all the subprojects studied was a 20 percent increase with two plants accounting for the bulk of that projected new employment.

g. A trend towards more capital intensiveness is seen looking forward to 1980, as seven out of eleven projects plan plant or equipment additions during that period.

h. The subproject performance regarding foreign exchange earnings is regarded as lackluster which is in part due to several projects which cater exclusively to the domestic market.

B. RECOMMENDATIONS

1. Access to Resources and Opportunities

a. Raw Material Purchases

(1) The most important link to be developed in new commercial agricultural systems is the food processing industry rather than farm input suppliers or farm credit institutions. LAAD-CA should continue to develop processor capacity and, where possible, finance processors who will provide for company representatives who will work directly with small and other farmers to develop output; and finance those who will provide credit (especially in kind) and transportation to stimulate the production process.

(2) Although processors may be funded either directly or through intermediate credit institutions, there does not appear to be any significant additional benefit to the loan recipients or the mandated target

group that results from ICI participation. Whenever possible, processing plant loans should therefore be made directly

(3) The fact that a large portion (35.1 percent) of raw material purchases made by LAAD-CA subprojects from small farmers may be partially attributable to the Congressional mandate concerning the rural poor suggests the workability of the concept. Therefore, LAAD-CA should continue to finance those firms which show a strong small farmer impact.

b. Employment

(1) AID should be aware that typical LAAD-CA processing plants must be somewhat capital intensive because they must be competitive in national and international markets. Nevertheless, considerable indirect unemployment is created on farms, even small farms in the medium term, with the cultivation of labor intensive, non-traditional crops.

(2) LAAD-CA should continue to select and support, wherever possible, agribusinesses located in rural areas.

2. Viability

a. LAAD-CA should seek additional concessional loans and outside equity to give it the possibility of building up its earnings base.

b. LAAD-CA should review its expenses including those for services performed on its behalf by LAAD-S. A. to see if growth in expenses can be contained.

c. The continuing growth in expenses reduces the possibilities of earnings growth and tends to offset the advantages deriving from concessional loans.

d. LAAD-CA cannot expect to increase significantly its rate of interest on subproject loans. Therefore, in addition to holding down the growth in expenses, it should seriously pursue the development of equity investments which would pay off in three or four years in amounts exceeding the interest income foregone.

### 3. Development of Equity Portfolio

a. LAAD-CA should seek to play a major role in new ventures in the food processing field, thus gaining the right to an equity position.

b. LAAD-CA should be prepared to participate more directly in management since it is in the formative years that new enterprises suffer their most fatal set-backs.

c. LAAD-CA can also consider investing in companies in difficulties which have a product line in consonance with LAAD-CA interests. These investments have their perils but the rewards can be significant.

d. LAAD-CA does not need to concern itself with developing equity markets in Central America. In all likelihood, LAAD-CA's equities will be sold to the majority shareholders or to foreign companies seeking a Central American base.

e. The present time and for the next two years would be most propitious for the development of equity interests. LAAD-CA could afford to forego some income on new loans although this would mean a plateau in net earnings. If additional resources are obtained, this policy could be followed by LAAD-CA without notable impact on its earnings. From 1981 on, the debt repayment to AID will become a more serious cash drain, reducing LAAD-CA's ability to afford equity investments.

#### 4. Lending Policies

a. LAAD-CA should concentrate on food processing ventures since such loans tend to support needed industries and to have the greatest impact upon the rural poor. This concentration would not exclude other loans linked to non-traditional agriculture.

b. LAAD-CA should dedicate some portion of its investible resources to equities since this would not only give LAAD-CA the prospect of future gains but would also reduce this burden of heavy interest payments on a new enterprise.

c. LAAD-CA should not count on increasing its interest rates and charges beyond present levels lest it discourage worthy borrowers.

d. LAAD-CA should, in general, seek to impact small farmers through its loans to industrial enterprises rather than lending through other financial institutions. This would not exclude such loans when necessary to support small producers supplying new food processing ventures.

5. Subproject Evaluations

a. Technical Assistance. Some borrowers do not expect technical assistance from LAAD-CA. However, LAAD-CA could contribute considerably by analyzing trends in major export market areas in order to assist subprojects to expand production, and by entering new product lines and geographic areas.

b. Non-Traditional Products. LAAD-CA should continue to expand the development of agribusiness systems in non-traditional agricultural fields, since this most directly expands the benefits of the rural poor. These products will provide for a stronger export sector, important for these Central American republics which are in a pre-industrialization phase.

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**III.**

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**ACCESS TO RESOURCES AND OPPORTUNITIES**

### III. ACCESS TO RESOURCES AND OPPORTUNITIES

Overall AID policy toward agricultural development has changed within the past five years to become more responsive to the needs of the poor majority within developing countries. This poor majority lives primarily in rural areas. Despite this, economic growth in Latin America has been "primarily an urban phenomenon and one that is concentrated in the small part of the agricultural sector that is commercially and/or export oriented." <sup>1/</sup> Barring some kind of system-wide revolutionary change, the only way that peasants and agricultural workers can benefit from this economic growth is by increased participation in the dynamic commercial agricultural sector. The expansion of commercial processing activities in non-traditional agriculture have the potential for dramatically increasing the social and economic welfare.

To this end, the AID/ROCAP stipulated that LAAD loan and invest in companies which had a positive economic impact upon small farmers and landless workers. LAAD-CA proposed to foment this impact in three ways: (1) lend to processing plants which would purchase a portion of its raw materials from small farmers, (2) lend to

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<sup>1/</sup> Thiesenhusen, William C., Current Development Patterns in Latin America with Special Reference to Agrarian Policy, " University of Wisconsin: Land Tenure Center, P. 5.

intermediate credit institutions which would relend the money to small farmers for farm credit, and (3) finance suppliers of farm inputs who would sell those inputs to small farmers.

In the interviews with loan recipients, LAAD had apparently communicated this aspect of AID policy well. Interviewee after interviewee stated that the loan, for whatever purpose it has been obtained, had a "small farmer element" included.

The consultants felt that the question as to whether small farmers and landless workers were able to participate in the developmental process as a result of LAAD-CA's activities was one of the most important asked in the study.

In this section, two important means to resource access and opportunities are discussed: (1) raw material purchases, and (2) employment. With regard to raw material purchases, this section brings out important findings regarding purchasing arrangements, small farmer views, purchase through cooperatives, as well as a tabulation of raw material purchases from various groups: small farmers, medium and large farmers, and company cultivation.

Several important aspects regarding employment are also discussed in this section: (1) analysis of employment creation due to

LAAD-CA's capital inputs to specific subprojects; (2) evaluation of the relative capital or labor intensiveness of LAAD-CA projects; (3) direct employment creation in rural or urban sites; (4) indirect farm labor creation; and (5) an estimation of total wage benefits.

The effect of farm credits channeled through ICIs and the productivity increases resulting from agricultural inputs are evaluated later in the report as a part of the comparative analysis of which funding channel creates the greatest impact upon the target group.

A. Raw Material Purchases

Among all the projects visited, six direct loan and three intermediate credit institution subprojects purchased raw materials from farmers. Crucial to this evaluation was the delineation between raw material suppliers, small, medium and large farmers, and that part which was raised on company-owned farms.

The definition of small farmer seemed to vary from source to source.

The formula used at the AID Spring Review on small farmer credit utilized farmers' total resources and their operations' profitability without reference to land acreage.<sup>1/</sup> The Capital Assistance

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<sup>1/</sup> Donald, Gordon, *Credit for Small Farmers in Developing Countries*, Boulder: Westview Press, 1976, P. 15.

**Paper (CAP) provided no specifics regarding the characteristics of a small farmer.**

More recently, the poor majority has been defined by AID/Washington as that proportion of a population with incomes in 1976 prices of at least \$250 to \$300 per capita.

Unfortunately, with regard to a precise definition of the small farmer, information regarding raw material purchases came, for the most part, from the processing plants. Their concern was not with the incomes of these farmers, although they do directly influence those incomes. Their preoccupation is with supply for their plants and this is translated outward to the farmers in yield and acreage terms. Indeed, there seemed to be a common means to delineate small from larger farmers. This delineation most likely reflects climatic conditions, productivity levels, etc. currently existing for Central American farmers.

**Most processors defined their growers as follows:**

|                        |   |
|------------------------|---|
| <b>Small farmers:</b>  | <b>less than 10 manzanas (17 acres)</b>   |
| <b>Medium farmers:</b> | <b>10 to 50 manzanas (17 to 85 acres)</b> |
| <b>Large farmers:</b>  | <b>over 50 manzanas</b>                   |

**Most plant managers emphasized that many of the small farmers had the "minimum-sized" farm, that being approximately two to three manzanas.**

Utilizing this breakdown of farm sizes, Table III-1 presents how the plant managers calculated by source actual raw material purchases. Industrias Agricolas Ideal has been segregated in the analysis because of its huge volume of purchases from large farmers which produced a very strong bias toward medium and large farmer purchases.

The consultants feel that the direct impact upon small farmers is very good--35.1 percent of all raw material supplies originated with them (excluding Industrias Agricolas Ideal).

1. Purchasing Arrangements

Table III-2 delineates these projects by name, products, number of suppliers, and purchasing arrangements utilized. The purchasing arrangements (agreements, contracts, etc.) varied from very informal to formal contractual arrangements.

The most informal arrangements were in two projects visited where the processors purchased goods from truckers who acted as middlemen between the processing plants and the farmers. It was learned that these truckers had as their business the transport of general freight to outlying villages and towns, and that rather than return to the capital city with empty trucks, they would purchase a few boxes of produce to pay for the return trip.

**Table III-1**  
**ACTUAL RAW MATERIAL PURCHASES BY**  
**LAAD DIRECT LOAN SUBPROJECTS AND SELECTED ICI SUBPROJECTS**  
**(Most Recent Fiscal Year)**

|   | <u>Raw Material</u><br><u>Purchases</u> | <u>Small</u><br><u>Farmer</u> | <u>Percent</u> | <u>Medium and</u><br><u>Large Farmer</u> | <u>Percent</u> | <u>Company</u><br><u>Cultivation</u> | <u>Percent</u> |
|---|---|-------------------------------|----------------|--|----------------|--------------------------------------|----------------|
| <b>Direct Loans:</b>                                      |   |                               |                |  |                |                                      |                |
| Alimentos Congelados (ALCOSA)                             | \$ 892,840                              | \$ 312,494                    | 35             | \$ 223,210                               | 25             | \$357,136                            | 40             |
| Conservas de Centroamerica                                | 275,567                                 | 113,506                       | 41             | 162,584                                  | 59             | -                                    | 0              |
| Arrocera Los Corrales <u>1/</u>                           | 763,669                                 | 314,613                       | 41.2           | 449,037                                  | 58.8           | -                                    | 0              |
| Alimentos de Costa Rica                                   | 892,050                                 | 133,807                       | 15             | 490,627                                  | 55             | 267,615                              | 30             |
| Leche y Derivados (LEYDE)                                 | 1,320,079                               | 580,834                       | 44             | 739,244                                  | 56             | -                                    | 30             |
| Industria Frutera del Gran Lago<br>(IFRUGALASA) <u>2/</u> | <u>1,069,750</u>                        | <u>456,943</u>                | <u>42.7</u>    | <u>400,140</u>                           | <u>37.4</u>    | <u>212,667</u>                       | <u>19.8</u>    |
| <b>Total Direct Loan Purchases</b>                        | <b>5,213,955</b>                        | <b>1,912,197</b>              | <b>36.7</b>    | <b>2,464,842</b>                         | <b>47.3</b>    | <b>837,418</b>                       | <b>16.0</b>    |
| <b>ICI Subprojects:</b>                                   |   |                               |                |  |                |                                      |                |
| Molino Arrocero Chorotega                                 | 290,161                                 | 166,552                       | 57.4           | 123,318                                  | 42.5           | -                                    | 0              |
| Lassally y Cia. <u>3/</u>                                 | <u>417,612</u>                          | <u>2,262</u>                  | <u>.5</u>      | <u>352,708</u>                           | <u>84.5</u>    | <u>62,642</u>                        | <u>15.0</u>    |
| <b>Total ICI Subprojects</b>                              | <b>707,773</b>                          | <b>168,814</b>                | <b>23.9</b>    | <b>476,026</b>                           | <b>67.3</b>    | <b>62,642</b>                        | <b>8.8</b>     |
| <b>Total Direct Loan and<br/>ICI Subprojects</b>          | <b>5,921,728</b>                        | <b>2,081,011</b>              | <b>35.1</b>    | <b>2,940,868</b>                         | <b>49.6</b>    | <b>900,060</b>                       | <b>15.1</b>    |
| <b>Industrias Agrícolas Ideal <u>4/</u></b>               | <b>22,920,000</b>                       | <b>2,388,000</b>              | <b>10.4</b>    | <b>20,652,000</b>                        | <b>89.6</b>    | <b>-</b>                             | <b>0</b>       |
| <b>Grand Total</b>  | <b>\$28,841,728</b>                     | <b>\$4,469,011</b>            | <b>15.3</b>    | <b>\$23,592,868</b>                      | <b>81.6</b>    | <b>\$900,060</b>                     | <b>3.1</b>     |

1/ Total purchases 76/77 were \$1,563,669 with \$800,000 (80,000 cwt @ \$10) of that in imports.

2/ Total purchases 76/77 were \$1,159,750 with \$90,000 in deciduous fruit pulp imports. LAAD-CA loan not disbursed during this period.

3/ Honey production only.

4/ Coffee and sesame production only.

Table III-2  
PURCHASING ARRANGEMENTS UTILIZED  
BY LAAD SUBPROJECTS

| <u>Name</u>                                  | <u>Product</u>   | <u>Number of Suppliers</u>  | <u>Purchasing Arrangements</u>   |
|--|--|---|--|
| 1) Alimentos Congelados                      | okra<br>broccoli<br>cauliflower                        | 3<br>Company production<br>70 plus                                  | Price is presently based on California market;<br>cash paid weekly   |
| 2) Arroceria Los Corrales                    | rice   | 245 farmers<br>14 truckers  | Purchase contract especially when inputs are<br>advanced. Price set at harvest time                                |
| 3) Conservas de Centroamerica                | tomatoes   | 30 (includes several<br>cooperatives)                               | Pre-set price based on main competitor's price   |
|  | peaches  | 2   | Pre-set price negotiated with farmers  |
|  | deciduous and<br>tropical fruit,<br>juices and nectars | N. A.   | Purchases mainly from truckers   |
| 4) Leche y Derivados                         | milk   | 150   | Verbal negotiation with comité de proveedores<br>(suppliers committee); farmers paid bi-weekly                     |
| 5) Alimentos de Costa Rica                   | rice   | 68 farmers and<br>company production                                | Purchase contract made in advance with prices<br>determined at harvest   |
| 6) Industria Frutera del<br>Gran Lago, S. A. | tomato paste   | 14 farmers, one 20-member<br>cooperative, and company<br>production | Contract with California price as competitive<br>factor  |
|  | papaya/guava   | 5 farmers   | Letter of intent to purchase   |
|  | pineapple  | 15 farmers  | Formal letter to INFONAC regarding intent to<br>purchase; eventually will be a contract with<br>individual farmers |
| 7) Molino Arrocerio Chorotega                | rice   | 70 farmers and 39<br>marketing co-ops                               | Advance purchase contract; will now begin to set<br>prices at the time of harvest                                  |
| 8) Lassally y Cia.                           | honey  | 115 farmers plus<br>company production                              | Sign purchase agreement only when cash advance is<br>made; pays competitive local market price                     |
| 9) Industria Agrícolas Ideal                 | coffee   | 1,900 farmers   | Purchase agreement is signed. Price set at<br>harvest time   |
|  | sesame   | N. A. Purchases entirely<br>from farmers                            | No purchase agreement; delivery is made if price<br>is adequate  |

It should be noted that the impact upon small farmers is very difficult to quantify in these cases. First of all, no one except the trucker knows who his suppliers are, and the actual amount of the purchase price to the farmer cannot be determined. In the case of Conservas de Centroamerica who utilizes truckers to obtain tropical and most of its deciduous fruits, the truckers are occasionally given small, short-term advances so they can encourage farmers to harvest and deliver more production. This certainly represents one of the characteristics of traditional purchasing methods.

a. Transportation

Three processors do not rely entirely on truckers or the farmers themselves to transport goods to the plant. ALCOSA weighs and purchases its raw materials at local buying stations, and takes responsibility for transporting the purchased material from these buying stations to the plant. The cost of this service is taken into account in setting the price that ALCOSA is willing to pay. Following a common dairy industry practice, LEYDE's trucks pick up milk at the farm, charging the farmers seven percent of the purchase price for this service. Alimentos de Costa Rica rents trucks and harvesting combines to any farmer who is interested, subtracting this rental fee from the amount due the farmer upon delivery to the plant.

Unless the processing plant can make some arrangements to provide transportation from the farm to the plant, many small producers may simply be precluded from selling to this new expanding market. This is especially true with products such as fruits, vegetables and milk, which involve daily production over long periods. Under these conditions, small producers simply cannot harvest enough at any one time to make it feasible to rent a truck, no matter how small. Such small farmers, even when members of co-ops, generally lack the time and organizational know-how to put together some kind of collective transportation arrangement. Processing plants, however, can do this easily and at no cost to themselves, since transportation charges can be subtracted from the prices paid for the farmers' goods.

Nevertheless, processors have been traditionally reluctant to take on the added complications of establishing trucking routes or local buying stations. In some crops, this has led to reliance on a few large-scale producers, who have no difficulty in providing their own transportation. In other crops more suited to small-scale production, the transportation function has been taken over by middlemen, or transportistas. By making a great number of small purchases at the farms or local markets, these middlemen are able to collect enough product to economically transport it for resale at the processing plant.

As has been frequently pointed out, these middlemen do serve an economic function, but the price they charge the farmers for this function is considerably higher than that charged by other processing plants who are willing to undertake this service. More importantly, the middleman serves as an almost absolute block to all communication between the processor and its growers. For instance, a company like Conservas, which purchased 100 percent of its small farmer production through middlemen, is unable to increase its raw material supply by providing these farmers technical assistance that would increase yields. (This is an important means by which ALCOSA and Alimentos de Costa Rica have been able to increase their supplies.) Furthermore, Conservas is unable to communicate to growers even such basic information as what fruits or varieties it would like to purchase more of in the future. It can only communicate its wants and desires through an uncertain pricing mechanism, never knowing whether higher prices would in fact serve as production incentives, since it can never know whether price increases are in fact passed on by the middleman to the farmer. Provision of transportation is thus a key variable determining the quantity and quality of small farmer participation, their access to resources and opportunities, in agricultural production for processing plants.

**b. Assured Demand Contracts**

Another element of the purchasing arrangements was whether they provided for assured-demand and price stabilization features. ALCOSA, LEYDE and Alimentos de Costa Rica all enter into agreements with their growers that provide these features. All agree to buy the total production of a stated number of input units (acreage or herd size). Prices are fixed, either by the company (ALCOSA) or by government regulation (LEYDE, Alimentos). <sup>1/</sup>

Goldberg noted in his book on fruit and vegetable marketing in Latin America that processors and packers procuring by contract may have greater long-run potential than completely integrated operations.

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<sup>1/</sup> There are three distinct sets of circumstances which determine how prices are set. One is where the goods are domestically traded and prices result from supply and demand. Good examples are fruit juice, tomato paste or canned jalapenos. Second, are goods which are internationally traded and where production price must be lower than that in the market area so that trade can take place. Good examples are cauliflower, okra and broccoli whose Central American feasibility depends greatly upon the California output price. Third is the case of nationally important commodities, such as milk or rice, whose prices are set by government fiat.

This is especially true in areas such as Central America where land pressure and concern over rural income distribution are present. The trend in Mexico is guided by credit and infrastructure investment weighted toward small farmer procurement is some type of contractual relationship with cooperatives, private packers and processors. <sup>1/</sup>

Conservas (in the case of deciduous and tropical fruits), and Urcozon and Prosanca (yucca processors many of whose growers receive credits from the Banco de Costa Rica) do not enter into contracts with farmers and, therefore, do not provide assured demand and price stability. All are having self-admitted problems of raw material shortages, thus constituting a serious threat to the companies' profitability.

Prosanca used to offer assured demand contracts but contracted for more production than they had the capacity to handle. When a good harvest came along, it found itself unable to honor commitments. Molino Arrocerero Chorotega provides a similar example. It formerly provided for assured demand contracts with price features. Faced with a bumper crop and a shortage of working capital, it was unable to pay for all of the production received. Furthermore, its sales prices fell drastically and it lost money. Chorotega no longer offers price features with its promises to buy. As the result of these two

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<sup>1/</sup> Goldberg, Ray A. et al, Agribusiness Management for Developing Countries - Latin America, Ballinger: Cambridge, 1974.

companies' experiences, many farmers mistrust them, and are unwilling to deal with them except as a last resort when no other market is available.

A common purchasing arrangement results where the processing plant provides credit to farmers generally in the form of seeds, fertilizer or other inputs. Thereupon, a contract is signed with the farmer to guarantee that adequate produce is delivered to the plant to repay the credit.

A good example of this was Los Corrales (rice) which imports high-yield seed from the United States and provides it to farmers who contract to sell their total production to Los Corrales. These contracts do not specify prices, although Los Corrales does as a matter of policy pay prices that at any given time are slightly higher than the prices offered by the small mills who constitute their only competition.

In the case of most fruits and vegetables, it is tempting for the farmer to sell in the fresh market when those prices exceed the contracted or anticipated prices from the processing plant. One processor stated that he would not tolerate sales of contracted production to the fresh market, and refused to purchase subsequent deliveries from the farmer after he discovered the fresh market sales. To offset the

diversion of badly needed production, they, in a positive manner, encouraged the farmers to plant adequate amounts for the fresh market along with the contracted amount for his plant.

2. Production for Processing Plants vs. Production for the Traditional Market: Small Farmer Reactions

Interviews with small farmers and with lower level personnel who deal directly with these farmers provide no basis whatsoever for any supposition that small farmers are unwilling to produce for new processing plants because of traditionalism, conservatism, reluctance to innovate, or any other cultural "backwardness" often attributed to such campesinos. Generally, small farmers discuss their decision whether to grow a particular product for a processing plant or the same or other products for the fresh market in strictly economic terms. As a rule, the prices that processing plants are willing to pay are substantially below cyclical peak fresh market prices and somewhat above the cyclical lows. Farmers thus must make an economic decision, weighing the security of the processor's contract versus the possibly higher income of production for the local fresh market. Naturally, since the small farmers interviewed were producing for processing plants, they were unanimous in their conclusion that an assured market was very important to them. Not surprisingly, the

degree of enthusiasm they still held for their previous decision depended upon the current prices in the fresh market that they had foregone.

Farmers generally were willing to give up a considerable amount of potential income for the security of a fixed price contract. Processors who do not offer this type of contract are therefore in effect buying on the open market, paying more for their raw materials than they might otherwise have to pay if they were willing to offer their growers contractual security. When the processing plant is paying open market prices and offering no contracts, then the farmer's main decision is not whether to produce for the processing plant or not but whether to grow the processing plant's product or some other. Except for Industrias Agricolas Ideal's coffee farmers and some traditional rice farmers (a group that made up almost all of Los Corrales' small producers, a few of Alimentos', and none of Chorotega's), the small farmers interviewed were all experienced cultivators of at least a limited variety of crops. They are therefore constantly assessing current prices, trying to foresee which crops will be likely to be most profitable in the coming year.

The collective result of all this rational decision-making on the part of the small farmers may be a complete lack of a particular type of raw material for processors who are unwilling to pay more than the open

market price. For instance, when Prosanca and Urcozon first began to process and purchase yucca, the price was quite high. Costa Rican farmers as a result moved into yucca production in great numbers causing a so-called "yucca boom." The plants were unable to process all of the resulting production, and therefore refused deliveries to some farmers. Prices dropped drastically, to very low levels, where they remain today. As a result, neither Urcozon nor Prosanca have been able to operate at even one-half capacity. Prosanca, which has recently established a policy of paying a premium over the market rate, has been able to continue to entice farmers who live within oxcart hauling distance to produce yucca. But these deliveries are only enough to keep the plant open one week out of every two. Urcozon, paying the going market rate, has been hardly able to secure any deliveries at all. In fact, yucca farmers stated that at current market prices it was not even worth their while to harvest yucca that they had ready in the ground. In short, small farmers who have been willing and able to produce yucca in the past have simply turned to other crops. As they see it, they have been driven out of yucca production by the unprofitably low price levels that the processing plants are currently paying. The plants' past inability to provide price stabilization has led them to their current situation of a desperate shortage of raw material.

Many people, including some of the company managers interviewed, believe that a major factor contributing to raw material shortages is a reluctance on the part of small campesinos to either move into new crops or to adopt innovative higher-yield agricultural technology. No basis for this belief was found in the interviews with small farmers. Indeed, agronomists and agricultural technicians who dealt directly with small farmers were unanimous in rejecting this conclusion. Typically, small farmers took advantage of the interview situation to ask for specific technical information, either from the Checchi socio-anthropologist or from the project representative who accompanied him. Small farmer respondents were also eager to know of any additional crops that the processor might be interested in purchasing. Casual comments by either the project representative or the socio-anthropologist about new crops or new varieties of the same crop were often responded to aggressively by small farmers, who often asked directly to be included in the new program, or to be allowed to make a trial planting of the new variety, etc.

For example, a group of ALCOSA's cauliflower growers, after being told that North American cauliflower varieties were heavier than the native plants, realized immediately that they might earn more money from the new varieties, since they were paid by the pound.

They repeatedly and persistently questioned ALCOSA's technical representative as to where they might be able to purchase these North American seeds. All he could say was that such seeds would have to be imported from the United States. More than a month later, while visiting ALCOSA's farms, this same group of campesinos came across an experimental seed bed of Imperial cauliflower, one of the new North American varieties. They immediately badgered the farm personnel into being allowed to take a few sample plants home "for a trial planting." Later, they confided to the Checchi socio-anthropologist that they had no intention of using these plants as a test per se, but as a source of seeds for the new variety.

In the standard interview schedule, small farmers were asked if they had ever received technical advice about the agricultural problems that they had encountered in the cultivation of their particular crop. Farmers who answered in the negative almost invariably added a spontaneous comment to the effect that they felt the need for such advice, or that they really would like the opportunity to receive such advice. The whole question of the effective communication of technical advice by LAAD loan recipients will be addressed in detail later; the point to be made here is that such advice and the innovations that might result were eagerly sought after by small farmers. This phenomenon was

repeatedly observed by the Checchi socio-anthropologist, and confirmed unanimously by all interviews with project agronomists, but upper level project management nevertheless tended to accept the stereotype shared by most Latin American urbanites of a tradition-bound, change resistant peasantry.

### 3. Purchasing Through Cooperatives

Several processors cited a finding of the previous LAAD evaluation that there was an aversion to purchasing through production or marketing cooperatives. This varied from country to country, but cooperatives are viewed as politically based with leaders who make political mileage through confrontations with packers and processors.

