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**Accrediting
Agribusiness:
An Evaluation
of the Peruvian
Rural
Development
Agribusiness
Fund**

Prepared for the U.S. Agency for International Development
Mission to Peru and the Employment and Small Enterprise
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PREFACE

This study by Development Alternatives, Inc. (DAI) originally was one chapter of a larger report that analyzed Peruvian agroindustry, evaluated the Rural Development Agribusiness Fund (FRAI), discussed constraints on this sector, and offered several options for future agribusiness development projects. This section is being reproduced separately for those solely interested in the FRAI evaluation; however, readers are urged to review the larger report, "Peruvian Agroindustry: Performance and Prospects for Future Action," to place this section into perspective.

This report was funded primarily by and conducted at the request of the United States Agency for International Development mission in Peru. It also received funding from the AID Office for Multisectoral Development as part of a contract to test methodologies to evaluate the impact of small-scale enterprise projects.

The study's objectives were to:

- Evaluate the administrative efficiency and financial performance of the FRAI fund;
- Analyze the impact of the project on public and private sector institutions involved in project implementation;
- Determine whether subprojects met the economic and social criteria stated in the loan agreement; and
- Assess the impact of loans on sub-borrowers by using a cost-effective evaluation methodology.

A four-person DAI team collected and analyzed the primary and secondary data for the larger report during August and September 1983. Team members reviewed all FRAI loan files at COFIDE; interviewed 29 FRAI sub-borrowers; and held discussions with private sector representatives, financial intermediaries, public and private business development organizations, and donor representatives.

Susan Goldmark wrote the final report, incorporating contributions from team members. Donald Stout focused on the financial and administrative analysis of the FRAI program, Refugio Rochin calculated the results of the survey of FRAI sub-borrowers, and Loren Parks provided background information on Peruvian agroindustry.

The report is organized into five chapters. The first and second chapters provide general background information for the FRAI evaluation, including a review of the Private Investment Fund (PIF) project. The third and fourth chapters focus upon the

administrative and financial performance of the FRAI loan fund respectively, while the final chapter analyzes its impact on agribusiness sub-borrowers.

The DAI team would like to thank John Sanbrailo, the AID Perru Mission Director, without whose support this evaluation would not have occurred. Mary Likar and Dani Cruz provided guidance and backstop support beyond the call of duty; Fred Mann and George Wohanka accompanied team members on two field trips; and George Wachtenheim, Bob Burke, George Hill, and Bob Maushammer provided valuable information and useful suggestions.

The evaluation of the FRAI project could not have been accomplished without the able assistance of COFIDE staff. Our thanks go to Carlos Neuhaus, the Director of COFIDE; Carlos Klinge, Carlos del Rosario, and Rosa Pareja, who have been involved in FRAI fund administration; and the COFIDE interns, who painstakingly helped to analyze data from COFIDE's files. Their dedication, efficiency, and competence contributed greatly to this evaluation effort.

Finally, our thanks to Michael Farbman, Chief of the Employment and Small Enterprise Division, whose support helped to make this evaluation possible.

Susan Goldmark
Team Leader
November 1983

TABLE OF CONTENTS

| | Page |
|--|------|
| CHAPTER ONE | |
| GENERAL BACKGROUND. | 1 |
| OVERVIEW OF PERUVIAN AGOINDUSTRY | 1 |
| GOVERNMENT OF PERU INDUSTRIAL INCENTIVES AND CONSTRAINTS. . | 2 |
| PRIVATE INVESTMENT FUND PROJECT | 3 |
| NOTES | 6 |
| CHAPTER TWO | |
| FRAI PROJECT DESCRIPTION. | 7 |
| PROJECT OBJECTIVES. | 7 |
| FRAI FUNDING SOURCES. | 8 |
| SUBLOAN TERMS AND CONDITIONS. | 9 |
| NOTES | 10 |
| CHAPTER THREE | |
| ADMINISTRATIVE OPERATIONS OF THE FRAI PROJECT. . | 11 |
| COFIDE OPERATIONS AND PERFORMANCE | 11 |
| ICI OPERATIONS AND PERFORMANCE | 15 |
| TECHNICAL ASSISTANCE | 16 |
| COFIDE | 16 |
| ICIs | 17 |
| Sub-borrowers | 17 |
| Internal Controls | 18 |
| NOTES | 22 |
| CHAPTER FOUR | |
| FINANCIAL OVERVIEW OF THE FRAI PROJECT | 23 |
| RELATIONSHIP TO OTHER COFIDE OPERATIONS | 23 |
| SOURCES AND APPLICATIONS OF FUNDS | 23 |
| PORTFOLIO QUALITY | 29 |
| PORTFOLIO COMPOSITION | 29 |
| Distribution of Loans by ICI. | 29 |
| Distribution of Subloans by Region and Activity | 30 |
| Ownership Groups and Size of Firms. | 36 |
| Distribution of Loans to New versus Existing Activities | 39 |
| NOTES | 39 |

| | |
|--|-----------|
| CHAPTER FIVE | |
| IMPACT OF THE FRAI PROJECT | 41 |
| EVALUATION METHODOLOGY. | 41 |
| CHARACTERISTICS OF SAMPLED FRAI SUB-BORROWERS | 41 |
| FINANCIAL REVIEW OF FRAI SUB-BORROWERS. | 43 |
| REACHING THE TARGET GROUP | 48 |
| EMPLOYMENT GENERATION | 50 |
| CAPITAL INTENSITY OF AGOINDUSTRY. | 53 |
| UTILIZATION OF PLANT CAPACITY | 54 |
| IMPACT ON GROSS DOMESTIC PRODUCT AND THE BALANCE OF PAYMENTS | 54 |
| FRAI CONTRIBUTIONS TO THE ELIMINATION OF CONSTRAINTS ON AGRICULTURAL DEVELOPMENT. | 55 |
| NOTES | 56 |
| | |
| EXCHANGE RATE FOR THE PERUVIAN SOLE | 57 |
| | |
| SELECTED BIBLIOGRAPHY | 59 |
| | |
| ANNEX A: | |
| LIST OF KEY PERSONS CONSULTED | A-1 |
| | |
| ANNEX B: | |
| EVALUATION METHODOLOGY | B-1 |
| | |
| ANNEX C: | |
| DISTRIBUTION OF FRAI DISCOUNTED SUB-LOANS BY DEPARTMENT; 1978-83 | C-1 |
| | |
| ANNEX D: | |
| COFIDE FINANCIAL STATEMENTS | D-1 |
| | |
| ANNEX E: | |
| ACTIVITIES OF FRAI SAMPLED SUBBORROWERS. | E-1 |
| | |
| ANNEX F: | |
| QUESTIONNAIRE FOR FRAI SUB-BORROWERS | F-1 |

LIST OF TABLES AND