The milk processor, Leche y Derivados, found itself negotiating prices with a suppliers' committee. Upon notification from the Honduran Government that the price be raised L. 02 per liter, that committee attempted to force him to pay the entire increment to the producer rather than halving it as the processor had proposed. There seemed to be no political overtones, and the case served as a good example of how interest groups will form to protect the interests of the farmer. For instance, in Mexico, grower cooperatives play a strong role in quality control and shipping schedule adherence. Although management prefers not to buy from such cooperatives, collective organizations of suppliers will tend to occur as the grower-processor relations mature.

**B. Employment**

This section will discuss and analyze (1) the relative capital or labor intensiveness of LAAD-CA projects; (2) direct employment creation attributable to LAAD-CA's capital input; (3) indirect farm labor creation; (4) total wage benefits; and (5) direct employment creation in rural and urban worksites.

**1. Labor versus Capital Intensiveness**

Because one of the congressional mandates is to cause the "shifting from capital intensive to labor intensive policies, and projects," <sup>1/</sup> it is important to determine whether the LAAD-CA subprojects are relatively capital or labor intensive. The problem is one of proper factor proportions. Checchi's opinion is that any statement regarding labor or capital intensiveness must recognize the need of any enterprise to be competitive pricewise now and in the longer term. This is true especially in the case of those plants which face considerable competition either domestically or on the world market. For example, both ALCOSA and IFRUGALASA cited the importance of

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1/ Capital Assistance Paper, P. 26.

California prices as a determinant in demand for their products. Furthermore, if the long-run trends in food processing projects follow the tendencies in the U.S., there will be concentration to achieve economies of scale and the result will be larger plant size and more capital intensiveness.<sup>1/</sup> Therefore, although it is generally agreed that employment is desirable, one cannot expect these plants to be equipped in such a way that long-run profitability is seriously handicapped.

In the 1974 Checchi evaluation which encompassed a broader range of business activities, average capitalization per full-time employee was \$10,756. The range of capitalization for full-time employee was from \$2,183 and \$4,306 capital per employee for two floriculture operations to \$47,815 for a frozen vegetable processor who operated on a highly seasonal basis.

Table III-3 permits the evaluation of relative labor-capital intensiveness among the subprojects visited during the second evaluation. For the purposes of this analysis, part-time employees have been converted into person-years to give a total "full-time employment" figure.

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<sup>1/</sup> Goldberg, Ray A. et al., op. cit., P. 115.

Table III-3

RELATIVE LABOR - CAPITAL INTENSIVENESS  
BY SUBPROJECTS VISITED

July - August 1977

| <u>Direct Loans</u>   | <u>Total<br/>Capitalization</u> | <u>Full-time<br/>Employees</u> | <u>Part-time<br/>Employees<br/>Full-time<br/>Equivalent</u> | <u>Total<br/>"Full-time"<br/>Employment</u> | <u>Capital/Labor</u> |
|---|---------------------------------|--------------------------------|---|---|----------------------|
| Alimentos Congelados<br>Frozen Vegetables                                   | \$ 1,671,508                    | 355                            | -   | 355   | \$ 4,708             |
| Conservas de Centroamerica<br>Fruit and Tomato Processing                   | 3,477,395                       | 163                            | 2   | 165   | 15,015               |
| Arrocera Los Corrales<br>Rice Mill  | 1,351,853                       | 32                             | -   | 32  | 42,245               |
| Alimentos de Costa Rica<br>Rice Mill  | 1,364,670                       | 32                             | 2   | 34  | 40,137               |
| Leche y Derivados<br>Milk Processor   | 1,203,817                       | 89                             | -   | 89  | 13,526               |
| Industria Frutera del Gran Lago <sup>1/</sup><br>Fruit and Tomato Processor | 3,400,000                       | 26                             | 161   | 187   | 18,182               |
| <u>ICI Subprojects</u>  |                                 |                                |   |   |                      |
| Molino Arrocero Chorotega<br>Rice Mill                                      | 983,608                         | 27                             | -   | 27  | 36,429               |
| Industrias Agricolas Ideal<br>Coffee and Sesame                             | 5,135,451                       | 18                             | 150   | 168   | 30,936               |
| Lassally y Cia.<br>Honey  | 300,000                         | 33                             | -   | 33  | 9,090                |
| Maquinaria Agricola<br>Farm Equipment                                       | 70,252                          | 14                             | -   | 14  | 5,018                |
| Semillas, S. A.<br>Hybrid Corn Processor                                    | 500,489                         | 24                             | -   | 24  | 20,854               |
| Totals  | \$18,459,043                    | 811                            | 315   | 1,126                                       | 16,393               |

<sup>1/</sup> Estimated capitalization: \$2.2 million building and fixtures; \$800,000 equipment; \$400,000 working capital.

Curiously, Alimentos Congelados, a frozen vegetable processor, was found to be the most labor intensive--in the same category as the floriculturalists from the previous study. This result may be attributed to the fact that 200 of ALCOSA's workers are presently found on the company's broccoli farms, an activity which will continue at least another five years during which time it will encourage individual farmer production of that crop.

At the other end of the scale are the three rice mills and the coffee processor. The rice mills are indeed capital intensive, operating with a small labor force from stored inventories over long periods. These mills could even become more capital intensive with the addition of conveyor and auger equipment to replace physical handling of sacked and bulk rice.

The average capital-labor figure of \$16,393, if taken as an estimator for the present LAAD operation, and the \$10,756 capital-labor figure (where part-time labor was not converted into its full-time equivalent) from the past evaluation, represents a definite shift toward more capital intensive projects, although price inflation may account for some of this increase. It would be noted that the loans to rice mills which have biased this figure upward have other important attributes as basic grains activities which make these important loans

for LAAD. However, it does seem that projects such as vegetable, fruit, milk, and honey processing, and the small equipment supplier (if it can be properly analyzed using this framework) represent acceptable levels of labor intensiveness vis-a-vis the Congressional mandate.

## 2. Direct Employment Creation

Employment creation was considered to be an important element of the overall LAAD-CA program. This activity recognizes the plight of landless peasants, and farmers whose landholdings are inadequate for efficient production. The Capital Assistance Paper stated that "a significant number of Central America's rural poor will never have the opportunity to become even moderately successful farmers, but many of this group could well perform related tasks which are more productive than marginal farming." LAAD estimated that through the \$7 million in loans and investments brought into play by the second AID loan and LAAD's shareholders, an additional \$10 million would be invested by subproject owners and/or loaned by their creditors. This \$17 million in capital was to have brought about direct creation of 5,150 full-time jobs. An estimated average of \$3,300 in capital outlay was required to create one full-time job.

Before analyzing LAAD's impact upon employment, several caveats should be mentioned. First, if the loan were for working capital, the implication is that the business was already set up and required funds to finance for raw material inventories or other operational expenses. This, unquestionably, is essential to the ongoing nature of the business; however, the credit may be said to have had the effect of maintaining rather than creating new employment. Because there is no practical way to make this differentiation, we have assumed that all employment effects are homogeneous and create employment. One ICI subproject loan, that to Salvador Machinery, has been omitted from the analysis altogether because it was felt that employment was neither created nor maintained by the infusion of LAAD funds, and that the loan enabled that company to expand its sales by ten percent utilizing its normal labor force.

Second, if a loan were for equipment purchases, it is conceivable that the effect may have been to reduce employment, replacing laborers with machines. There was, however, no evidence of that view.

Third, it should also be noted that LAAD's capital contribution represents only a portion of the total capitalization of each firm. If one is to quantify LAAD-CA's employment creation effects, it would appear logical that this be based on LAAD's proportion of the total

capital employed in each subproject. This was taken into consideration and employment was discounted by the LAAD financing/total capital ratio.

Table III-4 analyzes the actual employment situation in each project. LAAD-CA had made previous loans to some of these projects and the total LAAD financing was utilized in those cases. One direct loan subproject, Industria Frutera del Gran Lago, S. A., had not received its loan at the time of our visit pending finalization of the audit for its first year of operations, and therefore, LAAD-CA has not really contributed to employment creation at that plant. Nevertheless, for the sake of analysis and because when made it will certainly have a supportive effect, it has been assumed that that loan has been made.

This table indicates that LAAD's capital contribution represents 17 percent of the capital investment of the projects visited.

The \$18 million total capitalization of the subprojects visited is close enough to the estimated \$17 million capital for easy comparison. The inclusion of capital intensive Industrias Agricolas Ideal (which has a relatively small loan compared to its total capitalization) gives an upward bias to the capital outlay per job figure. Recognizing this bias and including Industrias Agricolas Ideal, we can calculate that LAAD's

Table III-4

EMPLOYMENT IN DIRECT LOAN AND SELECTED ICI SUBPROJECTS

July - August 1977

|                                 | <u>Full-time<br/>Equivalent</u> | <u>LAAD<br/>Financing</u> | <u>Total<br/>Capitalization</u> | <u>LAAD<br/>Capital</u> | <u>LAAD<br/>Employment<br/>Creation</u> |
|---------------------------------|---------------------------------|---------------------------|---------------------------------|-------------------------|---|
| <b>Direct Loans:</b>            |                                 |                           |                                 |                         |   |
| Alimentos Congelados            | 355                             | \$ 500,000                | \$ 1,671,508                    | .30                     | 107                                     |
| Conservas de Centroamerica      | 165                             | 400,000                   | 2,477,395                       | .16                     | 26                                      |
| Arrocera Los Corrales           | 32                              | 447,000                   | 1,351,853                       | .33                     | 11                                      |
| Alimentos de Costa Rica         | 34                              | 230,000                   | 1,364,670                       | .17                     | 6                                       |
| Leche y Derivados               | 89                              | 275,000                   | 1,203,817                       | .23                     | 21                                      |
| Industria Frutera del Gran Lago | 187                             | 400,000                   | 3,400,000                       | .12                     | 22                                      |
| <b>ICI Subprojects:</b>         |                                 |                           |                                 |                         |   |
| Molino Arrocerero Chorotega     | 27                              | 500,000                   | 983,608                         | .51                     | 14                                      |
| Industrias Agricolas Ideal      | 166                             | 100,000                   | 5,135,451                       | .02                     | 3                                       |
| Lassally y Cia                  | 33                              | 80,000                    | 300,000                         | .27                     | 9                                       |
| Maquinaria Agricola             | 14                              | 20,000                    | 70,252                          | .28                     | 4                                       |
| Semillas, S. A.                 | 24                              | 120,000                   | 500,489                         | .24                     | 6                                       |
| <b>Totals</b>                   | <u>1,126</u>                    | <u>3,072,000</u>          | <u>18,459,043</u>               | <u>.17</u>              | <u>191</u>                              |

Including Industrias Agricolas Ideal:  $\frac{\$18,459,043 \text{ Capital}}{1,126 \text{ full-time jobs}} = \$16,393 \text{ capital/job}$

Excluding Industrias Agricolas Ideal:  $\frac{\$13,324,552 \text{ Capital}}{960 \text{ full-time jobs}} = \$13,880 \text{ capital/job}$

\$7 million capital input would "enable" a total subproject capitalization of \$42 million. Direct employment creation at the rate of \$16,393 capital per job would be 2,570 full-time jobs, far short of the Capital Assistance Paper goal of 5,150 full-time jobs.

If Industrias Agrícolas Ideal is eliminated from the analysis, LAAD's \$7 million capital input will "enable" \$31.7 million of total subproject capitalization. At the rate of \$13,880 capital outlay per job, 2,286 jobs would be created. This is still far short of the CAP goal.

### 3. Indirect Farm Labor Creation

Given the number of crops, seasonal utilization of farm labor, and the fact that, in certain instances where middlemen were employed, the agribusinesses could not identify who their suppliers were, no attempt will be made here to estimate the total magnitude of indirect farm labor created.

Nevertheless, a general impression, along with some specific examples, can be given. With the AID emphasis upon small farmers, it should be recognized as inherent in those small operations that little outside labor is used. The primary source of labor comes from the immediate family. This practice does not have the same GNP effects as hired labor, but has the positive effect of keeping the family more productively employed thus maximizing their income potential. A good example of family cultivation was the small cauliflower farmers who grow for ALCOSA.

Eventually, the trend will be toward utilizing outside labor even on these small acreages. Tomato growers in Guatemala who have only five manzanas, employ two to three workers. Small milk producers in Honduras utilize one to three workers on a permanent basis, and an additional ten laborers for two to three weeks a year to clear pastures. Medium milk producers have two to six permanent employees. Medium-sized Salvadorean bee keepers hire three to five workers full time.

Much of this employment is planting or harvest oriented. Medium growers for Arrocería Los Corrales (rice) have one to two permanent employees, but utilize 10 to 15 workers during harvest. Even small pineapple producers in Nicaragua hire one extra man for one month a year to help with the harvest. Small coffee producers in El Salvador use 10 workers for each manzana cultivated for a month during harvest.

This type of employment creation is important in that it is rurally based and, in some cases, demonstrates a high labor intensiveness relative to capital inputs.

#### 4. Annual Wage Benefits

Although employment numbers are extremely useful indicators of economic impact and enable one to determine the relative capital or labor intensiveness of any given LAAD-CA subproject, it is

perhaps even more important to convert employment numbers into wages and benefits to measure the full import of employment creation activities. This will ultimately enable us to test how well the AID loan affects the marginally productive farmer or landless worker.

Wage information was given by plant managers. Some estimation was required for top management salaries and fringe benefits where required. Table III-5 tabulates the wage benefits for direct loan and ICI subprojects. The 11 projects listed have received \$2.7 million in direct or indirect LAAD financing. The same LAAD-CA financing to total capitalization ratio as found in Table III-4 has been utilized to discount wage and fringe benefit effects attributable to LAAD-CA. Wages and fringe benefits attributable to LAAD-CA equalled \$434,706. Assuming that the remainder of the \$5 million will create or maintain employment at about 85 percent as effectively as the studied \$2.7 million (Salvador Machinery will produce no direct employment effects and a large portion of the Costa Rican ICIs is strictly for farm production credits), our estimate is that the total wage benefits will be \$805,011 annually. The economic impact is far less than that of raw material purchases, even raw material purchases of small farmers.

Table III-5  
ESTIMATED ANNUAL WAGES AND FRINGE BENEFITS  
IN LAAD DIRECT LOAN SUBPROJECTS AND  
SELECTED ICI SUBPROJECTS

|  | <u>Wages</u>           | <u>Fringe Benefits</u> | <u>Total</u>           | <u>LAAD Financing/<br/>Capital</u> | <u>Wages and Benefits<br/>Attributed to LAAD</u> |
|--|------------------------|------------------------|------------------------|------------------------------------|--|
| <u>Direct Loans Projects:</u>                    |                        |                        |                        |                                    |  |
| Alimentos Congelados (ALCOSA)                    | \$ 250,000             | \$125,000              | \$ 375,000             | .30                                | \$112,500  |
| Conservas de Centroamerica                       | 322,370                | 64,474                 | 386,844                | .16                                | 116,053  |
| Arrocera Los Corrales                            | 72,450                 | 14,490                 | 86,940                 | .33                                | 28,690   |
| Alimentos de Costa Rica                          | 90,000                 | 34,200                 | 124,200                | .17                                | 21,114   |
| Leche y Derivados (LEYDE)                        | 161,400                | 47,369                 | 208,769                | .23                                | 48,015   |
| Industria Frutera del Gran Lago<br>(IFRUGALASA)  | <u>286,788</u>         | <u>84,236</u>          | <u>365,024</u>         | .12                                | <u>43,802</u>                                    |
| <b>Total Direct Loan Projects</b>                | <b>836,008</b>         | <b>369,769</b>         | <b>1,546,777</b>       |                                    | <b>370,175</b>                                   |
| <u>ICI Subprojects:</u>                          |                        |                        |                        |                                    |  |
| Molino Arrocerero Chorotega                      | 36,876                 | 11,062                 | 47,938                 | .51                                | 24,448   |
| Industrias Agricolas Ideal                       | 131,960                | 39,588                 | 171,548                | .02                                | 3,431  |
| Lassally y Cia.                                  | 55,052                 | 16,515                 | 71,567                 | .27                                | 19,323   |
| Maquinaria Agricola                              | 20,162                 | 4,320                  | 24,482                 | .28                                | 6,855  |
| Semillas, S. A.                                  | <u>33,570</u>          | <u>10,071</u>          | <u>43,641</u>          | .24                                | <u>10,474</u>                                    |
| <b>Total ICI Subprojects</b>                     | <b>277,620</b>         | <b>81,556</b>          | <b>359,176</b>         |                                    | <b>64,531</b>                                    |
| <br>Estimated Total Wages<br>and Fringe Benefits | <br><u>\$1,113,628</u> | <br><u>\$451,325</u>   | <br><u>\$1,905,953</u> |                                    | <br><u>\$434,706</u>                             |

This low impact can be illustrated further by comparing relative input costs for two products made in the IFRUGALASA plant in Nicaragua:

|                | <u>Pineapple Juice</u> | <u>Apple Juice</u> |
|----------------|------------------------|--------------------|
| Raw material   | 13%                    | 19%                |
| Cans           | 59%                    | 53%                |
| Sugar          | 6%                     | 7%                 |
| Indirect costs | 16%                    | 17%                |
| Labor          | 5%                     | 2%                 |
| Other          | <u>1%</u>              | <u>2%</u>          |
|                | 100%                   | 100%               |

The conclusion which can readily be drawn by the nature of these industries is that they tend to be capital intensive; wage benefits (from factory employment) will be a minor but important impact as a result of LAAD-CA's subproject employment.

##### 5. Rural versus Urban Worksites

This section will briefly analyze whether there are significant employment opportunities of the rural poor. All capital cities plus San Pedro Sula, Honduras, were considered urban worksites. Table III-6, using full-time jobs and full-time equivalent worksites, part-time jobs created, demonstrates that 64 percent of all jobs in the LAAD subprojects are found in rural areas.

Table III-6

**EMPLOYMENT IN LAAD DIRECT LOAN SUBPROJECTS  
AND SELECTED ICI SUBPROJECTS  
BY RURAL AND URBAN WORKSITE**

|   | <u>Rural Full-Time<br/>or Equivalent</u> | <u>Urban Full-Time<br/>or Equivalent</u> |     |
|---|--|--|-----|
| <b><u>Direct Loans:</u></b>                             |  |  |     |
| Alimentos Congelados, San Jose Pinula, Guatemala        | 355                                      | -  |     |
| Conservas de Centroamerica, Guatemala, Guatemala        | -  | 165                                      |     |
| Arrocera Los Corrales, Villa Nueva, Guatemala           | 32                                       | -  |     |
| Alimentos de Costa Rica, Liberia, Costa Rica            | 34                                       | -  |     |
| Leche y Derivados, La Ceiba, Honduras                   | 43                                       | 46                                       |     |
| Industria Frutera del Gran Lago, Granada, Nicaragua     | 187                                      | -  | 63. |
| <b><u>ICI Subprojects:</u></b>                          |  |  |     |
| Molino Arrocero Chorotega, Choluteca, Honduras          | 27                                       | -  |     |
| Industrias Agricolas Ideal, El Salvador, San Salvador   | -  | 166                                      |     |
| Lassally Cia., Quetzaltepeque, San Salvador             | 33                                       | -  |     |
| Maquinaria Agricola, El Salvador, San Salvador          | -  | 14                                       |     |
| Semillas, S. A., El Salvador, San Salvador and Environs | <u>7</u>                                 | <u>17</u>                                |     |
| <b><u>Totals</u></b>                                    | <b>718</b>                               | <b>408</b>                               |     |

**C. Qualitative Social Impact**

In only four of LAAD's subprojects was it possible to observe more or less dramatic changes in the life situations of small farmers, or changes that were directly attributable to the activities of LAAD's clients. These projects were ALCOSA, Arrocería Los Corrales, Alimentos de Costa Rica, and LEYDE. Three other projects, Arrocería Chorotega, Banco de Costa Rica, and IFRUGALASA, involved farmers located in an area where extensive government-sponsored colonization or land reform programs were being carried out. Unquestionably, the life situations of farmers in the San Carlos area of Costa Rica, in the Rigoberto Cabezas colonization project in Nicaragua, and in the Choluteca area of Honduras were being dramatically changed for the better. In each of these three cases, however, the impact of the LAAD-sponsored project was hard to assess. The IFRUGALASA project in Rigoberto Cabezas, Nicaragua, which of the three is the project most likely to have the greatest positive impact, was simply too new. The first crop of pineapple to be processed by IFRUGALASA had only been in the ground two weeks at the time of this study. LAAD-funded production credit loans made by the Banco de Costa Rica to farmers in the San Carlos area are undoubtedly a help to those farmers. But the precise impact is hard to measure, except for the higher interest rate charged to farmers due to the higher costs of the LAAD money, because

this same bank has been extending production credit to these same families since they first received their lands five or ten years before. In Choluteca, an efficient and well-managed rice processing plant could have a significant positive impact on the new land reform recipients trying to carry out large-scale collective rice farming in that area. But so far, the impact of Arrocería Chorotega's low-paying, slow-paying, unreliable, and inconsistent management has probably been more negative than positive.

Other LAAD projects have had a positive quantitative impact on some small farmers, but a qualitative impact effecting large changes appears unlikely. Thus, small fruit growers in Guatemala may possibly have received higher prices from the middlemen who have traditionally bought their fruit as a result of Conserva's activities. In El Salvador, Industrias Agrícolas Ideal's small coffee farmers have in recent years experienced dramatic increases in income and standards of living, but one cannot attribute the world-wide rise of coffee prices to any of LAAD's activities. It is possible and even likely that the combination of FRIGITEC's purchases and the Banco de Crédito Agrícola de Cartago's loans will have a significant positive impact on Costa Rican small farmers. But FRIGITEC was not in operation at the time of the study,

and the bank was using the money to finance the traditional products of small farmers who had been the bank's clients for generations. The qualitative social impact of the other ICI subprojects in El Salvador was either not investigated in depth (the hybrid seed and machinery suppliers) or was so investigated, and found to be nil (Lassally y Cia.). The observations that follow regarding qualitative changes in the life patterns of small farmers are, therefore, based on the four projects where such changes were most discernible. The changes discussed below are therefore not those caused by the "average" LAAD project, but by the best projects. They do indicate what other projects are likely to accomplish in the future (IFRUGALASA, FRIGITEC-BCAC) or what could be accomplished with better management (Arrocera Chorotega) or changed purchasing procedures (Conservas).

LEYDE, ALCOSA and the two successful rice processors are all purchasing products that have been grown before by at least some farmers in the purchasing area. All four of these companies, however, were able to offer their growers an unlimited demand for these products. This assured market has been, in all cases, sufficient to motivate farmers to expand production in every way they knew how. In all cases, farmers have brought more land into commercial crop cultivation, have considerably increased their family's labor time, and have tended to invest heavily in additional agricultural inputs per unit of land.

So far, the dairy farmers have concentrated their investment almost exclusively in increasing their herd size. Smaller farmers are lagging behind their larger counterparts in increasing investments in drugs and medical care for the herds, but some small farmers have begun to provide more careful medical care. More could be done in this direction if these farmers had access to any technical assistance at all, but they really have none. The only source of new technological know-how in the area is that informally transmitted from the larger dairymen, or from people who have been employed on the large dairy ranches in the area. LEY DE would like to be able to provide technical assistance, but it must wait until profits increase to the point where a technician may be hired. AL COSA farmers have been investing in additional fertilizer, insecticide, and pack horses for transportation. Los Corrales' rice growers have seen large increases in yields due to the use of the new North American seeds that Los Corrales provides. Most have felt justified in increasing the levels of fertilization, therefore, as a result of the increased yields. This is fortuitous, since it is likely that the new seed varieties require significantly more fertilizer for maximum production than was the case with the native varieties. Los Corrales is normally in contact with its growers only at planting and harvest times, and it is unlikely that much technical assistance is transmitted during these brief contacts.

The changes in cultivation techniques induced by Alimentos and their two agronomists are on a qualitatively higher plane than the other LAAD projects. Alimentos will provide the farmers seed and provide the highly specialized machinery to prepare the land, sow the rice, make the early applications of fertilizer and herbicide, and harvest the crop. Many of Alimentos' growers are not experienced farmers and probably could not grow rice successfully without this aid. But even the approximately one-third of the growers who have been traditional rice farmers have entered an entirely new age of productivity. Planting, sowing, weeding, and harvesting by hand, a rice farming family could only cultivate a few manzanas at most. Now all these families have rented and cleared former pasture land throughout the area to plant five or ten or fifteen manzanas. The expenses of this new mechanized farming are incomparably higher, but since none of these investments are out-of-pocket, but counted against deliveries at harvest time, the increased investments are not a hindrance. Only the increased incomes matter to these farmers. (Alimentos requires all of its growers to participate in Costa Rica's government-sponsored crop insurance program for rice.)

The additional labor being performed by these farm families would seem to be an unquestionably positive phenomenon, both from the point of

view of the families and from the point of view of national economic aggregates. Farm labor that has traditionally been under-utilized is becoming more productive as a result of these LAAD project activities. The extra investments, however, expose all but the Costa Rican farmers (who are covered by crop insurance) to significantly increased risks of economic disaster. On the one hand, these larger investments are absolutely necessary for increased income, and are gladly undertaken by the farmers involved. On the other hand, drought or other natural disaster could lead to much larger debts and much worse economic trauma than previously. And now that they are full participants in national or international agricultural commerce, natural disasters are no longer the only possible source of problems. Well managed as these particular LAAD clients are, it is still conceivable that international or national economic factors outside their control could lead to their temporary or permanent demise. This new possibility would now become as troublesome for the farmers involved as any natural disaster.

The involvement in commercial agriculture and the interaction with these large commercial processors does allow an additional opportunity, however, aside from the immediate economic benefits. Farmers in these situations become one of a large class of growers, all growing the same products for the same purchasers. This can

hasten the end of rural household and village isolation by increasing participation in national political and economic life. On a formal level, the growers may organize, as LEYDE's dairy farmers have done, to engage in collective bargaining with the plant. In this case, farmers are demanding a say in the sales conditions for a product which virtually had no market only a few years before. Even if organization does not take place on this formal level, there may occur an informal exchange of information among growers of the same product from different regions. This can lead to important local improvements in agricultural practices and yields. For instance, cauliflower growers from Chimachoy and Patzicia have carefully studied each other's native cauliflower varieties and each other's cultivation techniques. At Los Corrales, farmers who have brought their rice to sell at the Guatemala City plant spend the day in amiable shop talk with farmers from other areas up and down the coast. The awareness of national agricultural market conditions, and the knowledge of other farmers and their techniques, help to "de-provincialize" these peasants, one more step in their transformation into rational farmers aware of their interests, and capable of establishing a formal or informal interest group to advance their cause.

Although the efforts of the assessment team were concentrated on assessing the effects of these LAAD projects on small agriculturalists, the field research process repeatedly uncovered a highly visible phenomenon that is relatively new to Latin American agriculture, and that might take on increasing importance for the future of the rural poor. At least one project in every country worked with, in addition to small farmers, a new class of large, non-traditional farmers. These men were creating a new type of farm, growing non-traditional crops using irrigation and other high technology, high productivity techniques. Most strikingly, they were invariably encountered out in their fields directly supervising production. Whether the crop was tomatoes, or broccoli, or peaches, or rice, or potatoes, or platano, these farmers had certain common characteristics. Most come from land-owning but non-elite family backgrounds. All had acquired a technical background in agriculture, usually through formal education at the university level, but occasionally through previous work experience as lower-level supervisory personnel for large, foreign-owned agricultural organizations. All combined the role of direct supervisor and technical expert on their farms. The dual role required them to be present throughout the work day six or seven days a week. This total commitment to the work was reinforced by a belief in the necessity of direct hands-on management, and a corresponding

contempt for the absentee elite owners of farms producing traditional crops.

These high technology enterprises provided a new type of farm employment. Each of these farms provided less employment than would be the case with a traditional enterprise of equivalent scale, but more employment than would be the case with an equivalent acreage of small traditional farms. More significant than the quantity, however, was the quality of the farm employment provided. Because of the high technology, the lower proportion of the employees were unskilled "stoop" labor. Many more were tractor drivers and irrigation technicians. Even the unskilled crews, however, are employed steadily on a year-round basis. The employees thus enjoyed more security and higher income than would have been the case with their previous traditional seasonal employments.

Because of their size and productivity, these farms appear to pay slightly higher wages than the norms for agricultural labor in their area. Being more visible than traditional smaller operations, and less politically influential than traditional larger operations, they are more likely to obey, or be forced to obey, legally established minimum wages and other employment standards.

Because of the direct supervision, as well as the more efficient organization and the higher levels of technology, labor productivity is considerably higher on these farms than elsewhere. The relationship between the owner and his employees is also noticeably less paternalistic than is traditionally the case in these areas. Probably as a result of these two factors in combination, the workers on these enterprises are quickly organized. Whether formally through a union or informally through the formation of an influential leadership group among the employees, these workers seem to quickly demonstrate their desire and ability to engage in some form of collective bargaining. All of these entrepreneurs who have been in operations for more than two or three years had experienced a strike or a slow-down. Interestingly, all expressed a surface willingness to bargain with employee representatives. Many were worried that "political factions" would become involved in the process, but none found the collective bargaining process objectionable in itself.

The employees on these enterprises were presumably formerly either landless rural poor or minifundistas. There can be no doubt that they are making a much greater contribution to the national economy in their new employment than before. The security of their employment is likely to be considerably higher than the highly seasonal work

available in traditional agriculture. Their income, even if it is only the legal minimum wage, is also likely to be considerably higher. In most areas, traditional farm employers--whether large or small--have rarely paid the legal minimum wage. Since these non-traditional new agriculturalists and LAAD's non-traditional processors seem to attract each other like magnets, it is worthwhile assessing the impact of this type of farm on the rural poor.

Employment on this type of modern farm is probably the next-best way for a member of the rural poor to become involved in the expanding commercial sector of agriculture, with its higher productivities and income potentials. From the point of view of both Europeanized and indigenous value systems, it is probably best to participate in commercial agriculture as an independent grower. This permits the family to work together as an economic unit, as it has always done in the past, and it permits the family head to remain his (or her) "own boss." But a majority of the rural poor already lack access to enough land to make this ideal possible. They do not now live an independent existence working as a family unit on their own land, and they have not done so for years or even generations. This group constitutes not only a majority of the rural poor in most areas, but also the poorest strata among the poor. For these landless rural poor, employment on a unionized

**modern farm is the best economic opportunity that they are likely to encounter short of migration to the city. The next evaluation of LAAD and its subprojects should make a more deliberate effort to assess the impact of this type of farm unit on the rural poor. While this study did measure the farm employment generated by LAAD's projects themselves, and by small farmer growers, data on the economic and social impact of medium and large growers was only occasionally encountered. This small data base is enough to raise the possibility that this could be an area where LAAD has very significant positive impact on the poorest, landless sector of the rural population.**

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IV.

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VIABILITY OF LAAD-CA

#### IV. VIABILITY OF LAAD-CA

##### A. Introduction

Some five years have passed since the initial disbursement of the first AID loan to LAAD-CA. In fiscal year 1976, a second AID loan was made to LAAD-CA with the dual purpose of further developing agribusiness activities with a direct and increased participation of the small agriculturist, be he a landholder or a field worker (sometimes referred to jointly as the rural poor) and of permitting LAAD-CA to establish itself as a self-sustaining, viable entity on the Central American non-traditional agribusiness scene. The second loan differed from the first primarily in its specific insistence that the rural poor be demonstrable beneficiaries, directly or indirectly, of LAAD-CA's investment activities. This factor has resulted in a material change in LAAD-CA's lending policies and in some measure has affected LAAD-CA's thrust to achieve a self-supporting existence after the second AID loan is disbursed.

##### B. Viability

Viability of a lending (and borrowing) institution such as LAAD-CA can have different meanings. It would appear from a review of the Capital Assistance Paper (AID-DLC/P 2078) relating to the second AID loan that AID and LAAD contemplated that LAAD-CA would

**develop into a profitable lending institution during and following the use of the second AID loan capable of borrowing commercially, of attracting new equity capital and of maintaining a high rate of lending and investment.**

This picture was buttressed by certain projections contained in the **Capital Assistance Paper**. Naturally, to make these projections, it was necessary to make certain assumptions regarding future events. In discussing the viability of LAAD-CA, we will be making our own assumptions and reviewing the various options open to LAAD-CA.

Since LAAD-CA is a subsidiary of LAAD and a sister company of LAAD-Caribe, the fortunes of these latter two companies will inevitably have some financial impact upon LAAD-CA and upon its viability. Should LAAD, the holding company, and LAAD-Caribe show losses in consolidation, then the profits of LAAD will be less than the profits of LAAD-CA. Likewise, LAAD-CA pays for personnel and other services of LAAD headquarters to LAAD-CA. Due to this relationship, the viability of LAAD-CA cannot be discussed in isolation. LAAD-CA's viability prospects must be tempered by the successes or failures of other components of the LAAD complex as well as by its own achievements and financial results.

However, it is not the principal purpose of this discussion to review the inter-company relations of LAAD or to value the parent company services to its subsidiaries or to forecast the long-run profitability and

viability of units not studied by us. We will wish to look at the possible future development of LAAD-CA and determine what options are available to LAAD-CA if it is to attain viability of the type described in the Capital Assistance Paper.

The issue, therefore, becomes one of whether LAAD-CA can gain access to sufficient funds to permit it to lend or invest at a stable or expanding rate to borrowers of a type compatible with its objectives. To date, LAAD-CA has depended primarily upon loans from AID and equity from its shareholders. Earnings represent a very modest amount in terms of its lending while borrowings from commercial banks appear to have been invested in short-term commercial paper.

This report explores the various avenues open to LAAD and LAAD-CA to acquire resources and estimate their impact upon the policies of the organization, upon their profits as well as the prospects of raising such funds.

LAAD-CA, with the disbursement of the second AID loan and its second tranche of equity capital (8% preferred) will approach in fiscal 1978 a plateau in earnings. Its lending base will not grow significantly in absence of major new borrowed resources or equity capital. Earned income may expand somewhat as repayment of old loans are relent at

higher interest rates but a downward pressure on net earnings may occur as expenses rise or as more money is invested in equities of the subprojects. Likewise, the lending base will be diminished as the two AID loans are amortized, at least offsetting prospective earnings.

LAAD-CA lending and investing activities have been substantial since 1972, having disbursed not only its loan and equity assets but also has relented loan repayments. In the future, LAAD-CA will be dependent upon loan repayments and earnings and these will only permit a much lower level of activity by LAAD-CA. In sum, LAAD-CA appears to the consultants as unable to obtain the kind of viability envisaged in the second Capital Assistance Paper without substantial additional resources. The prospects of obtaining these resources in the open market in adequate amounts and at favorable rates do not appear good. If LAAD-CA is to continue lending at past levels and building its lending base for the future, it will require additional concessional loans, a higher profit rate and more investments of an equity character to push earnings above those possible with fixed return loans.

**C. Source of Funds Review**

**1. Earnings**

LAAD-CA has produced a net profit each year since the fiscal year of 1973, wiping out an accumulated deficit of \$54,057 existing on October 31, 1972. The following table outlines the financial results attained by LAAD-CA:

|                                    | <u>Year Ending October 31,</u> |                  |                  |                  |
|------------------------------------|--------------------------------|------------------|------------------|------------------|
|                                    | <u>1973</u>                    | <u>1974</u>      | <u>1975</u>      | <u>1976</u>      |
| Operating Income                   | \$207,680                      | \$470,656        | \$709,638        | \$880,268        |
| Gain on Sale of<br>Equity          | -                              | -                | -                | 90,000           |
| Other                              | <u>5,345</u>                   | <u>6,283</u>     | <u>4,594</u>     | <u>4,446</u>     |
| Subtotal                           | 213,025                        | 476,939          | 714,232          | 974,714          |
| Expenses:                          |                                |                  |                  |                  |
| Salaries and<br>Employee Benefits  | 95,032                         | 127,972          | 160,246          | 184,338          |
| Other                              | 42,246                         | 56,432           | 90,817           | 116,316          |
| Interest Expense                   | <u>46,672</u>                  | <u>109,077</u>   | <u>180,303</u>   | <u>247,515</u>   |
| Subtotal                           | 183,950                        | 293,481          | 431,366          | 548,169          |
| Less:                              |                                |                  |                  |                  |
| Provision for<br>Possible Losses   | 26,034                         | 57,895           | 112,392          | 103,000          |
| Other                              | <u>1,808</u>                   | <u>-</u>         | <u>-</u>         | <u>-</u>         |
| Subtotal                           | 27,842                         | 57,995           | 112,392          | 103,000          |
| Net Income                         | 1,233                          | 125,963          | 170,474          | 323,545          |
| Less:                              |                                |                  |                  |                  |
| Dividends on 8%<br>Preferred Stock | <u>-</u>                       | <u>-</u>         | <u>-</u>         | <u>47,325</u>    |
| Net Earnings to<br>Earned Surplus  | <u>\$ 1,233</u>                | <u>\$125,963</u> | <u>\$170,474</u> | <u>\$276,220</u> |

LAAD-CA has shown steadily increasing earnings in absolute terms and expressed as percentage return on assets and net worth. Nevertheless, the growth has not been spectacular and earnings at current levels will not result in a substantial build-up of LAAD-CA assets. Indeed, once repayment of the debt to AID commences, a portion of these earnings will have to be devoted to debt amortization. This can best be illustrated by reference to the following table which projects the estimated earnings and cash flow for LAAD-CA based on no additional borrowing or sale of shares:

|                     | Year Ending October 31, . |                |                 |                |                  |
|---------------------|---------------------------|----------------|-----------------|----------------|------------------|
|                     | <u>1977</u>               | <u>1978</u>    | <u>1979</u>     | <u>1980</u>    | <u>1981</u>      |
| Net Income          |                           |                |                 |                |                  |
| Before Provision    |                           |                |                 |                |                  |
| for Losses          | \$550,000                 | \$600,000      | \$600,000       | \$600,000      | \$600,000        |
| Less Repayment of   |                           |                |                 |                |                  |
| Loans:              |                           |                |                 |                |                  |
| AID                 | 153,445                   | 313,831        | 323,317         | 333,089        | 665,737          |
| Bank                | <u>125,000</u>            | <u>125,000</u> | <u>125,000</u>  | -              | -                |
| Net Cash Available  | 271,555                   | 161,169        | 151,683         | 333,089        | 665,737          |
| Less Pfd. Dividends | <u>160,000</u>            | <u>160,000</u> | <u>160,000</u>  | <u>160,000</u> | <u>160,000</u>   |
| Net Cash from       |                           |                |                 |                |                  |
| Earnings            | <u>111,555</u>            | <u>1,169</u>   | <u>( 8,317)</u> | <u>106,911</u> | <u>(225,737)</u> |

**Checchi believes that the foregoing estimates of future net income are generous and unlikely to be exceeded unless LAAD-CA gains access to significant additional resources on favorable terms. Some improvement in earnings might be achieved through a reduction in expenses (operating expenses and interest) but these have averaged about 61 percent during the years 1974, 1975 and 1976, and the estimates are based on a continuance at this level.**

**The projections indicate that if earnings continue at or above present levels, the cash they will produce will not materially increase LAAD-CA's ability to lend. Most of the cash produced by earnings will be devoted to repayment of loans to AID and banks and the payment of preferred dividends. The outflow of cash for these purposes becomes especially high commencing in 1981 when amortization payments start on the second AID loan.**

**No provision in these figures has been made for gains from the sale of portfolio equities. In earlier estimates made by LAAD, substantial gains were anticipated from such sales. These gains, with one exception, have failed to materialize. The prospects for sale of equities held by LAAD-CA is discussed in greater detail in the following section of this report.**

Reference was made above to the reduction of expenses as a means of improving earnings. Major expenses of LAAD-CA are interest and preferred stock dividends (an expense in fact if not in name) and little can be done to reduce these charges. Other major expenses are salaries and other operating expenses. These expenses have been 39 percent, 35 percent, and 34 percent of operating income (excluding capital gains) in fiscal years 1974, 1975, and 1976. The figure for 1977 may show some improvement but the improvement should not be great.

A good portion of the expenses of LAAD-CA are the result of the allocation of salary and other expenses by LAAD, S. A. and travel and communications expenses of LAAD, S. A. personnel to and in Central America. The total, as may be seen from the following table, amounts to \$94,494, or 31 percent of LAAD-CA's total expenses.

**Salaries and benefits:**

|                                  |               |
|----------------------------------|---------------|
| Incurred by LAAD-CA              | \$108,841     |
| Allocation of Miami Salaries (1) | <u>75,351</u> |
|                                  | \$184,192     |

**Other Expenses:**

|   |                   |
|---|-------------------|
| Incurred by LAAD-CA   | \$ 97,331         |
| Out-of-pocket expenses of Miami office charged to LAAD-CA (2) | 12,000 (rounding) |
| General overhead of Miami office allocated to LAAD-CA (3)     | <u>6,243</u>      |
|   | \$116,474         |

- 
- (1) Services rendered include: raising new capital, recruiting, general administration, accounting, auditing, treasury, and project assistance.
- (2) Includes travel in and communications with Central America.
- (3) Includes allocations to pay for annual report, Board meetings and memberships in the Agr. business Council.

Source: LAAD, S. A.

It should be understood that no judgment is being passed on the usefulness of the expenses generated by LAAD, S. A. to its Central American subsidiary. However, a substantial portion of LAAD-CA's expenses are generated outside its operational area.

2. Sales of Portfolio Equities

a. Equity and Convertible Debt Financing

The first AID loan required that LAAD place two-thirds of the funds provided in equity or in investments containing equity features. Such investments consisted of dividend paying preferred stock convertible into equity or in loans so convertible. The first Checchi report studied carefully the impact of this requirement upon LAAD investment policies and practices and concluded that it should be substantially altered in any new financing. The report pointed out that the requirement was forcing LAAD to take undue risks or to insert convertibility conditions in loans with little or no expectation of exercising the rights to convert.

The second AID loan removed this requirement although it was understood that LAAD would continue to seek equity investments when circumstances justified them. The earnings projections were such for LAAD (and LAAD-CA) that financial viability over the long haul was probably not possible without some exceptional gains from the sale of matured equity investments. Thus it was expected in the second AID loan that LAAD-CA would be successful in investing a portion of its new resources in equities of good quality and prospects.

**As a result of the removal of this restriction and the introduction of the new requirement that the AID loan benefit directly the small farmer (the rural poor), LAAD-CA has concentrated on straight loans to various enterprises and loans to intermediate credit institutions. With the second AID loan, LAAD-CA has a convertible loan of \$25,000 to LEYDE (Honduras) and, from its own funds, \$50,000 to Ricotico (Costa Rica). It anticipates additional equity investments of \$225,000 from its own funds.**

**Only one of the equity investments or those with equity features under the first AID loan has worked out well even though two-thirds of that loan was so invested. This must be regarded as disappointing even though the first Checchi report cautioned against too high expectations. The management of LAAD-CA also forecast in its cash flow and profit projections at that time modest revenues from the sale of equities.**

**Virtually all of the options to convert preferred shares and debt into equity have been allowed to expire unexercised. LAAD-CA let these options run out because it did not have the resource base or the level of income to permit it to hold high risk, non-productive equity investments in financially unsound companies. New loans, as indicated above, by and large do not contain equity features.**

In the case of CAMSA, only \$200,000 was planned at the time of the original loan to this company. Due to the reorganization of CAMSA and related companies, LAAD-CA now holds a \$251,000 equity investment in CAMSA which investment the management of LAAD-CA hopes to sell in the not too distant future.

The other equity investment in IWPSA consists of an original \$158,000 in equity, \$22,700 in overdue interest, and \$25,000 from a loan of \$140,000. Thus LAAD-CA holds \$205,700 in common shares of IWPSA. This company, according to LAAD-CA management, has had its ups and downs. At present, LAAD-CA management believes the company on the road to success although it will need to be monitored closely. There is, however, no prospect that the shares will be marketable in the foreseeable future.

What are the prospects for additional equities in LAAD-CA's portfolio arising from the exercise of options in the remaining convertible shares and loans? These convertibles are as follows:

**Convertible Preferred Shares**

|                         |                |
|-------------------------|----------------|
| CAICESA                 | \$250,000      |
| Fomento Internacional   | 50,000         |
| American Floral Shipper | 50,000         |
| PROSAN                  | <u>200,000</u> |
|                         | \$550,000      |

**Convertible Loans**

|                                |                |
|--------------------------------|----------------|
| Quality Foods (Quinonez Hnos.) | \$130,000      |
| LEYDE                          | 25,000         |
| Granalpina                     | 15,000         |
| Remote Sensing                 | 15,000         |
| Promotore Agricola Basico      | 48,000         |
| PROSAN                         | <u>200,000</u> |
|                                | \$433,000      |

Of these investments, the only significant ones which appear to have the prospect of being sold as equities are those in CAICESA and PROSAN. The CAICESA loan, on which repayment has not yet started, is proceeding well, according to LAAD-CA management, and may well require additional funds for further development. At that time, LAAD-CA will review the possibilities of improving its equity position. The present convertible feature does not appear too interesting, according to LAAD-CA management since the equity feature applies to a downstream company which is not designed as a repository of profits.

As for PROSAN, this company continues to operate satisfactorily according to LAAD-CA management, and it is hoped that at some point a major American or foreign company will be interested in acquiring this company to serve as its Central American base.

A major prospective equity investment is expected in Industria Frutera del Gran Lago, S.A. (IFRUGALASA) in Nicaragua. This investment is discussed in greater detail in the review of individual loans.

Thus, it can be concluded that the equity portfolio of LAAD-CA is not a promising source of capital and profits for LAAD-CA. Earnings and lendable resources will depend upon receipt of interest payments on loans, repayment of loans, and to the extent possible, new borrowings and sales of equity in LAAD. These aspects of LAAD-CA are reviewed in greater detail in other sections of this report.

The actual breakdown of LAAD-CA's portfolio as of June 30, 1977 is as follows:

|  |                   |
|--|-------------------|
| Equity (common and convertible preferred shares) | \$1,007,000       |
| Long term loans                                  | <u>12,043,000</u> |
|  | \$13,050,000      |

Of the long term loans, \$433,000 are convertible at the option of LAAD-CA into equity. Management of LAAD-CA does not anticipate that more than \$200,000 will eventually be converted. Of the equity portion, some \$550,000 are still in the form of convertible preferred shares. Of these shares, it is considered possible that as much as \$450,000 will be converted into common shares or sold for face value or more.

b. Divestiture of Equity Shares

LAAD-CA has actually disposed of three common stock (equity) investments through June 30, 1977. Each of these liquidations was motivated by differing sets of circumstances and none was related to the development of the market for equities in Central America. It should be recalled that LAAD-CA activities were to stress ownership of LAAD-CA investments over a broad base. It was recognized at the time that this objective would not be easily or quickly achieved. Given this background, the circumstances surrounding each of these divestitures merit review.

The first and most successful sale of equity from the LAAD-CA portfolio is represented by the disposal of the shares in CODICASA, a Guatemalan food wholesaler. These shares were acquired for \$78,800 in early 1974. These shares were sold for \$168,800 during

fiscal year 1976 for a profit of \$90,000. The sale was to the majority shareholder of CODICASA. There was no possibility of selling a minority interest in this closely held company on the public market. So far as LAAD-CA was concerned, the further development of CODICASA was not such as to justify holding these shares for additional appreciation.

The second sale of stock was to Fomento Internacional S. A. of Honduras. This investment promotion and financial services company originally sold \$50,000 of its shares to LAAD-CA and bought \$50,000 of LAAD-CA. This represented the only minority interest in LAAD-CA. The objectives which motivated LAAD-CA to invest in this company were not being achieved and there did not appear to be any reason to continue this intimate corporate relationship. Therefore, LAAD-CA succeeded in reversing the transaction. This reversal, of course, resulted in the sale of the Fomento shares back to the issuer. Since LAAD shares had increased in book value, a profit of \$12,000 recorded on the sale. There was no question of the Fomento Internacional shares being sold on the open or public market. Such a market did not exist nor did the issuer (Fomento) wish such a sale to occur.

The final sale of equity consisted of \$50,000 of shares in a company called Ricotico Alimentos, S. A. in Costa Rica. At the same time, these shares were purchased, a loan of \$50,000 was made to the company. Not long after December 1975, the date of the loan and equity purchase, the company encountered troubles and ceased operations. The difficulties had to do with the marketing of the company's product in Europe. The Odin company, which was handling the marketing, had agreed to purchase the Ricotico shares from LAAD-CA upon request and such a request was made. As can be understood, this equity sale had nothing to do with the development of an equity market but rather represented the recovery of LAAD-CA's capital. LAAD-CA was indeed foresighted to provide itself with this market for the Ricotico shares.

Thus, the record of sales of equity by LAAD-CA is not outstanding. The validity of the concept of combining lending operations with equity investments in the specialized area of agribusiness and non-traditional agricultural products has not yet been proven although the management of LAAD and LAAD-CA remained convinced that the equity aspect of their operations offers a major hope for the future.

As pointed out in the earlier Cheech report, it is not easy to find situations in Central America (or elsewhere, for that matter) whereby LAAD-CA can obtain promising equity investments. Those

ventures that are well thought out, financed and managed are not inclined to bring in outside partners unless they are essential to the success of the venture. Minority partners or partners outside the promoting group are at a distinct disadvantage in terms of influence or information.

LAAD-CA will have to seek its equity interests in special situations. Companies which have gotten into difficulties and require LAAD's capital and expertise might well welcome LAAD as an equity partner. These turn-around situations could be attractive to LAAD. As an example, the CAMSA and Frigitec companies may offer such opportunities.

Or LAAD-CA can join early in the development of a venture bringing its financing, experience and market contacts to the venture. This type of contribution would entitle LAAD-CA to an equity position in a sound venture. The IFRUGALASA commitment is offered as an example of this type of situation.

But, it must be repeated that with equity, risks are increased and short term earnings are sacrificed. No dividends can be paid by a new company and the market for its shares is limited until it has established itself. These are the problems and hazards of equity investments. How they affect the long-run viability of LAAD-CA is discussed elsewhere in this report.

c. Public Market for LAAD-CA Portfolio Shares

Costa Rica has the modest beginnings of a money market. The other countries in Central America lag behind. The principal equities traded are shares in established companies. The market for these shares tends to be thin since the companies are closely held and there is no great float of shares in the market. At the same time, public interest in common share investments is still not great. Most smaller investors are satisfied with savings accounts, time deposits, certificates of deposit and debt investments issued by established companies. Earnings from this type of investment range from nine percent upwards. A non-dividend paying share would have little interest for a buyer and only an established and proven company could pay a satisfactory dividend.

While one might say that, at a price, there is a market for the preferred and common shares in the LAAD-CA portfolio, this is a truism which begs the question. In no case, is there a market which would permit LAAD-CA to sell these portfolio securities at an adequate price or at a price that would allow LAAD to recapture its original investment.

There being no well organized securities market, LAAD-CA must look to a limited number of traditional investors who seek high returns or bargain prices or to investors who are linked in some way to the

company whose shares are being sold. Consequently, LAAD-CA will tend to find buyers for its equity holdings among the second group, although sales to foreign investors seeking a base in Central America may be possible.

The existing equities in the LAAD-CA portfolio are of Central American Meats, S. A. (CAMSA) and International World Products, S. A. (IWPSA). The cattle raisers are already shareholders and users of the services of CAMSA and they would be likely candidates to purchase LAAD-CA holdings. As for IWPSA, a furniture manufacturer might be interested in acquiring the LAAD held shares. FERUGALASA shares, which LAAD-CA intends to acquire, might eventually be sold to fruit and vegetable producers who are already shareholders. PROSAN, in which LAAD-CA holds convertible preferred stock and debentures, may be bought by a foreign medical supply firm which would bring product knowledge and marketing capability to the company.

In general, the past three years have brought no significant improvements in the capital markets in Central America. The disposal of LAAD-CA held equities still remains a hand-tailored operation with a buyer being carefully matched with the securities to be sold. The buyer's interest in general has to do with the operations of the company

In which equity is offered rather than a more investor-oriented interest in the securities as a source of income and growth. At the same time, the supply of equities held by LAAD-CA is limited and unseasoned and thus not ready for marketing.

d. LAAD-CA Relations with Investment Institutions

Properly speaking, there are no companies in Central America which depend for their existence upon providing underwriting and brokerage services. There are, however, some companies which render these services on a limited and intermittent basis.

While LAAD-CA attempted to encourage such firms during the period of the first AID loan, it had very little success and the effort along those lines has been largely abandoned. Perhaps, the most notable example of that period was the loan and investment in Fomento Internacional. The relatively small brokerage and investment business done by this company dried up in part for reasons beyond its control.

LAAD-CA management points out that the bulk of investment banking and underwriting in Central America is carried out by government development institutions. Notable among these are INFONAC in Nicaragua and CONADI in Honduras. LAAD-CA has worked closely with these public institutions in several instances.

**These public companies are active in developing projects, financing them, investing in them and selling off the investments after the projects have matured. These projects offered LAAD-CA some of its principal opportunities to participate in a project and obtain an equity position. Banks in Costa Rica, nationalized as they are, likewise are engaged in project promotion. While LAAD-CA is associated with these as well, the relationship is not as intimate as in the case of Honduras and Nicaragua.**

**There are private institutions which are also engaged in some activities suggestive of investment banking. Among these are Banco Financiera Hondurena and BANCAHSA in Honduras, and FISAL and FIDESA in El Salvador, with all of which LAAD-CA has worked closely. ADELA, of course, is very well known in Latin America, but it has not been active recently in Central America, at least not in the agribusiness field.**

**The major regional financial institution devoted to economic development is the Central American Bank for Economic Integration (CABEI). Although LAAD-CA has financed projects which have also received financing from CABEI, the management of LAAD-CA states that it has not worked closely with that institution. In general, CABEI**

tends to finance larger and more publicly oriented projects than LAAD-CA and there is not often the occasion for cooperation between the two institutions. In general, LAAD-CA management is of the opinion that CAFEI does not cooperate closely with other institutions nor does it engage in an interchange of information with them.

e. Value and Form of LAAD-CA Held Equities

As indicated above, there is no readily available public or institutional valuation of the common stocks and convertible preferred stock and debentures in the LAAD-CA portfolio. It would be fruitless and even counter-productive for LAAD-CA to ask financial institutions in Central America to value its equity holdings for purposes of public sale. The two companies in which LAAD-CA holds equity are both in the throes of reorganization and at best have had only limited periods of profitability during their relatively short lives.

Disclosure of the situations of these companies would not enhance the value of these equities to a potential buyer but could also be damaging to the other stockholders. Consequently, one cannot turn to public financial institutions for a realistic valuation of LAAD-CA-held equities. In all likelihood, the judgment of LAAD-CA management regarding the value, present and prospective, of its equity holdings

might well be the most realistic. Management is intimately aware of market developments and financial prospects of these companies and is in the best position, apart from any inherent bias in judgment, to express an opinion on value.

The form of the equity securities in the LAAD-CA portfolio presents no barrier to their sale. Common share equities in Central America can be of two general types, bearer shares and registered shares. In general, LAAD-CA has opted for registered shares since these offer a better protection against loss or theft. There likewise is no reason for LAAD-CA to conceal its investment in a particular company.

As for convertible preferred shares and convertible loans or debentures, the covenants vary according to the requirements of the buyers and issuers of these securities. Convertible preferred shares can have many protective features--such as fixed dividend rate, repurchase or redemption rights, payment of dividends out of surplus rather than earnings, etc.--which make them resemble debt instruments except for a lower ranking in case of liquidation or bankruptcy.

As for the convertibility features, these too are subject to variation from one investment to the next. In some cases, the convertible shares are convertible at a fixed ratio into common shares while in other cases, they may carry an option to purchase common shares at a specified amount.

As indicated, these same features may be found in convertible debt instruments, the primary difference being that debt ranks higher in case of liquidation and that interest is due whether the issuing company is profitable or unprofitable or has an earned surplus or is in deficit.

The problems faced by LAAD-CA in marketing equities in companies financed by it has to do primarily with the financial and operating success of the issuing companies rather than the form in which these equities and equity-type securities are held.

### 3. New Issues of Common or Preferred Stock by LAAD and LAAD-CA

Can LAAD-CA expect to expand its capital base through the sale of common or preferred stock? To date, it has issued \$2 million of common and \$2 million of 8% preferred. These issues have been taken up by its parent, LAAD, which in turn has issued corresponding shares (the preferred at 5%, however) to its outside stockholders.

First, can we expect that LAAD-CA capital will continue to be raised in the same manner as in the past, namely through LAAD, S. A. ? As explained elsewhere in the report, the prospects of LAAD-CA selling its shares to Central American investors appear remote.

**Therefore, we must look at the prospects of LAAD selling its common or preferred shares and transferring the capital to LAAD-CA. Although LAAD-CA is the primary component of the operations of LAAD, it is not the only component. The successes or failures of LAAD and LAAD-Caribe can enhance or detract from the results achieved by LAAD-CA. As noted, the earnings of LAAD and LAAD-Caribe were about \$73,000 less than LAAD-CA earnings in 1976, indicating losses outside of Central America.**

**But let us assume that the rest of LAAD does as well as LAAD-CA. LAAD-CA earned 6.6 percent on its net worth in 1975 and 8.3 percent in 1976. In 1976, it commenced to pay out dividends on its preferred stock thus reducing the amount of retained earnings.**

**It should do relatively well in 1977 as in 1976. The last preferred issue by LAAD carried a five percent dividend. If LAAD can continue to earn eight percent or better on its net worth and interested investors can be found, then further issues of five percent preferred would be desirable. The question remains, however, as to whether such investors can be found.**

**It appears unlikely that further issues of common are possible if ordinary investment considerations prevail. The prospects of a major upturn in earnings are too remote and most investors would not expect**

a company such as LAAD to pay dividends on common in the near future. Thus, the possibilities rest with the preferred. If earnings remain in the \$400,000 range, present preferred dividends are covered by four to one. If an additional \$2 million of 5% preferred are issued, this would add \$100,000 to the existing dividends making a total of \$200,000. Earnings of LAAD would have to rise to \$800,000 to achieve the same coverage. Such an increase seems unlikely but a rise to \$600,000 would appear possible. This would lower dividend coverage to 3:1 which would make the preferred issue somewhat less attractive. With a five percent rate and this coverage, there would have to be other than investment motives for a company or individual to invest in a new issue of LAAD preferred stock.

Existing shareholders have invested in LAAD for reasons other than return on capital or prospective gains on their investment. It may well be that they or other investors can be induced to make further investments if it can be shown that their investment would substantially increase LAAD's assets. The past two issues of LAAD stock have been accompanied by AID loans and it may be that this or a similar feature would have to be present for a new LAAD stock issue.

This rate of dividend on preferred stock must be tested against LAAD operating costs to see if financing at a five percent rate is feasible.

**LAAD salary and other costs (not including interest or provision for losses) have been as follows, expressed as a percentage of income:**

|      |                                   |
|------|-----------------------------------|
| 1974 | 46%                               |
| 1975 | 50%                               |
| 1976 | 43% (47% excluding capital gains) |

If it is assumed that LAAD could sell additional preferred carrying a 5 percent dividend and relend the proceeds through LAAD-CA at 11 percent, this would leave 6 percent to cover operating expenses and profit. If LAAD expenses continue to represent about 50 percent of income (or about 5-1/2 percent), this would leave only one-half of one percent for profit before allowance for losses on loans.

It can be argued that expenses will not continue to absorb the same percentage of income as in the past. This is probably true on the first small increment of additional capital. It might be that no new staff would be required to manage an additional one million of capital. Over a period of time and with substantial additional capital, it must be concluded that salaries and other expenses would increase. Thus, some part of any new income would have to be devoted to expenses. Profits on the new capital would be reduced accordingly.

In conclusion, it would be most difficult to expect LAAD to attract substantial additional capital at a five percent rate and it cannot be anticipated that this would allow a rapid accumulation of profits.

4. Borrowing

Can it be expected that LAAD or LAAD-CA can borrow in commercial markets in amounts sufficient to maintain a high volume of lending and at rates low enough to make this source of capital attractive?

LAAD in fact has borrowed from an American bank \$1 million unsecured, repayable during a four-year period at 1-1/8 percent over the Interbank rate (about U.S. prime). Should it be possible to repeat this borrowing and indeed expand it substantially, LAAD today would be paying about 8-1/8 percent. In all probability, LAAD might have to pay somewhat more in today's market.

If the cost of money to LAAD is at this level, this would make LAAD's lending operations in Central America most difficult. LAAD-CA is currently lending at 11 percent per annum (excluding loans to ICIs). In LAAD-CA's view, established companies and enterprises can borrow locally and from branches of American banks at this rate or even lower. This would leave LAAD-CA a very small margin to

cover operating costs. Likewise, due to medium-term repayment obligations, LAAD would be limited to good risks and established businesses since new companies would be hard put to start amortizing loans on such an early schedule.

In all probability, LAAD might find bank borrowing most useful to cover periods of temporary fund shortages or in conjunction with financing packages where the capital is being provided on more favorable terms. A spread of three percent or less would scarcely be profitable for LAAD-CA and would especially make it difficult to lend to new firms in non-traditional agricultural activities. Thus, any significant dependence by LAAD-CA at this time on bank borrowing would materially alter the nature of the institution.

Some financial institutions (financieras) in Latin America which have had the benefit of AID capital on concessional terms have succeeded in building up a good earnings record. This has enabled them to borrow from the public at rates which permitted them to continue their lending activities at a high level even while repaying AID loans. However, these financial institutions are usually modestly staffed and are lending in traditional and well established agricultural fields. In some cases, the loans from such institutions open up other investment opportunities

for the shareholders and managers, thus making the modest returns on loans not only supportable but good business.

It cannot be expected that LAAD-CA can develop in this manner and still achieve its stated aims of promoting non-traditional agricultural fields and assisting small agriculturists. LAAD-CA staff must assist borrowers in the preparation of loan applications, must provide management assistance to the borrowers from time to time, must work with other creditors of its borrowers and perform many other functions involving the skills and time of its staff. Thus, LAAD-CA staff tends to be of a superior quality. This significantly increases operating costs. Likewise, LAAD-CA lends throughout Central America which involves significant travel expenses. Finally, the experimental nature of some of its borrowers introduces an element of risk which must be provided for in operating costs. All of these factors argue that LAAD-CA requires a significantly higher margin between the cost of the money it borrows and the rate at which it lends than does the ordinary financier.

It should finally be pointed out that LAAD-CA is not a bank and, therefore, does not have any money creating powers. For example, a bank might well pay depositors eight to nine percent on savings which,

at the same time, lend to borrowers at 12 percent. This can be very profitable since a bank need only keep 15 or 20 percent cash against its deposits thus allowing it to build a substantial loan portfolio. LAAD-CA does not have these powers and can only lend as much as it borrows plus whatever earnings are plowed back.

Therefore, while LAAD or LAAD-CA has a commercial borrowing capability, we do not see this as a feasible alternative to securing money at a concessional rate and developing its earning power.

5. Other Factors:

a. Types of Loans

The consultants are of the opinion that the subproject loans dedicated to food processing offer LAAD-CA the best opportunity to develop new areas of economic activity in Central America and to impact the rural poor. LAAD-CA has in fact concentrated on this type of project during the period of the second AID loan. During the first AID loan, the efforts of LAAD-CA were much more diverse thus diluting the impact which it might have otherwise had.

It is not suggested that all other types of loans be excluded from consideration, but the efforts of LAAD-CA should be concentrated on food

processing. We have detected a willingness of small agriculturists to work with reliable food processing ventures and to produce new types of crops. It is also possible for more traditional types of food processing--such as canning--to have a major impact on small farmers. The quality of traditional fruits and vegetables can be improved with technical and financial assistance from the processors. In some cases, it may be necessary for LAAD-CA to press these processors to become more active in this area and to offer financing, if needed. There is reason to believe that the processors would thereby develop a larger and more reliable supply of raw materials and that the small farmer suppliers could improve their income.

As discussed elsewhere in the report, LAAD-CA has made six (five disbursed) loans totalling \$2,522,000 to intermediate credit institutions (ICIs) in all Central American countries excepting Guatemala. These ICIs in turn were to relend these monies to small farmers under supervised credit programs. In Costa Rica and Nicaragua, these loans were designed to support production by small farmers for new or recently established processing plants for fruits and vegetables.

While it can be argued that many of these loans might have been made in absence of the LAAD-CA loans, it can also be reasoned that the LAAD-CA

loans did have a direct impact on the production of small farmers. The consultants obtained lists giving the names of borrowers, the products grown, the size of the loans, and the land holdings of the borrowers. Thus there is little doubt that the LAAD-CA monies did reach the intended beneficiaries.

The consultants believe the LAAD-CA credits to the ICIs have made these latter organizations more aware of the needs of small farmers and their relationship to the needs and success of the processors. If these processors prove to be reliable buyers--paying fair prices, paying promptly, and giving needed technical assistance--the small farmers can expect to receive needed production credits from local banks and other lending institutions. To this extent, the loans to the ICIs have served a useful educational and social purpose.

There may still be a need to help the ICIs arrange financing to small producers who wish to supply new food processing plants. Processing plants are not well equipped to manage such credits and generally do not dispose of the necessary funds or personnel to carry out such a program. The processing plants are better suited to providing a stable and assured market for more valuable agricultural products and to providing technical assistance to growers. The ICIs are not equipped personnel-wise to aid

the small farmer with his special production problems while the processing plants understand the importance of giving this assistance. This transfer of technology is one of the most significant aspects of the LAAD-CA financial food processing industry and it should be encouraged in every way.

b. Loan Terms

On direct subproject loans, LAAD-CA has been lending at the rate of 11 percent with a 1 percent closing fee. The length of the loans vary and the grace period is generally for 18 months.

The 11 percent rate represents an increase over a percent rate which prevailed on the first AID loan. LAAD-CA cannot reasonably expect to increase this rate, especially for new enterprises and ones which offer guarantees. According to LAAD-CA, established enterprises in many parts of Central America are able to borrow at 11 percent and sometimes even less. While LAAD-CA will be able to increase the average return on its loan portfolio as it relends repayments from earlier loans, the process of increasing income cannot be speeded up by further increases in the present level of interest rates.

As pointed out elsewhere in the report, to the extent that LAAD-CA makes new equity investments, it will reduce its return on capital since no dividends can be expected for a period of several years and no interest would be earned.

LAAD-CA has been lending at nine percent to the ICIs. This allows the ICIs to realize a modest return of three to four percent for their efforts in retailing and supervising the loans to small farmers. It is evident that the ICIs cannot reasonably be expected to render special services or take undue risks for this return. So far as the consultants were able to ascertain, they do not. While a nine percent rate is less than the rate on regular LAAD-CA loans, these loans are virtually without risk since the borrowers are for the most part solid, financial institutions. Also, since LAAD-CA does not have its usual follow-up and trouble shooting responsibilities, it may be said that its administrative costs are also lower than normal. Nonetheless, the interest rate spread between the four percent at which LAAD-CA borrows from AID, and the 12 or 13 percent rate at which the farmer borrows from the ICIs is very substantial. As a general principle, it would be better for LAAD-CA to concentrate its lending in other areas where its contribution is more clearly required.

c. Staffing of LAAD-CA

The consultants do not believe that LAAD-CA is over-staffed in its Guatemala City office for the tasks which confront it. As explained elsewhere, the accounts of LAAD-CA bear some of the expenses of LAAD-S. A. in Miami. While these expenses are said to be related to

LAAD-CA's business, the bulk of the work of LAAD-CA is clearly conducted by the staff based in Guatemala City.

The staff appears able, dedicated and enthusiastic. The nature of the work of the President of LAAD-CA has changed notably over the past three years when our last evaluation was made. A table based on information provided by the President illustrates the distribution of his time in percentages in these two periods:

|                                     | <u>1974</u> | <u>1977</u> |
|-------------------------------------|-------------|-------------|
| New Business Development            | 50%         | 10%         |
| Project Monitoring                  | 20%         | 40%         |
| Implementation                      | 20%         | 10%         |
| LAAD-CA Administration              | 10%         | 20%         |
| Board, Executive Meetings,<br>ROCAP | -           | 10%         |
| Miscellaneous                       | <u>-</u>    | <u>10%</u>  |
|                                     | 100%        | 100%        |

Source: LAAD-CA

These are not scientific measurements but certain trends are worth noting. Clearly, new business development has received less and less attention from LAAD-CA's chief executive who has had to spend more and more time on "trouble shooting" and monitoring outstanding loans. Likewise, there has been more time spent on relations with the LAAD Board

which involve trips to the States. Administrative duties, such as meeting with his own staff, with the staff of ROCAP and with visitors of an official nature (including, of course, evaluators!) require more time than formerly.

We do not see this distribution of time changing significantly although LAAD-CA desperately needs investments which will reward it for its risks. To some extent, the President of LAAD-CA could spend more time on business development if the staff could assume some of his present duties. We do not see this taking place unless LAAD-CA staff is expanded. Such an expansion will be difficult given the present ratio of expenses to income. Possibly, a review would permit some reduction in the expenses arising in Miami and now charged to LAAD-CA.

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**SUBPROJECT EVALUATIONS**

## V. SUBPROJECT EVALUATIONS

**This section will analyze LAAD-CA's activities in light of its purposes and goals, namely, the development of Central American non-traditional agribusiness activities, and their effect upon the rural poor. LAAD has attempted to achieve this overall development goal through two distinct means: (1) direct loans to agribusinesses and (2) loans to intermediate credit institutions (ICIs) which relend the funds to agribusiness projects and to individual farmers. Table V-1 lists these two types of loans. One can see that, although the loans to ICIs are a relatively new lending area for LAAD-CA, it represents a large (presently 50.4 percent) portion of this AID loan.**

**These various subloans have been analyzed from various perspectives. First, the data and observations have been examined to determine which enterprises and which lending channel, direct or indirect lending, has the greatest impact upon small farmers.**

**Secondly, LAAD-CA's technical assistance role has been analyzed. This activity is important as it is a manifestation of an important concept underlying the formation of LAAD and one of the bases for additional AID financing. The Capital Assistance Paper stated that LAAD would "contribute substantially to the promotion,**

Table V-1

Listing of Subloans Made Under AID Loan Number 596-L-015

September 1, 1977

|   | <u>Amount</u>      | <u>Percent of<br/>Total</u> |
|---|--------------------|-----------------------------|
| <b>Direct Loans:</b>  |                    |                             |
| Alimentos Congelados, S. A. (ALCOSA)                            | \$ 258,000         | 5.2                         |
| Arrocera Los Corrales   | 300,000            | 6.0                         |
| Conservas de Centroamerica                                      | 400,000            | 8.0                         |
| Leche y Derivados (LEYDE)                                       | 275,000            | 5.5                         |
| Alimentos de Costa Rica   | 230,000            | 4.6                         |
| Industria Frutera del Gran Lago S. A.<br>(IFRUGALASA) <u>1/</u> | 400,000            | 8.0                         |
| Quinonez Hermanos   | 80,000             | 1.6                         |
| Jardines Mil Flores, S. A.                                      | <u>60,000</u>      | <u>1.2</u>                  |
| <b>Total Direct Loans</b>                                       | <b>2,003,000</b>   | <b>40.1</b>                 |
| <b>Intermediate Credit Institutions:</b>                        |                    |                             |
| Banco de Credito Agricola de Cartago                            | 400,000            | 8.0                         |
| Banco de Costa Rica   | 400,000            | 8.0                         |
| Instituto de Fomento Nacional (INFONAC)                         | 222,000            | 4.4                         |
| Financiera Salvadorena (FISAL)                                  | 500,000            | 10.0                        |
| Financiera de Desarrollo e Inversion S. A.<br>(FIDESIA)         | 500,000            | 10.0                        |
| Banco Financiera Hondurena                                      | <u>500,000</u>     | <u>10.0</u>                 |
| <b>Total Intermediate Credit Institutions</b>                   | <b>2,522,000</b>   | <b>50.4</b>                 |
| Funds Not Committed   | <u>475,000</u>     | <u>9.5</u>                  |
| <b>Loan Total</b>   | <b>\$5,000,000</b> | <b>100.0</b>                |

1/ Not yet disbursed.

development and expansion of agribusiness systems and enterprises through addressing constraints in agricultural production and supply systems where capital, management, training, technical and financial assistance can be productively applied." <sup>1/</sup>

Additionally, LAAD-CA's efforts to stimulate non-traditional agricultural activities through direct and indirect lending, and whether those activities represent a bonafide link in an agribusiness system have been evaluated. Related to this will be a brief analysis of how specific companies have fared in these new areas as well as their prospects for expansion.

Finally, there is a discussion of foreign exchange earnings derived from subproject activities.

A. Maximizing the Economic Impact:  
Direct Loans versus ICIs

Six of the eight agribusinesses which received direct funding were visited. Of the ICIs, all six were visited and 11 ICI sub-projects were visited. It should be noted that, of the ICIs, three were cases where farm credits were being extended and because of the large number of loans in these programs, it was difficult to

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1/ Capital Assistance Paper, P. 26.

develop with surety the proportion of farmers which fell in the small category, variations in yields and prices, etc.

It cannot be said, furthermore, that these farm production loans would not have been made if the LAAD-CA loans had not been available.

The loans to the Banco de Credito Agrícola de Cartago was made on the basis that the money would be relented to farmers growing broccoli, okra, and peas for the Frigorificos Tecnicos (FRIGITEC) plant near San Jose. However, since the FRIGITEC plant is currently closed down, subloans were made to farmers who had a long-standing credit relationship with the bank and who are growing traditional crops.

The field visits provided for by the Banco de Costa Rica did not provide an opportunity to visit processing plants funded with LAAD-CA funds. Field visits were made to the San Carlos region where the BCR had extended credits to swine, yucca and plantain producers. Yucca plants were visited, but no plants were funded with LAAD-CA money. The two yucca processing plants have run into operational difficulties as was indicated in a previous section. It seems that farmers there are refraining from harvesting yucca until prices recover and the plants are once again operating smoothly.

The third ICI providing farm production credits, INFONAC, was in the very early stages of lending to pineapple growers in the colonization area of Rigoberto Cabezas. No pineapple has yet been harvested and marketed to IFRUGALASA, which is also an INFONAC project.

Given these observations, we can see that there may be some positive aspects to supporting farm credit programs through ICIs, especially when the funds are loaned in conjunction with processing facility operations. Without doubt, these loans through ICIs have clearly been directed to small farmers thus meeting the conditions of the second AID loan. It is the feeling of the consultants that LAAD-CA has not, as yet, broken significant new ground by making these loans.

Addressing the question of farm input suppliers and the productivity increases generated by those inputs, we feel that measurement of those increases were beyond the scope of this study given the diffusion of purchasers, varying utilization rates, and so on.

Despite many obvious shortcomings, Table V-2 attempts to segregate the economic impacts upon the target group by agribusiness which received direct loans and by intermediate credit institutions. The exercise, however, should provide at least a clearer focus regarding impact by these two major types of loan recipients upon the rural poor.

Table V-2

COMPARISON OF ANNUAL IMPACTS UPON TARGET GROUP  
BY DIRECT LOAN PROJECTS AND ICI SUBPROJECTS

## PROJECTS VISITED ONLY

|  | <u>Wages</u> <sup>1/</sup> | <u>Small Farmer<br/>Raw Material<br/>Purchases</u> <sup>1/</sup> | <u>Farm<br/>Production</u> <sup>3/</sup> | <u>Total<br/>Target Group<br/>Economic Benefits</u> | <u>LAAD<br/>Financing</u> |
|--|----------------------------|--|--|---|---------------------------|
| <b>Direct Loans</b>                                    |                            |  |  |   |                           |
| Alimentos Congelados                                   | \$112,590                  | \$ 93,748  | \$ 0                                     | \$ 206,248  | \$ 258,000                |
| Conservas de Centro America                            | 116,053                    | 18,161   | 0  | 134,214   | 400,000                   |
| Arrocera Los Corrales <sup>2/</sup>                    | 28,690                     | 103,822  | 0  | 132,512   | 447,000                   |
| Leche y Derivados                                      | 48,016                     | 133,591  | 0  | 181,607   | 275,000                   |
| Alimentos de Costa Rica                                | 21,114                     | 22,747   | 0  | 43,861  | 230,000                   |
| Industria Frutera del Gran Lago                        | <u>43,802</u>              | <u>54,833</u>  | <u>0</u>                                 | <u>98,635</u>                                       | <u>400,000</u>            |
| <b>Total Direct Loans</b>                              | <b>370,175</b>             | <b>426,902</b>   | <b>0</b>                                 | <b>797,077</b>                                      | <b>2,010,000</b>          |
| <b>ICIs:</b>   |                            |  |  |   |                           |
| Banco de Credito Agricola de<br>Cartago <sup>4/</sup>  | 0                          | 0  | 383,600                                  | 383,600   | 270,025 <sup>5/</sup>     |
| Banco de Costa Rica, San<br>Carlos Area (farmers only) | 0                          | 0  | 336,934                                  | 336,934   | 217,794 <sup>6/</sup>     |
| Instituto de Fomento Nacional -<br>Rigoberto Cabezas   | 0                          | 0  | 105,000                                  | 105,000   | 105,000                   |
| FISAL  |                            |  |  |   |                           |
| Industrias Agricolas Ideal                             | 3,431                      | 47,760   | 0  | 51,191  | 100,000                   |
| Semillas, S. A.  | 10,474                     | 0  | 0  | 10,474  | 120,000                   |
| FIDESA   |                            |  |  |   |                           |
| Lassally y Cia.  | 19,323                     | 611  | 0  | 19,934  | 80,000                    |
| Maquinaria Agricola                                    | 6,855                      | 0  | 0  | 6,855   | 20,000                    |
| Banco Financiera Hondurena                             |                            |  |  |   |                           |
| Molino Arrocero Chorotega                              | <u>24,448</u>              | <u>84,942</u>  | <u>0</u>                                 | <u>109,390</u>                                      | <u>500,000</u>            |
| <b>Total ICIs</b>                                      | <b>64,531</b>              | <b>133,313</b>   | <b>825,534</b>                           | <b>1,023,378</b>                                    | <b>1,412,819</b>          |

<sup>1/</sup> Portion attributed to LAAD financing.

<sup>2/</sup> Loan from most recent AID financing amounts to \$300,000.

<sup>3/</sup> Includes productivity increase estimates from machinery or seeds.

<sup>4/</sup> Assumes that broccoli, okra, and peas are grown in proportions purchased by Frigitec under normal conditions.

<sup>5/</sup> Amount of LAAD-CA financing accounted for.

<sup>6/</sup> Amount of LAAD-CA financing relent by the San Carlos branch of the Banco de Costa Rica.

**Wages (which includes fringe benefits) and small farmer raw material purchases were discounted by the LAAD financing-total capitalization ratio.**

If all of the \$5 million loan had gone directly to subprojects, the total measurable impact would have been approximately \$2 million, and if all had been loaned through ICIs, the impact would have been \$3.6 million. Nevertheless, we feel that this does not constitute sufficient evidence to recommend a policy change one way or the other. More important qualitative issues are brought to light in the sections below regarding technical assistance, new activities stimulated, and the prospects for expansion which support strongly the direct loan as opposed to the ICI lending approach.

**B. Technical Assistance**

**1. Technical Assistance from LAAD-CA to Projects and ICI Subprojects**

Technical assistance and information is crucial to development. It can originate from many different sources and can be directed to various levels. One source of technical assistance emanates from LAAD-CA staff and is directed to processing plants or other agribusiness; LAAD conceivably can be of some assistance to ICIs as well. However, help from LAAD's staff to direct loan recipients has

been somewhat sparse. Several stated that they needed no technical assistance from LAAD-CA and emphasized that the relationship was strictly a borrower-lender one. IFRUGALASA offered that LAAD-CA had put them in contact with Gerber Foods in San Jose (a LAAD shareholder) who ultimately purchased some of the product and had been very helpful with suggestions on quality control. Also, LAAD-CA was attempting to obtain a certain variety of pineapple seedling through Castle and Cooke (another shareholder); however, had no luck to date. Another project, Arroceros Los Corrales, cited marketing assistance from Cargill (yet another shareholder) as the key technical input via LAAD.

As far as direct assistance to an ICI, only one case was cited. That was the case of Banco Financiera Hondurena with which LAAD-CA has enjoyed a relatively long relationship. "LAAD has given orientation through studies and discussions, and has sent experts, namely Mr. Corrales, a Guatemalan loan recipient."

A general comment from ICIs was that "LAAD has caused us to view agroindustry in a systematic way and has changed our perceptions regarding funding these activities."

2. Technical Assistance from Projects and Subprojects to Farmers

Researchers in the course of this study had the opportunity to observe the inter-actions between small farmers and 12 different agricultural technicians. As a class, the technicians employed by processing plants were much more successful in answering the farmers' questions and in issuing specific advice. Bank agronomists are primarily employed to assess the credit worthiness of various agricultural establishments. Their experience and expertise lies in the evaluation of what exists, not in the suggestion of improvements. Furthermore, they must by the nature of their job, be generalists, knowing a little about every crop but lacking detailed practical knowledge of any one of them. Processing plant representatives, on the other hand, were specialists in the particular crops that their company purchased. Constant immersion in the production details of the farmer's crop was the most important factor affecting the quality of the technical advice. ALCOSA's representative, for instance, had no formal education as an agronomist. His expertise was acquired as a result of his previous experience as an ALCOSA farm foreman and as a result of his own individually pursued reading and study. He thus could be considered at most a "para-professional" agricultural technician. Nevertheless, because he knew cauliflower and broccolt and brussel sprouts, his crop-specific advice was as effective as any.

Small farmers seeking technical advice do not ask general or theoretical questions. The archetypical question, heard over and over again in the course of this study, was: "I have this fertilizer left over from my corn crop. Can I use it on the tomatoes?" The easiest correct answer is "No." This was the answer generally given by bank agronomists. Occasionally, they would tell him that it really was the wrong fertilizer, but he could apply it if he wished. This tells him nothing he did not know already. The effective answer, and the one most often given by processing plant representatives with a genuine concern for the farmer's productivity, was to tell him which other fertilizer should be mixed with this inappropriate fertilizer to create something that would be usable. "Buy four bags of 5-10-20, and mix it altogether with your two bags. Then put half of it on as soon as the rains start again, and the other half when the fruits start to form." This advice would be accompanied by a written prescription to help the farmer remember. After this specific advice has been given, then it contributes to the farmer's education to tell him that tomatoes need more potassium than nitrogen after the planting. But if the general advice is given without the specific, then the farmer hears nothing and is not helped.

According to the farmers interviewed, the advice of government-employed agronomists and extension agents is likely to be of the same general theoretical kind as that of the bank agronomists. All of the farmers who were beneficiaries of various land reform programs experienced extensive contact with government agronomists. A few farmers were openly critical of the advice they had received, usually because the extension agent did not know the specific environmental conditions of the farmer's area well enough to give practical advice. But more often, the farmers were conventionally appreciative of the advice they had received, but unable to recall any specific piece of advice that they had put into practice.

It may not be necessary that the technical representative giving advice to the farmer be a formally trained agronomist, but he should have specific current knowledge of the farmer's crop. Because of the specific tasks of the processing plant technician's job, he is more likely to possess this specific knowledge than the bank or government agronomist. Perhaps also the processing plant's material interest in increasing the productivity of their growers is a contributing factor to the plant representative's better performance.

3. Technical Assistance to Projects and Subprojects from Other Sources

An additional important observation is that concerning the technical assistance provided by government institutions. The general feeling on the part of several respondents was that very little or no assistance was generated by the various ministries who have that responsibility. However, a surprising number cited positive contributions of specific government agencies in their respective countries:

Conservas de Centroamerica: Guatemalan government investment in the Sacapa Valley irrigation project is the basis for its tomato supply source.

Leche y Derivados: Honduran government provided cattle blood tests for brucellosis and tuberculosis.

IFRUGALASA: An emphatic yes. "Never would have gotten off the ground without the support of INFONAC." INFONAC provides two agronomists and one horticulturalist as well as farm production credits to stimulate a source of supply for IFRUGALASA. These efforts are complemented by a horticulturalist from the National Agrarian Institute. Regarding tomato production, the Ministry of Agriculture and National Bank operate an effective experimental station in Sebaco which has developed new varieties and weed control methods.

Semillas and Maquinaria Agricola: Both firms cited the Banco de Fomento Agropecuario with its 14 stores as an important marketing channel for their goods.

ALCOSA: Government extension agents have helped them identify additional suppliers.

It is our opinion that LAAD does not live up to its claims regarding technical assistance. Its financial packaging serves for the most part to get the loan approved, but not as an orientation for agribusinessmen. The paralysis of LAAD-Marketing eliminates assistance to exporters which was deemed to be crucial in the Capital Assistance Paper. LAAD-CA staff seems overworked with trouble shooting and loan documentation.

Moreover, the ICIs, especially the banks, do not constitute a strong source of technical assistance for small farmers. Governments have provided scattered assistance.

C. New, Non-Traditional Products

Two definitions of a non-traditional production seem to be concurrently employed by LAAD-CA staff. The original AID financing precluded any project which fell in the area of coffee, sugar, cotton and bananas. The second loan allowed LAAD-CA to fund projects in

these areas as long as there existed a small farmer or rural poor element. The Terms of Reference articulated this as follows:

"Nontraditional agriculture is defined here as activities which generate a positive impact on the target group by effectively involving the group in 'agribusiness systems.' Traditionally, to the extent that such systems have existed, the small farmer has been only marginally involved. Hence, the development and systems aimed at involving the small farmer is a general form of non-traditional agriculture."

These distinctions aside, many of the projects utilize new varieties, previously uncommercialized raw materials, and new cultivation or production techniques. The list is indeed impressive; a few examples follow:

Conservas and IFRUGALASA: Both firms cited the introduction of industrial tomato varieties (VF134, VF198, VC82, Meches 22) which have more solids content and produce a better paste. Conservas is encouraging pepper growers to raise pimentos; encouraging asparagus production. Conservas produces canned peaches where peaches had only been sold on the fresh market previously. IFRUGALASA is processing papayas which had never been commercialized in Nicaragua before.

ALCOSA is currently introducing the cultivation of snow peas and will be phasing out its own broccoli production over the next five years.

Leche y Derivados: Milk in the La Ceiba area was, prior to the installation of this plant, used to fabricate cheese. Now milk is turned into pasteurized, flavored milk, refrigerated and delivered in a highly technological manner. Egg nog (a year-round favorite), orange drink, and American and cheddar cheese, and sour cream, all count as newly introduced products with ice cream contemplated for the future.

Semillas, S. A.: The sale of hybrid corn seed which increases yields from 28 to 30 cwt up to 71 cwt per manzana (1.7 acres).

Coffee purchases by Industrias Agricolas Ideal represents the opposite of non-traditional production. Although a portion of total raw material purchases come from small farmers, this relationship has existed since 1948. The manager of Industrias Agricolas Ideal admitted that the LAAD-CA loan was taken because it was at a savings of one percent on the interest rate. No technological changes have been introduced.

The overall LAAD-CA performance is very good in new, non-traditional products. Our opinion is that the logic used when making the original LAAD loan should continue to prevail. New, non-traditional production gives small farmers the opportunity to receive better returns than those possible in the cultivation of traditional crops.

**D. Systems Approach to Agribusiness Development**

One of the original premises on which LAAD was founded was to be its ability to identify agribusiness systems and to bring to bear capital, management, training, technical and financial assistance upon missing or weak links in those systems. The consultants in the original Checchi evaluation suggested that almost any activity could be termed a part of an agribusiness system thus justifying almost any loan or investment. The result was that several projects funded had tenuous links with agribusiness system building.

The results of the current evaluation with regard to system building are more satisfactory especially among the direct loan projects. Seven of the eight direct loans are to food processors. Several represent integrated situations which carry the product "from the farm to the market." Others rely on distributors to sell the finished product among multitudinous small stores and supermarkets.

The ICI loans represent a step backward along the food processing chain in that the bulk of cases promote food production itself, and that is deemed positive with some qualifications.

As pointed out above, the Banco de Credito Agricola de Cartago was engaged in ordinary small loans to farmers pending the reopening of the Frigitec processing plant. The Banco de Costa Rica had lent in the San Carlos region to a number of plantain and banana producers in an area where such production was already quite large, <sup>1/</sup> but LAAD-CA financing may have improved returns to farmers through increased exports. Likewise, the yucca loans in the same area were well founded, representing \$50,000 in loans in the total of \$270,000 in loans made in that region.

The conclusions are that with the direct loans LAAD-CA exercised good judgment regarding the prospective contribution of the subproject to agribusiness system building. The ICI subprojects seem, in some cases, to be lacking the same consciousness regarding whether the project constituted a link in an agribusiness system although it must be remembered that the ICIs are responsible for the selection of subprojects.

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1/ Censos Nacionales de 1973, Agropecuario (Regiones Agrícolas), P. 174-5.

**E. Subproject Financial Viability**

Somewhat related to the new, non-traditional product stimulation is the question of subproject viability. Entering into new fields of endeavor usually implies a risky proposition. Table V-3 analyzes subproject viability utilizing financial statement data to determine a debt/equity ratio, current assets to current liabilities ratio, return on investment, and return on sales.

Among the direct loan projects, Arrocera Los Corrales was the best performer. This perhaps corresponds to the fact that it is the oldest company in that category, and certainly reflects the market share it commands in the Guatemalan rice business.

The debt/equity ratio reveals two companies with negative net worth--ALCOSA and Molino Arrocerero Chorotega--implying considerable past losses. Two companies, Alimentos and Conservas, also show highly leveraged conditions with debt far exceeding the capital invested by the owners,

The current asset/current liability ratio reveals three companies with potential cash flow problems: Alimentos de Costa Rica, Leche y Derivados, and Lassally. Alimentos is not likely to fall prey to cash

**Table V-3**  
**Subproject Viability Analysis**  
 (Based on most recent fiscal year)

|                            | <u>Debt/<br/>Equity</u> | <u>Current Assets/<br/>Current Liabilities</u> | <u>Profit/<br/>Investments</u> | <u>Profit/<br/>Sales</u> | <u>Initiation of<br/>Operations</u> |
|----------------------------|-------------------------|--|--------------------------------|--------------------------|-------------------------------------|
| <b>Direct Loans:</b>       |                         |  |                                |                          |                                     |
| ALCOSA                     | (5.9)                   | 1.4  | (1.9)                          | (.22)                    | 2/75                                |
| Conservas de Centroamerica | 5.5                     | 1.6  | (.15)                          | (.06)                    | 10/75                               |
| Arrocera Los Corrales      | 2.5                     | 39.52  | .68                            | 1                        | 72                                  |
| Alimentos de Costa Rica    | 5.7                     | .67  | (.47)                          | (.14)                    | 74                                  |
| Leche y Derivados          | 1.2                     | .57  | (.10)                          | (.01)                    | 73                                  |
| IFRUGALASA                 | N. A.                   | N. A.  | N. A.                          | N. A.                    | 5/76                                |
| <b>ICI Subprojects:</b>    |                         |  |                                |                          |                                     |
| Molino Arrocero Chorotega  | (9.6)                   | .75  | (.96)                          | (.59)                    | 72                                  |
| Industrias Agricolas Ideal | .74                     | 1.12   | .16                            | N. A.                    | 48                                  |
| Lassally Cla               | 2.25                    | .83  | .15                            | .12                      | 33                                  |
| Salvador Machinery         | .64                     | 1.37   | .53                            | .11                      | 46                                  |
| Maquinaria Agricola        | .24                     | 3.84   | N. A.                          | N. A.                    | 73                                  |
| Semillas, S. A.            | .91                     | 2.48   | .19                            | .05                      | 74                                  |

**Note: Parentheses indicate negative figures.**

shortages because of its status as a property of Agrodinamica Holding Company, S. A. which can shift funds to it when needed. Leche y Derivados has been requested by LAAD-CA to increase its capitalization and has opened up ownership to local dairymen.

Arrocera Los Corrales showed excellent return on investment, 68 percent, and several among the ICI subprojects also registered highly acceptable returns on investment. The worst performer was ALCOSA whose losses can be attributed, perhaps, to their initially low production volume and high organization and start-up costs.

The second poorest profit performance was by Molino Arrocero Chorotega which we feel was the most poorly managed of all projects visited. Its debts to farmer producers were discussed above. Its poor plant layout and still inadequate equipment lineup, and the fact that companies from as far away as San Pedro Sula offer higher prices to farmers in the southern Honduras region, suggest the lack of dynamic management required for a viable operation.

Among the other ICI subprojects, one finds a healthier financial picture. This indicates that the companies are fairly well established and do not represent risky operations. The ICIs, when lending to sub-projects, depend on personal guarantees to lessen the risk of the loans.

**For a new firm, Semillas, S. A. appears to have strong financial management and performance.**

Our conclusion is that through the direct loan projects under the second AID loan, LAAD-CA is supporting non-traditional production. The fact that they are not profitable at the moment does not mean that any poor lending decision has been made by LAAD-CA, but rather that these projects are in the start-up phases. None seem to be in particular financial difficulty; and if they continue on their present path, will most likely achieve profitability within three or four years.

The ICI subprojects, on the other hand, appear to be less risky and less non-traditional. This is due perhaps to the fact that the ICIs are earning only about two to three percent interest on those loans (above the cost of money to the ICIs).

F. Growth Prospects for Subprojects

We attempted to collect the views of the managers regarding their expansion possibilities over the next several years to measure future economic impacts. Raw material purchases by source, employment, and capital outlay were projected through 1980.

## 1. Raw Material Purchase Projections

Table V-4 gives estimated raw material purchases for the year 1980. Shifts in the percentages purchased from small, medium and large farmers and that cultivated on company farms are accounted for by managers' statements regarding these changes. If the individual managers' predictions are collectively correct, total raw material purchases by direct loan and ICI subprojects will nearly triple from \$5.9 million in 1977 to \$16.8 million in 1980. Small farmer purchases will more than triple from a current \$2.08 million to \$6.9 million in 1980.

## 2. Employment

The general impression given when considering projections of raw material purchases in conjunction with predictions of increased employment is that the plants are contemplating increasing their output by increasing the productivity of their laborers. The largest increase foreseen for 1980 (Table V-5) will be an increase of 120 production workers by ALCOSA. IFRUGALASA plans to add an additional half shift during harvest season. These additional four hours will probably be worked by present employees and will not involve new hirings.

The overall employment increase projected is approximately 20 percent.

Table V-4

Estimate of 1980 Raw Material Purchases by  
LAAD Direct Loan Subprojects and  
Selected ICI Subprojects

| <u>Direct Loans</u>                          | <u>Raw Material Purchases</u> | <u>Small Farmer</u> | <u>Percent</u> | <u>Medium and Large Farmer</u> | <u>Percent</u> | <u>Company Cultivation</u> | <u>Percent</u> |
|--|-------------------------------|---------------------|----------------|--------------------------------|----------------|----------------------------|----------------|
| Alimentos Congelados (Alcosa)                | \$ 1,800,000                  | \$ 900,000          | 50             | \$ 540,000                     | 30             | \$ 360,000                 | 20             |
| Conservas de Centroamerica                   | 2,100,000                     | 945,000             | 45             | 1,155,000                      | 55             | 0                          | 0              |
| Arrocera Los Corrales                        | 2,000,000                     | 900,000             | 45             | 1,100,000                      | 55             | 0                          | 0              |
| Alimentos de Costa Rica                      | 2,823,000                     | 564,600             | 20             | 1,411,500                      | 50             | 846,900                    | 30             |
| Leche y Derivados (LEYDE)                    | 2,050,000                     | 922,500             | 45             | 1,127,500                      | 55             | 0                          | 0              |
| Industria Frutera del Gran Lago (IFRUGALASA) | 2,500,000                     | 1,250,000           | 50             | 875,000                        | 35             | 375,000                    | 15             |
| Total Direct Loans                           | <u>13,273,000</u>             | <u>5,482,100</u>    | <u>41</u>      | <u>6,209,000</u>               | <u>47</u>      | <u>1,581,900</u>           | <u>13</u>      |
| <u>ICI Subprojects:</u>                      |                               |                     |                |                                |                |                            |                |
| Molino Arrocero Chorotega                    | 2,864,000                     | 1,432,000           | 50             | 1,432,000                      | 50             | 0                          | 0              |
| Lassally y Cia.                              | 751,500                       | 37,575              | 5              | 601,200                        | 80             | 112,725                    | 15             |
| Total ICI Subprojects                        | <u>3,615,500</u>              | <u>1,469,575</u>    | <u>41</u>      | <u>2,033,200</u>               | <u>56</u>      | <u>112,725</u>             | <u>3</u>       |
| Total Direct Loan and ICI Subproject         | 16,888,500                    | 6,951,675           | 41.1           | 6,209,000                      | 36.7           | 1,694,625                  | 10.0           |
| Industrias Agricolas Ideal                   | <u>20,000,000</u>             | <u>2,000,000</u>    | <u>10</u>      | <u>16,000,000</u>              | <u>90</u>      |                            | <u>0</u>       |
| Grand Total                                  | 36,888,500                    | 8,951,675           | 24             | 26,242,200                     | 71             | 1,694,629                  | 5              |

Table V-5

Estimated 1980 Full-Time Employment

|                                 | <u>Current<br/>Full-Time<br/>Employment</u> | <u>Projected<br/>Increase</u> | <u>Total<br/>1980<br/>Employment</u> |
|---------------------------------|---|-------------------------------|--------------------------------------|
| <b>Direct Loans:</b>            |   |                               |                                      |
| Allimentos Congelados           | 355   | 120                           | 475                                  |
| Conservas de Centroamerica      | 165   | 0                             | 165                                  |
| Arrocera Los Corrales           | 32  | 0                             | 32                                   |
| Allimentos de Costa Rica        | 34  | 15                            | 49                                   |
| Leche y Derivados               | 89  | 0                             | 89                                   |
| Industria Frutera del Gran Lago | 187   | 70                            | 257                                  |
| <b>ICI Subprojects:</b>         |   |                               |                                      |
| Molino Arrocerero Chorotega     | 27  | 0                             | 27                                   |
| Industrias Agricolas Ideal      | 166   | 0                             | 166                                  |
| Lassally y Cia.                 | 33  | 0                             | 33                                   |
| Maquinaria Agricola             | 14  | 5                             | 19                                   |
| Semillas, S. A.                 | <u>24</u>                                   | <u>5</u>                      | <u>29</u>                            |
| <b>Totals</b>                   | <b>1,126</b>                                | <b>215</b>                    | <b>1,341</b>                         |

### 3. Capital Outlay Predictions

Of the three projections, capital outlay predictions are perhaps the most difficult to make. The managers were asked to estimate future capital outlay, but more than likely these estimates reflect very short-term needs only. Indeed, until full labor utilization (three shifts) is reached, one would suspect that the firms may tend toward becoming more labor intensive. The 20 percent employment increase projected above would seem to support this.

However, the interviews indicated that in eight of twelve projects, capital investments are planned. In only one case is there a projected labor increase along with an increase in capital outlay. The following capital improvements were projected:

Molino Arrocerero Chorotega - \$150,000 and \$100,000 will be invested in plant space and equipment respectively to alleviate poor layout and low technology machinery problems.

Arrocera Los Corrales - Additional grinders will be added for both parboiled and polished rice lines.

Conservas de Centroamerica - By December 1978, 50,000 square feet of additional plant space will be built to offset current crowded conditions, and additional evaporators will be added.

Allmentos de Costa Rica - A cattle feed mill is contemplated.

Leche y Derivados - An additional milk carton machine has been purchased.

IFRUGALASA - Three to four additional pieces will be added to complete the juice line; a new warehouse has just been completed and additional farm land has been purchased.

ALCOSA - Additional plant space and equipment is contemplated.

It should be noted that six of these projects are LAAD-CA direct loans; all of these businesses are relatively new. The consultants conclude that there will be no major capital outlays with the exception of the Conservas expansion which could amount to as much as \$1.5 million. Most of the planned outlays are refinements to the process which will make individual firms more productive.

It is doubtful whether one can say that these proposed outlays are a result of the LAAD loans made to the subprojects. Two examples do specifically support that hypothesis. LEYDE was operating in the red until the LAAD-CA loan was made which enabled it to expand plant capacity. LEYDE is now in the black, and the additional piece of equipment means that productive capacity is being expanded so that further economies of scale can be gained.

LAAD-CA has been a major provider of capital to Arroceros Los Corrales extending \$680,000 in loans over the past four years. Now that Los Corrales commands a major share of the market in Guatemala, it is looking to expand its export sales of parboiled and polished rice.

4. Foreign Exchange Benefits

The purpose of this section is to give a general view of the foreign exchange characteristics of the firms who received sub-loans under the second AID loan.

Several caveats need to be advanced before beginning the analysis. First, imports of equipment and machinery may decrease relative to total exports once the business is firmly established. This means that firms which currently have a negative trade balance now may well have a positive balance in the future. Conservas de Centroamerica is a good example of this likely outcome.

Second, foreign capital movements are less likely to influence the foreign exchange impact in the future. Only two firms, ALCOSA and Conservas, are foreign owned and repatriation of funds will be a factor over the long run.

Third, once again the inclusion of Industrias Agrícolas Ideal biases the outcome of the analysis. If it were not included, the total foreign exchange impact would be negative during the year studied.

It is seen in Table V-6 that not all subprojects had an export sales component although they might have a foreign exchange saving element. Not surprisingly, the rice mills have at present no export sales; and Salvador Machinery, which specializes in the sale of imported machinery, also has a deficit balance. LEYDE is exporting a small amount of milk to San Andres, Colombia; however, that amount is far over-shadowed by its imports of cartons, flavors, etc.

The weak foreign exchange earners were Salvador Machinery and Maquinaria Agrícola which specialize in the sale of imported farm machinery, and LEYDE, which exports only a small fraction of its production to San Andres, Colombia. LEYDE, for example, primarily sells domestically and depends heavily upon imports of cartons, flavors, and miscellaneous detergents and cleaners.

Among the strong foreign exchange earners were ALCOSA, which exports frozen vegetables through its U. S. parent firm, Hanover Brands; IFRUGALASA, exporter of tomato paste, juices and nectars; Industrias

Table V-6

## ESTIMATED FOREIGN EXCHANGE IMPACT BY SUBPROJECTS VISITED

(Based on Most Recent Fiscal Year)

| <u>Project</u>                              | <u>Total Sales</u>              | <u>Export Percentage</u> | <u>Total Exports</u>            | <u>Total Imported</u>          | <u>Exports Less Imports</u>     | <u>Foreign Loans and Equity</u> | <u>Foreign Dividends, Interest Repayment</u> | <u>Total Foreign Exchange Impact</u> |
|---|---------------------------------|--------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------|--|--------------------------------------|
| <b>Direct Loans:</b>                        |                                 |                          |                                 |                                |                                 |                                 |  |                                      |
| Alimentos Congelados (ALCOOSA)              | \$ 906,804                      | 95                       | \$ 861,463                      | \$ 46,777                      | \$ 814,686                      | \$263,124                       | \$54,000                                     | \$1,104,810                          |
| Conservas de Centroamerica                  | 915,880                         | 40                       | 366,352                         | 439,622                        | (73,270)                        | 278,000                         | 0  | 204,730                              |
| Arrocera Los Corrales                       | 2,319,724                       | 0                        | 0                               | 225,000                        | (225,000)                       | 150,000                         | 0  | (75,000)                             |
| Alimentos de Costa Rica                     | 2,125,828                       | 0                        | 0                               | 500,000                        | (500,000)                       | 0                               | 0  | (500,000)                            |
| Leche y Derivados (LEYDE)                   | 1,751,565                       | 1                        | 17,515                          | 250,041                        | (482,567)                       | 0                               | 0  | (482,567)                            |
| Industria Frutera del Gran Lago (FRUGALASA) | <u>3,100,000</u>                | <u>80</u>                | <u>2,480,000</u>                | <u>1,674,000</u>               | <u>806,000</u>                  | <u>N.A.</u>                     | <u>N.A.</u>                                  | <u>806,000</u>                       |
| <b>Total Direct Loans</b>                   | <b>11,119,801</b>               |                          | <b>3,725,330</b>                | <b>3,135,440</b>               | <b>339,849</b>                  | <b>664,124</b>                  | <b>54,000</b>                                | <b>1,057,973</b>                     |
| <b>ICI Subprojects:</b>                     |                                 |                          |                                 |                                |                                 |                                 |  |                                      |
| Molino Arrocerero Chorotega                 | 626,288                         | 0                        | 0                               | 70,000                         | (70,000)                        | 0                               | 0  | (70,000)                             |
| Industrias Agricolas Ideal                  | 25,000,000                      | 90                       | 22,500,000                      | 0                              | 22,500,000                      | 0                               | 0  | 22,500,000                           |
| Salvador Machinery                          | 3,876,570                       | 0                        | 0                               | 2,709,666                      | (2,709,666)                     | 0                               | 0  | (2,709,666)                          |
| Lassally y Cia                              | 620,344                         | 99                       | 614,140                         | 20,000                         | 594,140                         | 0                               | 0  | 594,140                              |
| Maquinaria Agricola                         | 288,000                         | 30                       | 86,400                          | 160,000                        | (73,600)                        | 0                               | 0  | (73,600)                             |
| Semillas, S. A.                             | <u>1,530,000</u>                | <u>30</u>                | <u>459,000</u>                  | <u>31,500</u>                  | <u>427,500</u>                  | <u>0</u>                        | <u>0</u>                                     | <u>427,500</u>                       |
| <b>Total ICI Subprojects</b>                | <b>31,941,202</b>               |                          | <b>23,659,540</b>               | <b>2,931,166</b>               | <b>20,668,374</b>               | <b>0</b>                        | <b>0</b>                                     | <b>20,668,374</b>                    |
| <b>Grand Total</b>                          | <b><u><u>43,061,003</u></u></b> |                          | <b><u><u>27,384,870</u></u></b> | <b><u><u>6,126,606</u></u></b> | <b><u><u>21,008,223</u></u></b> | <b><u><u>664,124</u></u></b>    | <b><u><u>54,000</u></u></b>                  | <b><u><u>21,726,347</u></u></b>      |

**Agrícolas Ideal, which specializes in processed coffee and a small amount of sesame; Semillas, S. A., which exports hybrid corn seed to Guatemala.**

The performance with regard to foreign exchange earnings are lackluster; they will tend to improve over time. A positive money supply effect is not evidenced if Industrias Agrícolas Ideal (to which LAAD-CA has loaned only \$100,000 through an ICI) is omitted. Nevertheless, this can be tempered by the overall AID policy which addresses the increase of domestic food consumption. The non-exporters certainly are affecting this important factor and possibly are replacing goods which would otherwise be imported.

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VI.

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**IN-DEPTH ANALYSIS: THE SOCIAL IMPACT OF ALCOSA  
ON THE PEASANT FARMERS OF CHIMACHOY**

**VI. IN-DEPTH ANALYSIS: THE SOCIAL IMPACT OF ALCOSA  
ON THE PEASANT FARMERS OF CHIMACHOY**

A special feature of this evaluation of LAAD-CA called for an in-depth analysis of a subproject of LAAD-CA to trace the sociological impact of the project upon the rural inhabitants of the project area. The decision as to which project to study was not made until the subprojects in all of the Central American countries had been visited. Then, after review and discussion with officials of ROCAP of the possible alternatives, the ALCOSA project in Guatemala was selected for further analysis. This project was of particular interest involving as it did a typical segment of the Guatemalan rural population, the transfer of agricultural technology and the production of a product for export.

Thus, it came to pass that the effects of ALCOSA's cauliflower purchasing activities on the Kakchikel village of Chimachoy in the Guatemalan highlands were assessed. After spending two days there in the company of the ALCOSA representative, the socio-anthropologist returned to spend three days in the village. He brought with him a rented truck, which was put at the villagers' disposal in

return for giving him a guided tour of their cultivations and answering his questions. Most of the information collected, however, came not from formal interviews but from conversations conducted in the cab of the truck.

Chimachoy is an aldea of about 700 people, located in the township of Parramos in the central highlands department of Chimaltenango. Chimachoy is a Kakchikel village, though all of the men and most of the women also speak Spanish as a second language. Although located in a densely populated area not far from the capital city, Chimachoy is separated from the main stream of Guatemalan commerce by 13 kilometers of rugged dirt road between it and the nearest paved highway at Parramos. The last three kilometers of this route is a side road that dead ends at Chimachoy. Thus, the only traffic on the road are those few vehicles that have business in Chimachoy itself: the twice daily minibuses to Chimaltenango and the capital, and the ALCOSA buyer's trucks.

Like most small villages in the Guatemala highlands, Chimachoy has no discernible village center. For the last two kilometers or so of its length, the Chimachoy road runs along a high mountain ridge. About half of Chimachoy's 120 households are located along this road on the ridge. The other half are scattered down below among the milpas. At the near end of this stretch of road that constitutes Chimachoy proper

sits the village school. This building is the farthest extension of the national electric system. It is also the point where the minibuses pick up their passengers and turn around. At the far end of the mountain ridge, just before the road dwindles out altogether, is the ALCOSA buying station, and across the street from that, the prosperous home of the family that owns the village's gasoline-powered tortilla mill. These two wide spots in the road, the bus stop and the tortilla mill, are the only centers of community life, places where people are likely to meet other villagers in the course of their daily routines.

Although agriculture has been its only occupation, the village of Chimachoy is land-poor. This is primarily due to simple population density--Chimachoy is hemmed in closely by neighboring villages on all sides--but some of the best land on the gentler slopes of Chimachoy's ridge is occupied by small Ladino farms. The land that remains for the villagers does not look like much to the outsider. Although the soil is rich, the slopes are extraordinarily steep. At first glance this appears to be marginal land, pressed into production only because of the extreme population density of the

**Altiplano. But the villagers feel otherwise. The steepness of the land presents no problem to them, since they take for granted a centuries-old hoe-cultivation technology that effectively controls erosion through the use of deep contour furrows. The people of Chimachoy believe that their land has certain unique advantages that far outweigh any difficulties created by the steepness of the slope. The high altitude of their mountain ridge (8,000 feet) permits the cultivation of cold-weather vegetable crops which generally command high prices on the national market. More importantly, the ridge is normally enveloped at least a part of each day by ground fog. As a result, the soil retains enough moisture to permit cultivation to continue through the dry season. This land can sustain three vegetable harvests or two milpa harvests per year, something that is possible in very few other places in the Guatemalan highlands.**

The typical Chimachoy household owns about three or four cuerdas of land. (In this area, approximately six cuerdas equal one manzana (or about 1.7 acres). This tiny amount is normally comprised of three or more individual plots: one at the house site, one somewhere else on the ridge, and at least one located on some other ridge

three or four kilometers away. In addition to their inherited land, about one-quarter of the families in the village are also in the process of buying an additional eleven-cuerda parcel. These families are participants in an American-sponsored private land reform project, which bought the largest finca on the ridge, sub-divided it and resold it to the villagers. The terms of sale are: no money down, no interest, and ten years to pay. In addition to these parcels and their inherited land, most families also try to rent four or five cuerdas of land every year. Land for rent is scarce, however. Some years families cannot rent as much as they would like; often, the rental plots are located as far as eight or ten kilometers away from the village.

The additional 11 cuerdas of land from the little land reform program have made an immense difference in the lives of recipient families. The three or four cuerdas that they owned before were not enough for a family to survive on. The family had to either rent more land-- something that could not be counted on every year-- or send its adult males out to work as jornaleros. Before the land reform project, and before the coming of ALCOSA, such small farmers could only live an unstable and insecure life of grinding

poverty. With the extra parcel of land, it is easily possible to live a relatively secure life without having to worry about leaving the village every year to earn money.

Between the land it rents and the land it owns, the average Chimachoy family farms six to eight cuerdas of land. Those who are buying a parcel of land normally farm 15 to 20 cuerdas. As one of them said when the study's small farmer emphasis was explained to them, "We are not just small farmers, we are the smallest!"

Although relatively land poor, Chimachoy is not, by highland Indian standards, a poor village. The main reason for this is their vegetable cultivation know-how--Chimachoy has been a vegetable producing center for centuries. There are many such vegetable producing centers in the Chimaltenango area. Local amateur historians believe that these vegetable crops and vegetable cultivation techniques were introduced in the area in the 17th century by missionary priests from Antigua. Certainly this region has been growing vegetables for the national market since the days when Antigua was the capital of Guatemala. Present-day villagers are proud of this vegetable producing patrimony. The villager leadership considers it to be the village's strongest economic asset and its most likely source of progress. Down in the

**valley at the intersection where the side road begins its steep climb to Chímachoy, the villagers have placed a sign, lettered for them by the local school teacher: "Welcome to Chímachoy. If you have anything to do with vegetables, visit us."**

The typical Chímachoy farmer devotes **less than one-third of his land area** to the traditional milpa inter-planting of corn, beans, and squash. Most of his land is devoted to cash-crop vegetable farming: carrots, peas, cabbage, brussel sprouts, cauliflower, hulcoy (squash), beets, and potatoes. Some of these vegetables **are sold in the Chimaltenango or Antigua markets, but most of it is sold in the terminal market at Guatemala City. In all three of these cities, the farms of Chímachoy are well known to wholesale buyers and highly respected for the quality of their produce.**

With the exception of cabbage, whose price per pound **is so low that it sometimes is not worth the transport costs, Chímachoy farmers normally refuse to sell their goods to the middlemen truckers who periodically pass through the area. Instead, they make their own arrangements for transporting the produce to market. For such crops as potatoes or beets that are harvested all at once,**

they make arrangements with neighbors to harvest on the same day and to share the costs of renting a truck. Crops such as cauliflower, however, are more troublesome, since they must be continually harvested every few days over an extended period of time. In such cases, the farmer loads his bundles on top of the minibus and leaves in the evening for Guatemala City. Each bundle costs 25 cents to transport and an additional 25 cents to enter into the terminal. He makes his sale before dawn at the market and takes the first morning bus back to the village. It is an exhausting trip that must be made at least once and sometimes twice a week throughout the harvest period.

Though the trip is exhausting, the farmer often profits from the experience in ways less material than the money in his pocket. Through the contacts made at the terminal market with other producers, Chimachoy farmers participate in an informal network that disseminates information about cultivation techniques and sources of seeds. For instance, some men from Chimachoy had heard at the terminal market that the town of Lob Esclavos was the best place to buy seed potatoes for a particular variety of potato that is highly valued by Guatemalans and therefore highly priced on the national market. With the Checchi sociologist along as an observer, six of them

traveled the 200 kilometers to Los Esclavos. They purchased 4,000 pounds of seed potatoes and arranged to rent a truck to transport them back to Chimachoy. Although the two groups had never done business together before, the Los Esclavos farmers were just as aware of Chimachoy's reputation as the Chimachoy farmers were of Los Esclavos'. The people from the Los Esclavos area were especially interested in obtaining seeds for Chimachoy's local varieties of high quality carrots and cauliflower. The exchange was accompanied by a tour of some Los Esclavos farmers' cultivations and much animated discussion of the differences between the two local agricultural traditions and practices.

As the farmers of Chimachoy are aware, their reputation for quality vegetables is potentially a genuine economic resource for the village. Already some families have been able to develop a highly profitable sideline of growing seeds or young plants for sale to other farmers. Certainly Chimachoy's reputation in the terminal market was an important factor that led ALCOSA to come to Chimachoy in search of additional cauliflower supplies.

This reputation as a producer of quality vegetables is based partly on traditional skills passed down through the generations and

partly on the high quality local vegetable varieties that have been developed over the centuries of careful seed-plant selection. Nevertheless, in the last ten years, the farmers of Chimachoy have adopted new technologies that have considerably increased both the quantity and quality of their produce. Chimachoy agriculture is presently dominated by an influential group of indigenous young men who have been strongly influenced by various internationally sponsored projects in the Chimaltenango area. The largest single influence has probably been the private land reform project. As a condition of their participation, all land recipients have become members of a farm co-op in Chimaltenango. The active young men in the community have also formed a farmers' group, affiliated with the co-op. They meet every Sunday in the village to discuss farm techniques, and send representatives to periodic meetings in Chimaltenango, meetings where agricultural information is disseminated as well as co-op business discussed. Many of this community leadership group have also joined various evangelist or adventist churches in neighboring villages. All of these influences have tended to instill in this group an aggressive desarrollismo, characterized by a propensity for hard work, an avid interest in new agricultural information, and a constant watchfulness to take advantage of any economic opportunities that might present themselves. As a result, this leadership group

exudes a mixture of Chimachoy boosterism and charming "little-old-country-boy" manner that closely resembles the image projected by successful small town leadership groups in the United States.

#### ALCOSA Comes to Chimachoy

Largely as a result of Chimachoy's farmers' vegetable know-how and the reputation they enjoyed as a result, ALCOSA and Chimachoy made one another's acquaintance one morning before dawn in the Guatemala City terminal market. ALCOSA had sent Mr. Pablo Duches to the market to find out if any high quality cauliflower was being grown for the fresh market and, if so, who was growing it. Among the villages mentioned by everybody was Chimachoy. Eventually he came across one of the young progressive Chimachoy farmers, who was in the market that morning to sell cauliflower. Don Pablo (as he is known in Chimachoy) arranged to make test purchases of cauliflower. Trial runs through the freezing process demonstrated that Chimachoy's local variety of cauliflower was of sufficient quality to be frozen and sold as chopped cauliflower in the United States. Long discussions followed. The men from Chimachoy had experienced two different types of North American-sponsored projects in the past. On the one hand, they were familiar with the land reform, the co-op, the various forms of earthquake relief

projects. Don Pablo had to convince them that ALCOSA was not an aid program to be taken advantage of. On the other hand, Chimachoy had encountered several North Americans in the past who had arrived in town with their truck, announced their intention to buy vegetables, and had never been heard of again. Don Pablo had to convince them that ALCOSA was a stable, permanent operation. Convincing them of this was not easy. In fact, now that the first harvest is over, Chimachoy farmers still tend to ask every new ALCOSA representative they meet if it is really true that ALCOSA intends to buy cauliflower "permanently."

Eventually, enough mutual trust was established for a few of the most aggressive Chimachoy farmers to sign on as ALCOSA growers. Others followed suit, a few at a time, until eventually there were 16 farmers who had agreed to plant eight manzanas of land (about 14 acres) for ALCOSA. ALCOSA offered the standard terms that it worked out the year before with its first small cauliflower growers in Patzicia. They would pay six and one-half cents per pound of cauliflower, almost the peak price paid by the terminal market in the dry season and considerably more than the prices paid in the rainy season when cauliflower is plentiful. ALCOSA also agreed to buy the cauliflower in Chimachoy, weighing and purchasing it on one trip and paying for it the next. ALCOSA agreed to buy all the cauliflower produced on the farmers' contracted

**cuerdas, and the farmers in turn agreed not to sell ALCOSA's contracted cauliflower to anyone else. ALCOSA encouraged farmers who wished to continue selling cauliflower on the fresh market to do so, as long as the cauliflower was produced on land not under contract to ALCOSA. The contract also allows ALCOSA to deduct a proportion of its payment representing the proportion of substandard cauliflower delivered. This is an important part of ALCOSA's contract with large growers, but with small growers it has never been necessary for Don Pablo to invoke this clause in the contract. Small growers' cauliflower is delivered and weighed in such small lots that it is possible to observe any quality problems before the cauliflower is even loaded on ALCOSA's truck.**

**Chimachoy wakes up early on cauliflower day. Don Pablo arrives at 10 a. m., and each family must have its cauliflower ready at the buying station by that time. Before dawn, each family's male labor force has left for the fields. The men examine each cauliflower plant, cutting the heads that are ready. Children follow along through the rows, carrying the cut cauliflower in relays to a place on the edge of the field where another adult or older child carefully packs each head in net sacks. Each sack holds up to 50 head of cauliflower, normally 110 to 130 pounds. In mid-harvest, each cuerda of cauliflower will**

normally yield one sack of produce at each twice-weekly cutting. For the first ALCOSA harvest, the average family had three cuerdas of cauliflower under contract. Most have planted double that for the second harvest.

Cutting the cauliflower does not take long, but the family's plots are so scattered, and often so distant from the buying station up on top of the ridge, that it is heavy work to carry the sacks in from the fields. The men consider that three kilometers is about the maximum practicable limit for carrying the 130-pound sacks up the steep trails on their backs. They try to use pack horses to carry the sacks in from the farthest fields. Unfortunately, however, there are not enough pack horses in the village to go around. As word of ALCOSA has spread, a few residents from neighboring villages, relatives or co-religionists of Chimachoy growers, have begun to sell cauliflower also. An increasing proportion of the cauliflower purchased in Chimachoy is therefore being packed in from fields as far as 10 or 15 kilometers away.

By the time Don Pablo's pickup arrives at 10 o'clock, about 20 men, a few women, a few dozen children, all of the village's pack horses, and about 5,000 pounds of cauliflower have come together at the ALCOSA buying station. Four men have wrestled the heavy platform scale up the hill from its safekeeping place in the home of the man who

originally met Don Pablo in the Guatemala City market. Then begins the familiar purchasing ritual. One family at a time, each sack is loaded on the scale, the balance is carefully adjusted, and the weight called out and noted down.

After all the cauliflower has been weighed and the scale put away again, Don Pablo climbs back into the pickup truck and announces that his teller's window is open. The men file by, each one collecting the amount due him from the previous day's harvest. The average payment is about 15 Quetzales, but a few families receive less than five, and the two families who have committed almost all of their land to cauliflower production from the beginning collect 50 or 75 Quetzales apiece.

Throughout the weighing process, each man has casually but carefully observed his neighbors' produce. Each knows exactly how much his neighbors have planted; the scale measures not only how much each will earn but also his relative skills as a farmer. As each family brings forward their cauliflower to the scale, Don Pablo and their fellow farmers silently note its quality and quantity. Those whose cauliflower heads are on the small side, or who only have a small sack to bring forward, smile sheepishly. "It may not look like much," they say, "but every Quetzal counts." Those whose sacks are bulging with

fine big heads don't say much, but they do make quite a little show out of the extra effort necessary to lug around such a bountiful harvest.

Throughout this whole process, Don Pablo has been casually dispensing technical assistance in the form of gentle questions and comments. To the man with the small heads of cauliflower, "When was the last time you put on fertilizer?" To the man whose heads are unusually large, "If you planted a little closer together, the heads would be smaller but you would get more weight per cuerda." To the man who has been complaining about his insect problem, "When you first see the butterflies, that's when you have to apply the insecticide."

Cauliflower yields have in fact improved dramatically between ALCOSA's first and second harvests in Chimachoy. This is partly due to Don Pablo's advice--he recommends closer planting distances and three times as much fertilizer as they used to apply. But it is also partly due to the extra care, attention, and ingenuity that has been stimulated in the farmers by ALCOSA's assured demand and relatively high fixed price.

Never before have these men sold their cauliflower by weight, but by the sack, an unreliable measure that could vary as much as 20 pounds from one to the next. Now that they have available such exact

measurements of their yields, some of the farm co-op members have begun to keep careful records, so they can measure the effect of changes in fertilizing practices or planting distances. Certainly they never have sold their cauliflower in such a public arena, where every three days the weigh-in ritual reveals their current production success and therefore their current income to the assembled village.

This twice-weekly ritual of publicly measuring agricultural productivity has already begun to affect the value system of the village. Respect, esteem, and status among Chimachoy men had already been unusually dependent upon the single determinant of agricultural expertise. This is probably a result of the success of various Protestant missionaries in the area. It reflects the "Protestant ethic" morality of the new religions, but more significantly, the break-up of the old Indio-Catholic religious system has removed the most traditional determinants of village status, the ritual positions in religious societies.

Traditionally, agricultural expertise has been measured in Chimachoy not by productivity per se, but by the state of one's fields and the robustness of one's plantings. Chimachoy fields are immaculately cultivated; weeds are non-existent. No plows are used, nor could they be on the steep slopes, but the soil is worked to an unusual depth for hoe cultivation. The deep furrows follow the contours of the hills

precisely, and other erosion control measures are carefully maintained. Not only in the milpas, but in other crops as well, intensive interplanting is carefully carried out. Plants that die or are harvested are replaced. All fields are fertilized and insecticide is applied as needed. The crops are uniformly healthy, because the village knows how to control the most common pests and diseases.

Many of these advanced agricultural techniques do tend to increase productivity, but that has not apparently been the primary purpose for their adoption. For instance, the goal of the Chimachoy cauliflower growers has traditionally been to grow the biggest, healthiest possible plants with the largest possible heads. They have been remarkably successful at this; the best Chimachoy cauliflower can make a head up to 18 inches across with a weight of eight or nine pounds. To achieve these results, however, the plants must be set out at very wide intervals.

Now after only one ALCOSA harvest, standards in cauliflower have begun to change. Most now agree with Don Pablo that it is more important to maximize yield per cuerda than it is to maximize yield per plant. As a result, the subject of proper planting distances has become a hot topic of discussion in the village. Don Pablo believes that the "American" planting distance used by ALCOSA on its own farms is too close together for native Guatemalan varieties. He therefore is offering

no hard and fast opinion. The transplanting of the second ALCOSA crop was just about to begin at the time the study was made. Each farmer had a different idea of what distance he planned to try out. As the Checchi socio-anthropologist drove various men from Chimachoy around in his truck, they asked to stop at every roadside cauliflower patch. Everybody would get out to measure the planting distance in the patch, to assess its effect on the health of the plants, and to begin the discussion all over again. Since several of the Chimachoy farmers now keep careful production records, it will probably only require one or two harvests before the village arrives at a new yield-maximizing standard.

The villagers' ideas about fertilizer are beginning to change also. At present, Chimachoy farmers only use two types of fertilizer, a high potassium formula for sandy soils, and a more balanced formula for clay-like soils. These two fertilizer formulas and their uses have become in effect a new village tradition, based apparently on a soil analysis made some years ago on the American-sponsored land reform project. At their co-op in Chimaltenango where they purchase their fertilizer, they have often been told that they should vary the fertilizer they use depending on the requirements of each crop. Many of the farmers have accepted the wisdom of this as a general principle, but they haven't felt confident enough of it to dare try out some unknown fertilizer formula. Don Pablo

recommends certain specific formulas be used at the time of transplanting the cauliflower, and that other, lower-nitrogen formulas be applied later when the heads first start to form. Some of the farmers showed the Checchi socio-anthropologist the carefully saved pieces of paper where Don Pablo had written down his recommendations to be presented, like a doctor's prescription, to the cooperative store. It is likely that at least one or two men will soon begin to follow this recommendation. If the results as measured by the scale are good, the rest of the village will undoubtedly follow suit. In the meantime, Don Pablo has more strongly insisted that, even if they want to continue to use their traditional formula, they should triple their application. Some farmers followed this advice on the first crop, and their dramatically higher yields have convinced all who can afford it to use more fertilizer.

As Table VI-1 illustrates, ALCOSA purchases have led to considerable benefits for Chimachoy farmers. Their net financial return per cuerda of land has increased from 150 to 275 percent, depending chiefly on the amount of fertilizer they choose to apply. The calculations made in the table are somewhat artificial, since nobody ever planted or sold such large quantities of cauliflower before the arrival of ALCOSA. Nevertheless, the calculated benefits are probably realistic. Cauliflower had been a major crop in Chimachoy, and the yields it produced could

Table VI-1

**BENEFITS TO CHIMACHOY FARMERS PER CUERDA <sup>1/</sup>**  
**OF CAULIFLOWER HARVEST**

|   | <u>Low Yield<br/>Farmer</u> | <u>High Yield<br/>Farmer</u> |
|---|-----------------------------|------------------------------|
| <b>Costs</b>  |                             |                              |
| Fertilizer @ 18Q/cwt  | Q <sup>2/</sup> 12.00       | Q 36.00                      |
| Insecticide   | <u>3.00</u>                 | <u>3.00</u>                  |
| Total Costs   | 15.00                       | 30.00                        |
| <b>Yields @ 6.5¢/lb. (ALCOSA price)</b>   | 65.00                       | 108.00                       |
| Net yields  | 50.00                       | 69.00                        |
| Annual net yields (3 harvests)  | 150.00                      | 207.00                       |
| <b>Equivalent costs and yields if sold<br/>at Guatemala City fresh market</b>           |                             |                              |
| Costs (3 harvests including transport)  | 60.00                       | 142.50                       |
| Yields (1 harvest of average dry<br>season prices, 2 at average<br>rainy season prices) | 120.00                      | 196.00                       |
| Net yields  | 60.00                       | 53.50 <sup>3/</sup>          |
| Annual ALCOSA Benefits/Cuerda of Land   | 90.00                       | 163.50                       |
| Annual ALCOSA Benefits for Farmer<br>with average 3 cuerdas planted to<br>Cauliflower   | 270.00                      | 490.50                       |

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- <sup>1/</sup> 1 Cuerda equals 1/6th manzana in this region, or about 1/4 acre.  
<sup>2/</sup> One Quetzal equals one dollar.  
<sup>3/</sup> Note that rainy season prices cannot support additional fertilizer costs in high-yield mode.

not have been significantly less than those of the major rival crops, carrots, cabbage, potatoes. Farmers who use more fertilizer get significantly greater profits per cuerda of land, but note that the return on each dollar invested is lower. This is the normal case for expanding commercial agriculture; the farmer's net income rises, but the amount of capital required rises at an even faster rate.

Much of the increased income to Chimachoy farmers from ALCOSA sales is being reinvested. Most obviously, farmers are using the income from one crop to purchase higher amounts of fertilizer for the next crop. Farmers are also renting more land and raising more pack horses. At this stage, the pack horses are the critical investment. Transportation from the fields is the present production bottleneck in Chimachoy; there are just not enough pack horses to go around. Many in Chimachoy are also investing in portable back-pack sprayers. Since these sprayers are normally used for only a few hours during an entire crop cycle, the five or six units presently owned by various people in the village are probably sufficient to meet the village's needs. Nevertheless, the sprayers have become something of a status symbol of progressive farming, and it is likely that most of the cauliflower growers in the village will buy one in the next year or so.

All of the present growers plan to expand cauliflower production in the future. The average cauliflower planting now is only three cuerdas. The land reform recipients own or rent enough land to expand this production up to six or even twelve cuerdas without engaging in ruinous monocultivation. To do this, however, they must rotate cultivations among all their holdings, growing cauliflower occasionally even in the most distant plots. At present, most cannot do this because of the pack horse shortage. Farmers in Chimachoy are aware of the necessity to rotate crops, a practice which they have always followed in the past, normally through the alternation of vegetable and milpa harvests. Without renting much more land, and without giving up good crop-rotation practices, the average ALCOSA grower in Chimachoy can probably plant 24 cuerdas of cauliflower per year. At present yields, this would result in an annual family net income of Q 1,680, considerably more than the average annual household income in rural Guatemala. Improved techniques that are being developed, such as optimal planting distances, could increase this income figure. Eventually, if the heavier and more compact American cauliflower varieties prove suitable for Chimachoy conditions, yields and incomes could double this projected figure. No wonder the future looks bright to Chimachoy farmers, no wonder it is so important to them to be assured that ALCOSA's presence is permanent.

But at the time of this study, ALCOSA had been in Chimachoy for less than six months. Yet the village has already experienced undramatic but consequential changes as a result of ALCOSA's presence. What changes are likely to occur in the future? It is, of course, difficult to predict from a single study, but some inferences can be made from the experience of Patzicia, a nearby village that has been selling cauliflower to ALCOSA for one year longer than Chimachoy.

In the beginning, ALCOSA made contracts in Patzicia with about the same number of farmers and acreage as in Chimachoy. Now, in the fourth harvest cycle since that small beginning, the number of participating farmers has risen 200 percent, the contracted acreage has risen 300 percent, and the weekly production about 400 percent. ALCOSA has contracts in Patzicia with both Kakchikel and the Ladino <sup>1/</sup> farmers. The two groups have responded differently to the stimulus of the ALCOSA market. Kakchikel farmers have generally expanded their cauliflower production by eliminating the production of any other vegetables, especially cabbage which used to be an important cash crop. They still retain their milpa plots, however, and they still grow a crop of wheat

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<sup>1/</sup> Ladinos are Spanish-speaking "non-Indian" people, though the category is a cultural one, reflecting life style, not biology or genetics.

on every plot between vegetable crops. As long as they continue these sensible restraints, the amount that each family can expand its cauliflower production is limited. Most of the expanded production among the Kakchikel population of Patzicia is a result of greater numbers of farmers participating. Almost every buying day in Patzicia, one of the Kakchikel growers introduces Don Pablo to a relative of his who wishes to enroll in the program.

The Ladino response has been different. Each family has rented as much land as it can to expand cauliflower production. The largest of these families are now cultivating several manzanas of cauliflower. This is straining each family's labor resources to the absolute maximum. From a situation of disguised unemployment and under-utilized labor, these families are facing a labor shortage, at least on the two days a week when cauliflower is harvested and purchased. Poor Ladino farmers in this area live in extended family households. Normally, the men cultivate the fields and the women do the rest of the work. But now, every member of the household, every infant and every able grandmother, must be mobilized for the cauliflower harvest. The largest of these extended Ladino families has been delivering to ALCOSA up to 10,000 pounds of cauliflower a week. Five other Ladino families are making mid-harvest deliveries of 3,000 or 4,000 pounds weekly.

At this scale of production, these Ladino farmers are operating near the limits of traditional technology and their own families' labor capacity. They could possibly respond to this by curbing their agricultural expansion at present levels. From the interviews, however, it appears that their more likely response will be to start hiring labor from outside the family. Already some of the largest producers have turned from pack horses to rented trucks to transport their cauliflower from the fields to the ALCOSA buying station. Hiring labor and renting trucks represent qualitative changes in the organization of cauliflower production and in the level of technology applied.

The hiring of labor and the renting of trucks must increase these farmers' costs of production. But the costs of other production factors are also increasing. Heavier and more costly applications of fertilizer and insecticide are already the norm. In addition, land rental prices must soon rise, since the expanded cauliflower production has led to a huge increase in local demand for rented land. If the larger Patzicla farmers respond to these rising costs in the classical way, as seems likely, they will seek to expand production still further to compensate for the lower net yields per pound of cauliflower.

Given the very finite amount of land available in this densely populated area, the expansion of the largest cauliflower growers must take place at the expense of the contraction of some other farmers' activity. The most likely candidates for this contraction are the marginally small farmers who for some reason or another have not chosen to grow cauliflower for ALCOSA. Again, if Patzicia follows the classical economic patterns, these smaller farmers--possibly more traditional and certainly less opportunistically entrepreneurial--will supply the labor needed by the larger growers.

But the larger growers will not be the only ones who come to participate in the cauliflower-based local economic growth. Many others, with a small amount of capital to invest, will take advantage of the expanded Patzicia economy. Already a few food vendors have discovered the wonderful market available at the ALCOSA station on cauliflower buying days. Hundreds of people are gathered there, and by the end of the day all have money in their pockets. It is only a matter of time before a few stores, and maybe even a full-fledged market, appear on the site. In addition to the growers and the commercial entrepreneurs, anybody who owns, and can therefore rent, agricultural capital--land, pack horses, or especially a truck--will also benefit.

All of these people that are most likely to directly or indirectly receive the greatest benefit from the expanded cauliflower production have two elements in common: at least a little capital to begin with and an entrepreneurial economic mentality. In Patzicla, most of the people who meet these requirements are Ladinos; most of the people who do not are K'ekchikel. This is not to say that small K'ekchikel growers who do not produce cauliflower will not receive any economic benefit from ALCOSA. In fact, it is likely that the wages they may receive working for the large growers will in fact represent a significant increase in their annual income. Nevertheless, the economic benefits of others will be proportionately much greater. Though all may benefit economically, the aggregate result in the community will be an increase in economic inequality. It is ironic that ALCOSA, which is an "equal opportunity" contractor if there ever was one, and Don Pablo, who is almost an Indianist in his sentiments, should have this effect.

But does the experience of Patzicla really foretell the future of Chimachoy? To answer this question, one must assess the likely impact of the one significant difference between these two communities. The population of Patzicla is divided between Ladinos and K'ekchikel;

Chimachoy is 100 percent Kakchikel. As a result of this difference in their populations, the Chimachoy experience could diverge from that of Patzicia in one of two ways. Either the native Kakchikel value system will prevent the emergence of large commercial farmer-employers, or such a larger farmer stratum will emerge, but the resulting economic stratification of the community will not be reflected in an odious economic ethnic division. At present, it seems like the second alternative is more likely to occur, since Chimachoy agriculture is already dominated by a leadership group of progressive and entrepreneurial young men.

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**EXHIBITS**

LAAD DE CENTROAMERICA S.A.

BALANCE SHEETS

|   | October 31,         |                    | October 31,  |  |
|---|---------------------|--------------------|--|--|
|   | 1976                | 1975               | 1976   | 1975                                   |
| <u>Assets</u>   |                     |                    | <u>Liabilities and<br/>Stockholders' Equity</u>  |  |
| Cash  | \$ 55,376           | \$ 120,390         | Loan payable to parent company (Note 2)  | \$ 375,000      \$ 300,000             |
| Time deposits   | <u>190,000</u>      | <u>365,593</u>     | Accrued interest and other liabilities   | 104,192      45,790                    |
| Investments including \$2,374,927<br>(1975 - \$1,714,415) maturing within<br>one year (Note 1): | <u>245,376</u>      | <u>485,983</u>     | Term debt (Note 3)   | <u>8,115,000</u> <u>6,000,000</u>      |
| Loans   | 10,416,758          | 7,239,904          | Total liabilities  | <u>8,594,192</u> <u>6,345,790</u>      |
| Equity  | 1,106,772           | 929,750            | Stockholders' equity (Note 4):-  |  |
| Short-term commercial paper   | <u>571,000</u>      | <u>169,309</u>     | Convertible preferred stock:   |  |
|   | 12,094,530          | 8,338,963          | Class A - 5% cumulative, non-<br>participating, \$1,000 par value,<br>2,000 shares authorized, 1,330<br>and 290 shares issued and out-<br>standing, respectively | 1,330,000      290,000                 |
| Less - Allowance for possible losses<br>(Note 1)  | ( 308,000)          | ( 205,000)         | Class B - 8% cumulative, non-<br>participating, \$100 par value,<br>10,000 shares authorized   |  |
|   | <u>11,786,530</u>   | <u>8,133,963</u>   | Common stock:  |  |
| Accrued interest and dividends<br>receivable due within one year                                | 351,352             | 234,094            | Class A - \$1,000 par value, 2,000<br>shares authorized, issued and<br>outstanding   | 2,000,000      2,000,000               |
| Other assets  | <u>110,367</u>      | <u>74,963</u>      | Class B - \$100 par value, 10,000<br>shares authorized, 500 shares<br>issued and outstanding   | <u>50,000</u> <u>50,000</u>            |
|   |                     |                    | Retained earnings (Note 3)   | 3,380,000      2,340,000               |
|   |                     |                    |  | <u>519,433</u> <u>243,213</u>          |
|   |                     |                    |  | <u>3,899,433</u> <u>2,583,213</u>      |
|   | <u>\$12,493,625</u> | <u>\$8,929,003</u> |  | <u>\$12,493,625</u> <u>\$8,929,003</u> |

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LAAD DE CENTROAMERICA S.A.

Exhibit 2.

STATEMENTS OF INCOME AND RETAINED EARNINGS

|  | <u>Year ended October 31,</u> |             |
|--|-------------------------------|-------------|
|  | <u>1976</u>                   | <u>1975</u> |
| <b>Income:</b>   |                               |             |
| Interest earned  | \$817,643                     | \$642,859   |
| Dividends earned   | 62,625                        | 66,779      |
| Gain on sale of equity investment                                | 90,000                        |             |
| Other  | 4,446                         | 4,594       |
| Total  | 974,714                       | 714,232     |
| <b>Expenses:</b>   |                               |             |
| Interest   | 247,515                       | 180,303     |
| Operating expenses:  |                               |             |
| Salaries and employee benefits                                   | 184,338                       | 160,246     |
| Other  | 116,316                       | 90,817      |
| Provision for possible losses                                    | 300,654                       | 251,063     |
| Total  | 651,169                       | 543,758     |
| Net income for the year  | 323,545                       | 170,474     |
| Retained earnings, beginning of year                             | 243,213                       | 72,739      |
| Cash dividends on 8% cumulative preferred stock (Note 4)         | 47,325                        |             |
| Retained earnings, end of year                                   | \$519,433                     | \$243,213   |
| <b>Earnings per common and common equivalent share (Note 1):</b> |                               |             |
| Per Class A common share   | \$122.97                      | \$34.14     |
| Per Class B common share   | \$ 12.30                      | \$ 8.41     |

# Consolidated Financial Statements

Exhibit 3.

## Consolidated Balance Sheets (Note 1)

|  | October 31,  |              |
|--|--------------|--------------|
| ASSETS   | 1976         | 1975         |
| Cash   | \$ 102,080   | \$ 209,240   |
| Time deposits  | 250,000      | 465,593      |
|  | 352,080      | 674,833      |
| Investments, including \$2,960,238<br>(1975 - \$2,075,543) maturing within one year:   |              |              |
| Loans  | 11,279,322   | 8,105,805    |
| Equity   | 1,226,320    | 1,108,265    |
| Short-term commercial paper  | 955,718      | 255,717      |
|  | 13,461,360   | 9,469,787    |
| LESS: Allowance for possible losses  | (354,000)    | (225,000)    |
|  | 13,107,360   | 9,184,787    |
| Accrued interest and dividends receivable  | 397,707      | 261,449      |
| Other assets   | 236,804      | 193,498      |
|  | \$14,093,951 | \$10,314,567 |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>  |              |              |
| Loan payable to bank (Note 2)  | \$ 875,000   | \$ 300,000   |
| Accrued interest and other liabilities   | 99,744       | 45,867       |
| Term debt (Note 3)   | 8,115,000    | 6,000,000    |
| Minority interest  | 62,749       | 55,016       |
| Total liabilities  | 9,152,493    | 6,400,883    |
| Stockholders' equity (Note 4):   |              |              |
| Preferred stock - 5% cumulative, convertible,<br>fully participating, \$5,000 par value<br>1,000 shares authorized, 266 and 102 shares<br>issued and outstanding, respectively | 1,330,000    | 510,000      |
| Common stock - \$5,000 par value, 2,000 shares<br>authorized, 600 shares issued and outstanding  | 3,000,000    | 3,000,000    |
| Retained earnings (Note 3)   | 611,458      | 403,684      |
|  | 4,941,458    | 3,913,684    |
|  | \$14,093,951 | \$10,314,567 |

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**Consolidated Statements  
of Income and Retained Earnings  
(Note 1)**

|  | <u>Year ended October 31,</u> |                  |
|--|-------------------------------|------------------|
|  | <u>1976</u>                   | <u>1975</u>      |
| <b>Income:</b>   |                               |                  |
| Interest earned  | \$ 935,444                    | \$ 737,355       |
| Dividends earned   | 62,625                        | 66,778           |
| Other  | 98,042                        | 39,365           |
| Total  | <u>1,096,111</u>              | <u>843,498</u>   |
| <b>Expenses:</b>   |                               |                  |
| Interest   | 275,051                       | 185,202          |
| Operating expenses:                                      |                               |                  |
| Salaries and employees benefits                          | 264,693                       | 213,509          |
| Other  | <u>205,404</u>                | <u>205,866</u>   |
|  | 745,148                       | 604,577          |
| Provision for possible losses                            | <u>100,279</u>                | <u>60,934</u>    |
| Total  | <u>845,427</u>                | <u>665,511</u>   |
| Net income for the year                                  | 250,684                       | 177,987          |
| Retained earnings, beginning of year                     | <u>403,684</u>                | <u>225,697</u>   |
|  | 654,368                       | 403,684          |
| Cash dividends on 5% cumulative preferred stock (Note 4) | <u>42,910</u>                 |                  |
| Retained earnings, end of year                           | <u>611,458</u>                | <u>403,684</u>   |
| Earnings per share of common stock (Note 1)              | <u>\$ 346.29</u>              | <u>\$ 303.21</u> |

**LAAD EVALUATION**

**Agribusiness Subproject Operations**

**LAAD Direct Financing** \_\_\_\_\_ **ICI Subproject** \_\_\_\_\_

**Name of Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Name of Respondent:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Operation's product line(s)** \_\_\_\_\_

1. When did your company begin operations? \_\_\_\_\_

2. How did you decide upon the product line(s)? (What information precipitated the decision; who provided the information; what sorts of studies and analyses were done?)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**LAAD/ICI Contact:**

3. How and when did your original contact with LAAD/ICI come about? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. (If LAAD's contact came about prior to beginning of operations) Do you consider that LAAD/ICI was in some measure instrumental in your initiating operations?

Yes ( ) No ( ). Explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(For ICIs and their sub-lending activities as well as agribusiness projects financed directly by LAAD)

5. Please describe any technical assistance or support LAAD has rendered you. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Did you pay any of the expenses for that assistance?

Yes ( ) No ( ). If yes, specify \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

On an overall basis, how would you rate assistance rendered by LAAD?

- Very effective ( )
- Moderately effective ( )
- Not effective ( )

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Which type of assistance was the most useful?

Technical ( )

Financial ( )

Other ( )

Please specify: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. What is the amount of financing through LAAD/ICI? \_\_\_\_\_

\_\_\_\_\_

7. (If a loan) What are the terms of the loan agreement with LAAD/ICI? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Are there specific conditions in that loan agreement which deal with purchasing raw materials from small farmers?

Yes ( ) No ( ). If yes, what does the loan agreement say in this regard? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. (LAAD direct subproject only) Because of LAAD's participation either through loan or equity investment, have other sources of finance been opened up to you? Yes ( ) No ( )

Perhaps ( ). Explain \_\_\_\_\_

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Subproject Viability

10. What have been your level of sales and profits since the beginning of your operation?

|                    |       |       |       |       |
|--------------------|-------|-------|-------|-------|
| Year               | _____ | _____ | _____ | _____ |
| Sales              | _____ | _____ | _____ | _____ |
| Costs and Expenses | _____ | _____ | _____ | _____ |
| Profits            | _____ | _____ | _____ | _____ |

11. (If reasonably profitable) What have been the major problems you have had to solve (as a new business; or maintaining the above sales level)? (Marketing, cash-flow, out-of-date technology, labor, suppliers, organizational)

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(If marginal profitability or loss) What seems to be the major reason(s) for the lack of profits? \_\_\_\_\_

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12. What level of sales (or output) do you feel you will  
 achieve by 1980? \_\_\_\_\_  
 1985? \_\_\_\_\_

**Subproject Marketing:**

13. What are the marketing channels that the firm uses to sell  
 its goods? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

14. Has marketing the processed or final product been a special  
 problem for your firm? Yes ( ) No ( )

If yes, explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

15. What percentage of your goods were sold  
 in this country? \_\_\_\_\_ %  
 in the CA region? \_\_\_\_\_  
 outside the region? \_\_\_\_\_

16. Within these market areas can you estimate your market share?

This country \_\_\_\_\_ % U.S. \_\_\_\_\_ %  
 CA region \_\_\_\_\_ Other \_\_\_\_\_  
 Not significant \_\_\_\_\_

17. Of your costs of goods sold, what percent are purchases of  
 raw materials? \_\_\_\_\_ %

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18. Who are your suppliers of raw materials? (Percent of total, please)

- Small farmer individuals \_\_\_\_\_ percent \_\_\_\_\_ (number)
- Marketing cooperatives \_\_\_\_\_
- Medium farmers \_\_\_\_\_
- Large farmers \_\_\_\_\_
- Company cultivation \_\_\_\_\_

(If source is cooperative, try to obtain break down on member farm size characteristics) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

19. Is the product your are buying from suppliers one which he has traditionally grown? Yes ( ) No ( )

If yes, has any change in crop varieties, better production methods, new fertilizers or other improvements come about as a result of your company's actions? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

20. Has some governmental agency been helpful in providing technical assistance to your suppliers? Yes ( ) No ( )

In helping you identify specific suppliers? Yes ( )  
No ( )

In other ways? Yes ( ) No ( )

21. Is someone else working with producers on new varieties/ methods and techniques?

Purchasing agent or employee of company \_\_\_\_\_  
 Non-affiliated intermediaries \_\_\_\_\_  
 Others \_\_\_\_\_

22. (If products or varieties are not too numerous)

Would you please tell me amounts of raw materials purchased and price per unit?

| <u>Product</u> | <u>Amount Purchased</u> | <u>Price/Unit</u> |
|----------------|-------------------------|-------------------|
| _____          | _____                   | _____             |
| _____          | _____                   | _____             |
| _____          | _____                   | _____             |
| _____          | _____                   | _____             |

23. Do you have competitors which are trying actively to purchase these same products? Yes ( ) No ( )

Detail: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

24. Since you have started purchasing these goods have prices to the farmer risen? Yes ( ) No ( )

If yes, give specific examples: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Purchasing Mechanism:**

25. What means do you use to purchase your raw materials?

Direct purchasing \_\_\_\_\_ percent - Marketing Cooperatives \_\_\_\_\_  
 Outside agent or intermediaries \_\_\_\_\_ - Other (specify) \_\_\_\_\_

Other: \_\_\_\_\_

26. What sort of purchasing agreement do you use?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

27. How are prices arrived at (pre-set, relationship to market price, negotiated at time of delivery)? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Supplier Problems:

28. What, if any, problems do you have with your suppliers?

Lack of compliance with quality standards \_\_\_\_\_

Inability to deliver promptly \_\_\_\_\_

Insufficient grower output \_\_\_\_\_

Other (specify) \_\_\_\_\_

29. Do you extend credit to suppliers? Yes ( ) No ( )

What has been your experience(s)? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

30. (If indication in that company produces its own supply)

Have you had to cultivate your own supply source because of these problems? Yes ( ) No ( )

If yes, give details: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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31. Have there been points in time when you could not buy from suppliers as anticipated due to a plant breakdown, lack of funds to pay, technical production problems, etc.

Yes ( ) No ( )

If yes, please explain: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Employment:

32. What is your current number of employees and their pay ranges?

|                      |       |         |
|----------------------|-------|---------|
| Management           | _____ | \$_____ |
| Administration       | _____ | _____   |
| Sales                | _____ | _____   |
| Full-time production | _____ | _____   |
| Part-time production | _____ | _____   |
| Farm operations      | _____ | _____   |

Expansion:

33. Will there be change in the production level which affects the number of personnel in the near future?

Yes ( ) \_\_\_\_\_ increase  
\_\_\_\_\_ decrease  
No ( )

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34. If increase in production level, will there be an expansion of capital outlay?

Yes ( )

Plant space \_\_\_\_\_

Additional Equipment \_\_\_\_\_

No ( )

Export Earnings:

35. At present what percent of your equipment was purchased within this country? \_\_\_\_\_ percent outside this country but within CA? \_\_\_\_\_ outside the CA region? \_\_\_\_\_

How about construction materials for the plant?

within this country? \_\_\_\_\_ percent outside this country but within CA? \_\_\_\_\_ outside the CA region? \_\_\_\_\_

How about operating materials (packaging, for example)

within this country \_\_\_\_\_ percent outside this country but within CA \_\_\_\_\_ outside the CA region \_\_\_\_\_

LAAD EVALUATION

Intermediate Credit Institution Loans

Institution Name \_\_\_\_\_

Address \_\_\_\_\_

Respondent \_\_\_\_\_

Position \_\_\_\_\_

1. What is this institution's area of concentration as far as type of loan is concerned?

Agricultural ( )

Industrial ( )

Commercial ( )

Other ( ) \_\_\_\_\_

No specific concentration ( )

2. How and when did the borrowing relationship with LAAD come about? \_\_\_\_\_

3. What are the terms and conditions of the loan agreement (read terms and conditions as given in LAAD project papers)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. What is your understanding of LAAD's view of financing traditional agricultural activities? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. What is your understanding regarding LAAD's financing for different sized farm operations? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. How many subprojects have been financed with LAAD loan funds? \_\_\_\_\_

7. Would you mind telling me the names of these companies, cooperatives or individuals; their product(s); and the amount of credit extended to each one?

| <u>Name</u> | <u>Product</u> | <u>Credit Amount</u> | <u>Now</u> | <u>Previous Customer</u> |
|-------------|----------------|----------------------|------------|--------------------------|
|-------------|----------------|----------------------|------------|--------------------------|

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Do any of these projects represent new business activities?

Yes ( ) No ( ) Indicate above.

9. Have any of these projects been previous borrowers from this institution? Yes ( ) No ( )

Indicate above. Why have they returned to you for credit?

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10. What terms to you offer these borrowers?

| <u>Name</u> | <u>Interest</u> | <u>Payback</u> | <u>Collateral/<br/>Loan Ratio</u> | <u>Other</u> |
|-------------|-----------------|----------------|-----------------------------------|--------------|
|-------------|-----------------|----------------|-----------------------------------|--------------|

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11. Is there a limit to the amount you will loan to any one borrower in the non-traditional agribusiness field?

Yes ( ) No ( ) If yes, how is limit determined?

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12. Do you consider the above loans to be low, medium or high risk loans?

Name

|       |   |   |   |
|-------|---|---|---|
| _____ | L | M | H |
| _____ | L | M | H |
| _____ | L | M | H |

|       |   |   |   |
|-------|---|---|---|
| _____ | L | M | H |
| _____ | L | M | H |
| _____ | L | M | H |

13. Would you have loaned to some of these borrowers anyway even if LAAD-financing had not been available?

Yes ( ) No ( ) Which ones? \_\_\_\_\_

\_\_\_\_\_

14. After your institution has repaid its obligation to LAAD, is it likely that you will continue to provide loans to some of these sub-borrowers? Yes ( ) No ( )

Which ones? \_\_\_\_\_

\_\_\_\_\_

15. Do you think these types of loans require special considerations as opposed to more traditional loans?

Yes ( ) No ( ) Explain. \_\_\_\_\_

\_\_\_\_\_

16. What sorts of assistance and how often (in addition to their loan), do you offer these borrowers? (production, technical advice; marketing and management assistance)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. Are there other sorts of assistance available to these borrowers from other sources (government, LAAD processors, etc.)? Yes ( ) No ( ) If yes, please explain.
- 
- 

18. Of the above mentioned borrowers, which loans are for production, which are for marketing, which are for processing and which are for distribution of the product?

| <u>Name</u> | <u>Production</u> | <u>Marketing</u> | <u>Processing</u> | <u>Distribution</u> |
|-------------|-------------------|------------------|-------------------|---------------------|
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |
| _____       | _____             | _____            | _____             | _____               |

19. Of the loans made directly to farmers for agricultural production credit what amount has gone to small, medium or large farmers?

|        | <u>Number of Loans</u> | <u>Total Amount</u> |
|--------|------------------------|---------------------|
| Small  | _____                  | _____               |
| Medium | _____                  | _____               |
| Large  | _____                  | _____               |

20. Do some of these loans go to companies, cooperatives, or institutions which relend it to other borrowers?

Yes ( ) No ( ) Please give details.

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21. Of the loans made through these other companies, co-operatives or institutions, what amount has gone to small, medium and large farmers?

|        | <u>Number of Loans</u> | <u>Total Amount</u> |
|--------|------------------------|---------------------|
| Small  | _____                  | _____               |
| Medium | _____                  | _____               |
| Large  | _____                  | _____               |

22. Would you describe your experiences with farm production credit (especially with smaller producers)?

Yes ( ) No ( )

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23. Would you say that you are more active in the field of agribusiness lending than you were previous to your contact and financing through LAMP? Yes ( ) Perhaps ( )

Not really ( ) Explain. \_\_\_\_\_

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24. If yes, will this be a continuing pattern for your  
organization? Yes ( ) No ( ) Comments:

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**EVALUACION DE LAAD**  
**ENTREVISTAS AL PEQUEÑO AGRICULTOR**

(Instrucciones: Trate al entrevistado en una forma amistosa para que entre en confianza. Haga énfasis de que éste es un estudio del proyecto de agroindustria, y no del agricultor. Su ayuda en este estudio será de mucho valor porque él ha tenido contacto con la agroindustria y conoce algunos aspectos de su operación. El entrevistado debe ser jefe de familia.)

(Antes de comenzar la entrevista, complete los siguientes datos.)

1. Nombre del proyecto de LAAD, o de la ICI \_\_\_\_\_

2. Fecha \_\_\_\_\_ 3. Lugar \_\_\_\_\_

4. Fuente de introducción al entrevistado: \_\_\_\_\_

Buenos días (buenas tardes), ¿me permite hacerle unas preguntas generales sobre su finca y los productos que usted cultiva?

5. ¿Cuáles son los productos que usted cultiva? \_\_\_\_\_

6. ¿Cuántas manzanas de terreno tiene usted? \_\_\_\_\_

7. De éstas, ¿cuántas son propias? \_\_\_\_\_ Alquiladas? \_\_\_\_\_

O las trabaja para otra persona (como medianero) \_\_\_\_\_

8. Actualmente, ¿cuántas manzanas están dedicadas a cada producto (por cosecha)? \_\_\_\_\_

¿Cuántas cosechas al año son posibles en esta área? \_\_\_\_\_

9. ¿Cuántas personas viven en su casa? \_\_\_\_\_

De ellos, ¿cuántos trabajan en el campo? \_\_\_\_\_

10. ¿Contrata usted a otras personas para trabajar en su parcela durante las épocas de mucho trabajo? \_\_\_\_\_  
(Si la respuesta es afirmativa) ¿Cuántos? \_\_\_\_\_  
¿En qué trabajan? \_\_\_\_\_
11. ¿Trabaja usted algunas veces en las parcelas de otros agricultores (o en algún otro lugar) devengando un salario? \_\_\_\_\_
12. ¿Es usted miembro de alguna cooperativa? \_\_\_\_\_  
(Si la respuesta es afirmativa) ¿Distribuidora? \_\_\_\_\_,  
¿Producción? \_\_\_\_\_, ¿Asociación de Crédito? \_\_\_\_\_,  
¿Mercadeo? \_\_\_\_\_  
(Si no) ¿Hay alguna cooperativa en el área, a la cual usted pudiera ingresar? \_\_\_\_\_
13. ¿Recibe usted créditos de producción al inicio de la época de siembra? \_\_\_\_\_ (Si la respuesta es afirmativa) ¿De quién? \_\_\_\_\_  
\_\_\_\_\_  
¿Para qué usa el préstamo? \_\_\_\_\_  
¿Cuál es la tasa de interés? \_\_\_\_\_  
¿Por cuántos años ha recibido usted dinero de esa fuente?  
\_\_\_\_\_  
\_\_\_\_\_
14. En general, ¿es su parcela una finca típica de esta área?  
\_\_\_\_\_  
(Si no) ¿Porqué no? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ahora voy a hacerle algunas preguntas sobre sus experiencias como agricultor de ¿un cultivo que les compra una agroindustria? \_\_\_\_\_

15. ¿Cuántos años tiene de estar sembrando  $\Delta$ producto(s) $\Delta$ ?

\_\_\_\_\_

(Si no lo ha hecho toda la vida) ¿Qué cultivos sembraba usted en esta tierra donde ahora siembra  $\Delta$ producto(s) $\Delta$ ? \_\_\_\_\_

¿Porqué cambió usted a  $\Delta$ producto(s) $\Delta$ ? \_\_\_\_\_

\_\_\_\_\_

16. ¿Dedica usted más manzanas, o menos, a la siembra de  $\Delta$ producto(s) $\Delta$  que lo que le dedicaba hace algunos años? \_\_\_\_\_

\_\_\_\_\_

¿Cuántas manzanas más (o menos)? \_\_\_\_\_

¿Porqué? \_\_\_\_\_

17. ¿Cuántos quintales de  $\Delta$ producto(s) $\Delta$  le produjo la última cosecha?

\_\_\_\_\_

¿Cuántos quintales más o menos que la cosecha anterior?

\_\_\_\_\_

18. ¿Hizo usted algún compromiso para vender  $\Delta$ producto(s) $\Delta$  antes de la cosecha? \_\_\_\_\_

(Si la respuesta es afirmativa, obtenga los detalles del contrato). \_\_\_\_\_

\_\_\_\_\_

¿Obtuvo usted una cosecha mayor de  $\Delta$ producto(s) $\Delta$  de la que ya tenía comprometida? \_\_\_\_\_

(Si no, pase a la pregunta No. 20.)

16

19. ¿Dónde vendió usted producto(s)? \_\_\_\_\_

Porcentaje (%) al mercado local \_\_\_\_\_

Porcentaje (%) al intermediario tradicional \_\_\_\_\_

Porcentaje (%) a la agroindustria (procesadora) \_\_\_\_\_

20. ¿Han cambiado esos porcentajes durante los últimos años?

(Si la respuesta es afirmativa) ¿En qué forma? \_\_\_\_\_

21. ¿A cuál de estos compradores prefiere usted vender su(s) producto(s)? \_\_\_\_\_

¿Porqué? \_\_\_\_\_

(Si no se ha mencionado ya) ¿Quién paga el mejor precio? \_\_\_\_\_

22. En la última cosecha, ¿qué precio recibió usted por producto(s)? \_\_\_\_\_

23. Considerando todas las cosas, ¿cree usted que el (los) producto(s) es(son) el mejor producto que un agricultor como usted, puede cultivar en estas tierras, o cree usted que sería mejor sembrar otro producto si usted pudiera hacerlo? \_\_\_\_\_

(Si es mejor otro producto) ¿Cuál producto? \_\_\_\_\_

¿Porqué? \_\_\_\_\_

24. ¿Cuáles son los problemas principales que se le presentan a un agricultor de esta área en el cultivo de producto(s)?

Ejemplos: Factores naturales (clima, suelos, insectos, o enfermedades); factores económicos (costo de suministros, precios del producto, disponibilidad de crédito y centros de mercadeo); dificultades técnicas.

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25. Posiblemente usted ha discutido estos problemas con otros agricultores y con sus vecinos, pero los ha discutido usted alguna vez con algún experto o especialista? \_\_\_\_\_

(Si la respuesta es afirmativa) ¿Con quién? \_\_\_\_\_

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26. (Si la respuesta a la pregunta No. 25 es afirmativa)

¿Qué clase de ayuda o consejo recibió de (mencione el nombre de la persona o institución) para tratar de solucionar estos problemas? \_\_\_\_\_

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¿Cómo le parecieron los consejos o la ayuda recibidos? \_\_\_\_\_

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(Repita esta pregunta por cada categoría mencionada en la pregunta 25. Por ejemplo, agente de una sucursal, representante de una institución de crédito, representante de una planta

procesadora, etc.) \_\_\_\_\_

(Si el proyecto o sub-proyecto es un procesador, haga las preguntas 27 a 31. Si es una institución de crédito, haga las preguntas 32 a 35.)

27. ¿Desde hace cuántos años ha estado cultivando productos que son procesados por (nombre de la empresa procesadora)?

28. ¿Cuándo tuvo su primer contacto con (procesador)? \_\_\_\_\_

29. ¿Qué problemas ha tenido usted en la venta de su producto a (procesador)? \_\_\_\_\_

30. Tengo entendido que (firma procesadora) exige (mencione los requerimientos más importantes del procesador: nuevas variedades, innovaciones en prácticas de cultivos, técnicas y épocas de cosechar, y estándares de calidad, etc.) ¿Cuál es su opinión sobre esto? ¿Cree usted que un agricultor como usted puede adaptarse a estos cambios? ¿Le causa esto bastantes problemas? ¿Cree usted que vale la pena?

31. En su opinión, ¿es (nombre del procesador) un buen cliente para los pequeños agricultores de esta área, o es más apropiado para los agricultores con mayores recursos y grandes parcelas de tierra? \_\_\_\_\_

(Si es más apropiado para los agricultores más grandes)

¿Porqué? \_\_\_\_\_

(Preguntas 32 - 35 para proyectos financiados por ICIs)

32. ¿Desde hace cuántos años recibe usted crédito de (Banco) para su producción? \_\_\_\_\_

33. Anteriormente recibió usted créditos de producción de alguna otra fuente? \_\_\_\_\_

(Si la respuesta es afirmativa) ¿De quién? \_\_\_\_\_

34. ¿Cómo estableció su primer contacto con (la fuente)? \_\_\_\_\_

35. ¿Qué problemas ha tenido usted en sus negociaciones con (la fuente)? \_\_\_\_\_

(Preguntas 36 - 37 para todos los entrevistados)

36. ¿Cree usted que (banco o agroindustria) ha sido justo en sus negociaciones con los pequeños agricultores de esta área? \_\_\_\_\_

(Si no ha sido justo) ¿Porqué? \_\_\_\_\_

\_\_\_\_\_

37. ¿Qué cambios podría hacer (banco o agroindustria) en el futuro para dar más ayuda o mayores beneficios a los pequeños agricultores con los que trabaja? \_\_\_\_\_

\_\_\_\_\_

(De las gracias al entrevistado. Haga énfasis en la gran ayuda que le ha prestado en su estudio de la agroindustria o banco.)

AID No. 511,788  
 Amount: \$1 million  
 Date Signed: July 23, 1975

ANNUAL STATUS REPORT No. 18  
 As of July 31, 1977  
 (US\$ '000)

| Investment No. | Project Name, Description & Location   | Interest Rate | Repayment Period | Grace Period | Date Approved by LAID Loan & Investment Committee | Date Approved by AID | Date Agreement Signed | Total Investment | COMMITMENTS |                  |                   |                |                  |                   | DISBURSEMENTS |                | Comments                       | Rate Convertibility Expires |
|----------------|--|---------------|------------------|--------------|---|----------------------|-----------------------|------------------|-------------|------------------|-------------------|----------------|------------------|-------------------|---------------|----------------|--------------------------------|-----------------------------|
|                |  |               |                  |              |   |                      |                       |                  | AID Funds   |                  |                   | LAIID-CA Funds |                  |                   | AID Funds     | LAIID-CA Funds |                                |                             |
|                |  |               |                  |              |   |                      |                       |                  | Equity      | Convertible Loan | Conventional Loan | Equity         | Convertible Loan | Conventional Loan |               |                |                                |                             |
| 3-1            | Agropecuaria El Mirante Cattle fattening Guatemala   | 3 1/2         | 3                | 1-1/2        | 5/12/76   | ---                  | 6/6/76                | 50.0             | ---         | ---              | ---               | ---            | ---              | 50.0              | ---           | 50.0           | Outstanding balance \$17,500   | ---                         |
| 3-2            | Tillatocencia Brothers Cattle raising Guatemala  | 11            | 1                | ---          | 4/26/77   | ---                  | 5/30/77               | 35.0             | ---         | ---              | ---               | ---            | ---              | 35.0              | ---           | 35.0           | Outstanding balance \$15,000   | ---                         |
| 7-1            | Industria Tropicalera, S.A. (INTROSA) Processing and selling natural 5th graded rubber Guatemala                                   | 10            | 1                | 1-1/2        | 3/8/76  | ---                  | 3/18/76               | 100.0            | ---         | ---              | ---               | ---            | ---              | 100.0             | ---           | 100.0          | Fully disbursed                | ---                         |
| 10-1           | American Flower Corporation, S.A. Flower growing for export Costa Rica   | 9             | 3-3/4            | 2-3/4        | 9/8/75  | ---                  | 2/25/76               | 25.0             | ---         | ---              | ---               | ---            | ---              | 25.0              | ---           | 25.0           | Fully disbursed                | ---                         |
| 19-3           | Arrozera Los Corrales y Cia. Ltda. Processing and marketing of rice and rice by-products Guatemala                                 | 3 1/2         | 5                | 1-1/2        | 5/12/75   | ---                  | 6/21/75               | 200.0            | ---         | ---              | ---               | ---            | ---              | 200.0             | ---           | 200.0          | Repayment of \$25,000 received | ---                         |
| 19-4           | Arrozera Los Corrales y Cia. Ltda. Processing and marketing of rice and rice by-products Guatemala                                 | 10            | 5                | 1-1/2        | 12/6/76   | ---                  | 1/11/77               | 300.0            | ---         | ---              | ---               | ---            | ---              | 300.0             | ---           | 200.0          | Partially disbursed            | ---                         |
| 20-2           | Central American Meats, S.A. (CAMSA) Slaughtering of cattle and marketing of beef Costa Rica                                       | 10            | 1                | 1-1/2        | 10/25/76  | ---                  | ---                   | 100.0            | ---         | ---              | ---               | ---            | ---              | 100.0             | ---           | ---            | Pending disbursement           | ---                         |
| 26-1           | Productos Sanitarios de Nicaragua, S.A. (PROSAN) Processing of cotton and adhesive products Nicaragua                              | 11            | 2                | 2            | 4/13/76   | ---                  | 1/19/77               | 200.0            | ---         | ---              | ---               | ---            | 200.0            | ---               | ---           | 200.0          | Fully disbursed                | ---                         |
| 28-1           | Jardineros Mil Flores, S. A. Production of F1 hybrid flower and vegetable seeds Guatemala  | 10            | 1                | 1-1/2        | 9/8/75  | 3/15/76              | 7/6/76                | 60.0             | ---         | ---              | 60.0              | ---            | ---              | ---               | ---           | 60.0           | Fully disbursed                | ---                         |
| 30-2           | Hielera Siquita, S. A. Production and sale of ice block shaped, crushed and cubed for aggroindustry and private consumer Nicaragua | 11            | 1                | 1            | 3/14/77   | ---                  | ---                   | 132.0            | ---         | ---              | ---               | ---            | ---              | 132.0             | ---           | ---            | Pending disbursement           | ---                         |
| 33-2           | Compania de Distribucion Centroamericana, S. A. (CODICASA) Distribution of foods and consumer goods Guatemala                      | 3 1/2         | 3                | 1-1/2        | 10/25/76  | ---                  | 10/26/76              | 118.0            | ---         | ---              | ---               | ---            | ---              | 118.0             | ---           | 118.0          | Fully disbursed                | ---                         |
| 34-1           | Productos Alimenticios Granel y Alpina, S. A. (GRUALPINA) Meat processing and packaging Guatemala                                  | 8             | 3                | 1-3/4        | 6/11/75   | ---                  | 10/22/75              | 15.0             | ---         | ---              | ---               | ---            | 15.0             | ---               | ---           | 15.0           | Fully disbursed                | 6/30/76                     |
| 34-2           | Productos Alimenticios Granel y Alpina, S. A. (GRUALPINA) Meat processing and packaging Guatemala                                  | 10            | 4                | ---          | 5/21/76   | ---                  | 6/11/76               | 45.0             | ---         | ---              | ---               | ---            | 45.0             | ---               | ---           | 45.0           | Fully disbursed                | 6/30/76                     |
| 42-1           | Alimentos Comolados, S. A. (ALCOISA) Freezing vegetables and fruits for the U.S. and Central American markets Guatemala            | 11            | 1                | 1-1/2        | 5/21/76   | ---                  | 6/15/76               | 200.0            | ---         | ---              | ---               | ---            | ---              | 200.0             | ---           | 200.0          | Fully disbursed                | ---                         |
| 42-2           | Alimentos Comolados, S. A. (ALCOISA) Freezing vegetables and fruits for the U.S. and Central American markets Guatemala            | 11            | 1                | 1-1/2        | 5/14/77   | ---                  | 7/12/77               | 218.0            | ---         | ---              | 218.0             | ---            | ---              | ---               | ---           | 218.0          | Outstanding balance \$25,000   | ---                         |

Exhibit 6.

AID to A. 501.7-815  
 Bureau: LAD  
 Amount: \$5 Million  
 Date Signed: July 23-1975

| Investment No. | Project Name, Description & Location  | Interest Rate | Repayment Period | Grace Period | Date Approved by LAD Loan & Investment Committee | Date Approved by AID | Rate Agreement Signed | Total Investment | COMMITMENTS |                  |                   |              |                  |                   | DISBURSEMENTS |              | COMMENTS                         | Date Convertibility Expires |
|----------------|---|---------------|------------------|--------------|--|----------------------|-----------------------|------------------|-------------|------------------|-------------------|--------------|------------------|-------------------|---------------|--------------|----------------------------------|-----------------------------|
|                |   |               |                  |              |  |                      |                       |                  | LAD Funds   |                  |                   | LAD-CA Funds |                  |                   | AIP Funds     | LAD-CA Funds |                                  |                             |
|                |   |               |                  |              |  |                      |                       |                  | Equity      | Convertible Loan | Conventional Loan | Equity       | Convertible Loan | Conventional Loan |               |              |                                  |                             |
| 45-1           | International Wood Products, S. A. Production and export of wood-processed components for wooden doors, moldings and pallets Honduras         | 0             | 5                | 1            | 5/12/75  | ---                  | ---                   | 162.75           | ---         | ---              | ---               | 47.7         | 115.0            | ---               | ---           | 52.7         | Partially disbursed              | ---                         |
| 46-1           | Ercadores de Carnes Camilandia, S.A. Slaughtering and rendering of meat animals, beef deboning and portion control, cattle fattening Honduras | 11            | 5                | 1            | 9/8/75   | ---                  | 9/24/75               | 50.0             | ---         | ---              | ---               | ---          | ---              | 50.0              | ---           | 50.0         | Outstanding balance: \$38,888.88 | ---                         |
| 48             | Raquel Balda e Hijos Rubber growing and processing Guatemala  | 3 1/2         | 5                | 1-1/2        | 5/15/75  | ---                  | 5/23/75               | 200.0            | ---         | ---              | ---               | ---          | ---              | 200.0             | ---           | 200.0        | Outstanding balance: \$150,000   | ---                         |
| 49             | Neil Potter P. Registered pure-bred Brahman cattle breeding operation Guatemala   | 3 1/2         | 5                | 1-1/2        | 5/12/75  | ---                  | 5/23/75               | 150.0            | ---         | ---              | ---               | ---          | ---              | 150.0             | ---           | 100.0        | Outstanding balance: \$75,000    | ---                         |
| 41             | Quilich Hermanos, S. A. Processing of frozen vegetables for the U.S. market El Salvador   | 0             | 7                | 3            | 12/8/75  | 5/15/76              | 2/25/76               | 400.0            | ---         | 80.0             | ---               | ---          | 320.0            | ---               | 80.0          | 320.0        | Fully disbursed                  | 8/25/77<br>2/25/79          |
| 42             | Nicolino Alencos, S. A. Production of coconut swirls Costa Rica   | 0             | 2                | 1-1/2        | 9/8/75   | ---                  | 12/10/75              | 100.0            | ---         | ---              | ---               | 50.0         | ---              | 50.0              | ---           | 100.0        | Fully disbursed                  | ---                         |
| 43             | Banco Financiera Hondureña, S. A. Development and commercial banking Honduras   | 0             | 7                | 2            | 9/8/75   | 5/15/76              | 10/9/75               | 500.0            | ---         | ---              | 500.0             | ---          | ---              | ---               | 500.0         | ---          | Fully disbursed                  | ---                         |
| 44             | Conservas de Centroamérica S. A. Processing consumer tomato preparations, industrial fruits and vegetables Guatemala                          | 10.5          | 5                | 1-1/2        | 5/1/76   | 8/11/76              | 6/18/76               | 400.0            | ---         | ---              | 400.0             | ---          | ---              | ---               | 400.0         | ---          | Fully disbursed                  | ---                         |
| 45             | Leche y Derivados, S. A. (LEFIDE) Dairy operations Honduras   | 0             | 6                | -            | 5/8/76   | 6/23/76              | 11/17/76              | 275.0            | ---         | 275.0            | ---               | ---          | ---              | ---               | 275.0         | ---          | Outstanding balance: \$213,000   | 11/17/81                    |
| 46             | Banco Crédito Agrícola de Cartago Commercial mortgage and agricultural banking Costa Rica   | 0             | 7                | 2            | 5/1/76   | 6/23/76              | 4/1/76                | 400.0            | ---         | ---              | 400.0             | ---          | ---              | ---               | 400.0         | ---          | Fully disbursed                  | ---                         |
| 46-1           | Banco Crédito Agrícola de Cartago Commercial, mortgage and agricultural banking Costa Rica  | 0             | 7                | 2            | 12/6/76  | ---                  | 2/1/77                | 100.0            | ---         | ---              | 100.0             | ---          | ---              | ---               | ---           | 100.0        | Fully disbursed                  | ---                         |
| 47             | Almacenes Generales de Depósito de Nicaragua, S. A. (ALGENIC) Bonded warehousing Nicaragua  | 11            | 6                | 1-1/2        | 5/8/76   | ---                  | ---                   | 400.0            | ---         | ---              | ---               | ---          | ---              | ---               | 400.0         | ---          | Pending disbursement             | ---                         |
| 48             | Casabon San Jeronimo, S. A. Cattle raising and vice breeding Costa Rica   | 11            | 5                | 1            | 4/13/76  | ---                  | 5/6/76                | 350.0            | ---         | ---              | ---               | ---          | ---              | ---               | 350.0         | ---          | Fully disbursed                  | ---                         |
| 49             | Industria Frutera del Gran Lago, S.A. (IFRUGALASA) Processing consumer tomato preparations, fruit nectars and tropical fruit juices NICARAGUA | 10            | 7                | 2            | 6/6/77   | ---                  | ---                   | 400.0            | ---         | ---              | ---               | 200.0        | ---              | ---               | 200.0         | ---          | Pending disbursement             | ---                         |

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AID Loan No. 576-T-015  
 Borrower: LAAD  
 Amount: \$5 Million  
 Date Signed: July 23, 1976

| Invest-<br>ment<br>No. | Project Name, Description & Location   | Interest<br>Rate | Repar-<br>ment<br>Period | Grace<br>Period | Date Ap-<br>proved by<br>LAAD Loan &<br>Investment<br>Committee | Date Ap-<br>proved by<br>AID | Date<br>Agreement<br>Signed | Total<br>Invest-<br>ment | C O M M I T M E N T S |                          |                           |               |                          |                           | DISBURSEMENTS |                  | COMMENTS             | Date convert-<br>ibility Expires |
|------------------------|--|------------------|--------------------------|-----------------|---|------------------------------|-----------------------------|--------------------------|-----------------------|--------------------------|---------------------------|---------------|--------------------------|---------------------------|---------------|------------------|----------------------|----------------------------------|
|                        |  |                  |                          |                 |   |                              |                             |                          | AID Funds             |                          |                           | LAAD-CA Funds |                          |                           | AID<br>Funds  | LAAD-CA<br>Funds |                      |                                  |
|                        |  |                  |                          |                 |   |                              |                             |                          | Equity                | Convert-<br>ible<br>Loan | Conven-<br>tional<br>Loan | Equity        | Convert-<br>ible<br>Loan | Conven-<br>tional<br>Loan |               |                  |                      |                                  |
| 70                     | Banco de Costa Rica<br>Industrial, commercial, mortgage<br>and agricultural banking<br>Costa Rica  | 8                | 3                        | 2               | 5/21/76   | 7/7/76                       | 7/12/76                     | 400.0                    | ---                   | ---                      | 400.0                     | ---           | ---                      | ---                       | 400.0         | ---              | Fully disbursed      | ---                              |
| 70-1                   | Banco de Costa Rica<br>Industrial, commercial, mortgage<br>and agricultural banking<br>Costa Rica  | 8                | 3                        | 2               | 12/6/76   | ---                          | 1/20/77                     | 100.0                    | ---                   | ---                      | 100.0                     | ---           | ---                      | ---                       | ---           | 100.0            | Fully disbursed      | ---                              |
| 71                     | Comercial Agrícola El Escobillo, S.A.<br>Cultivation of Macadamia nuts,<br>cardamom, citrus, avocado, mango<br>and coffee<br>Guatemala                   | 11               | 3                        | 1-1/2           | 5/27/76   | ---                          | 11/8/76                     | 150.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 150.0                     | ---           | 150.0            | Fully disbursed      | ---                              |
| 72                     | Latopelo, S. A.<br>Cattle fattening and agriculture<br>operations<br>Costa Rica  | 11               | 3                        | 2               | 5/21/76   | ---                          | 6/10/76                     | 400.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 400.0                     | ---           | 400.0            | Fully disbursed      | ---                              |
| 73                     | Instituto de Fomento Nacional (INFONAC)<br>Autonomous government non traditional<br>agriculture development and invest-<br>ment corporation<br>Nicaragua | 8                | 3                        | 2               | 6/5/76  | 11/18/76                     | 6/6/76                      | 500.0                    | ---                   | ---                      | 222.0                     | ---           | ---                      | 278.0                     | 222.0         | 278.0            | Fully disbursed      | ---                              |
| 74                     | Posevadora Agrícola Salvadoreña, S.A.<br>Sesame banking plant<br>El Salvador   | 10               | 5                        | 2               | 6/5/76  | ---                          | ---                         | 200.0                    | ---                   | ---                      | 200.0                     | ---           | ---                      | ---                       | ---           | ---              | Pending disbursement | ---                              |
| 75                     | Desarrollo Comero Chiquibaltin, S.A.<br>Commercial cow/calf herd operation<br>Guatemala  | 10               | 5                        | 1-1/2           | 10/1/76   | ---                          | 1/24/77                     | 500.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 500.0                     | ---           | 500.0            | Fully disbursed      | ---                              |
| 76                     | Financiera Salvadoreña, S. A. (FISAL)<br>Development banking<br>El Salvador  | 8                | 7                        | 2               | 10/1/76   | 11/18/76                     | 10/29/76                    | 500.0                    | ---                   | ---                      | 500.0                     | ---           | ---                      | ---                       | 500.0         | ---              | Fully disbursed      | ---                              |
| 77                     | Financiera de Desarrollo e Inversión,<br>S. A. (FIDESA)<br>Development finance<br>El Salvador  | 8                | 7                        | 2               | 10/1/76   | 11/18/76                     | 10/29/76                    | 500.0                    | ---                   | ---                      | 500.0                     | ---           | ---                      | ---                       | 500.0         | ---              | Fully disbursed      | ---                              |
| 78                     | Banco Cacatlán, S. A.<br>Industrial, commercial, agricultural<br>and mortgage banking<br>El Salvador   | 9.5              | 3                        | 2               | 1/10/77   | ---                          | ---                         | 500.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 500.0                     | ---           | ---              | Pending disbursement | ---                              |
| 79                     | Alimentos de Costa Rica, S. A.<br>Rice milling and marketing<br>Costa Rica   | 10               | 5                        | 4               | 4/29/77   | ---                          | 5/14/77                     | 230.0                    | ---                   | ---                      | 230.0                     | ---           | ---                      | ---                       | ---           | 230.0            | Fully disbursed      | ---                              |
| 80                     | Plantaciones Agrícolas, S.A. de C.V.<br>Cultivation of sugarcane, plantains,<br>oranges<br>Honduras  | 11               | 3                        | 3               | 3/14/77   | ---                          | ---                         | 50.0                     | ---                   | ---                      | ---                       | ---           | ---                      | 50.0                      | ---           | ---              | Pending disbursement | ---                              |
| 81                     | Compañía Azucarera Hondureña, S.A.<br>Sugarcane plantations and sugar<br>processing<br>Honduras  | 10               | 5                        | 1               | 3/14/77   | ---                          | 5/31/77                     | 500.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 500.0                     | ---           | 500.0            | Fully disbursed      | ---                              |
| 82                     | Agrropecuaria Levilla, S. A.<br>Agricultural activities<br>Guatemala   | -                | -                        | -               | 6/28/77   | ---                          | ---                         | 25.0                     | ---                   | ---                      | ---                       | ---           | 25.0                     | ---                       | ---           | ---              | Pending disbursement | ---                              |
| 83                     | Hacienda Las Delicias, S. A.<br>Cattle breeding and fattening<br>Costa Rica  | 11               | 7                        | 0               | 6/28/77   | ---                          | 5/19/77                     | 500.0                    | ---                   | ---                      | ---                       | ---           | ---                      | 500.0                     | ---           | 500.0            | Fully disbursed      | ---                              |

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U.S. Loan No. 104-T-018  
 Category: LAAD  
 Amount: \$5 Million  
 Date Signed: July 22, 1975

| Investment No. | Project Name, Description & Location   | Interest Rate | Repayment Period | Grace Period | Date Approved by LAAD Loan & Investment Committee | Date Approved by AID | Date Agreement Signed | Total Investment | COMMITMENTS      |                  |                   | DISBURSEMENTS |               | COMMENTS | Date Convertibility Expires |     |  |
|----------------|--|---------------|------------------|--------------|---|----------------------|-----------------------|------------------|------------------|------------------|-------------------|---------------|---------------|----------|-----------------------------|-----|--|
|                |  |               |                  |              |   |                      |                       |                  | AID Funds Equity | Convertible Loan | Conventional Loan | AID Funds     | LAAD-CA Funds |          |                             |     |  |
| 66             | Banco Nacional de Costa Rica<br>Commercial, mortgage and agricultural banking<br>Costa Rica    | 7             | 7                | 2            | 6/6/77  | ---                  | ---                   | 600.0            | ---              | ---              | 600.0             | ---           | ---           | ---      | Pending disbursement        | --- |  |
| 67             | Fabrica de Muebles Costensa, S. de R.L.<br>Production and export of wood furniture<br>Honduras | 11            | 6                | 1-1/2        | 6/6/77  | ---                  | ---                   | 500.0            | ---              | ---              | ---               | ---           | 500.0         | ---      | Pending disbursement        | --- |  |
| <b>TOTALS</b>  |  |               |                  |              |   |                      |                       | 11,840.5         | 355.0            | 4,470.0          | 322.7             | 695.0         | 6,003.0       | 5,537.0  | 5,342.5                     |     |  |

- 1/ Over 180-day Eurodollar rate, adjustable every six months
- 2/ Over 360-day Prime rate, adjustable every year.
- 3/ \$140,000 approved by Loan & Investment Committee. Balance (\$22,700) represents interest on previous loan which, together with \$25,800 of this loan, was converted to equity
- 4/ \$50,000 equity was sold to Odia Trading and Development Corporation, S. A.

SUMMARY OF INVESTMENTS APPROVED BY AID TO DATE

|                    | Amount  | Percent |
|--------------------|---------|---------|
| Equity             | ---     | ---     |
| Convertible Loans  | 355.0   | 30      |
| Conventional Loans | 3,182.0 | 90      |
|                    | 3,537.0 | 100     |

BREAKDOWN OF LAAD-CA CAPITAL

|                                    |         |
|------------------------------------|---------|
| Share Certificate No. 1 Class "A"  | 100.0   |
| Share Certificate No. 2 Class "A"  | 110.0   |
| Share Certificate No. 3 Class "A"  | 150.0   |
| Share Certificate No. 4 Class "A"  | 240.0   |
| Share Certificate No. 5 Class "A"  | 50.0    |
| Share Certificate No. 6 Class "A"  | 50.0    |
| Share Certificate No. 7 Class "A"  | 50.0    |
| Share Certificate No. 8 Class "A"  | 170.0   |
| Share Certificate No. 9 Class "A"  | 330.0   |
| Share Certificate No. 10 Class "A" | 570.0   |
|                                    | 1,900.0 |

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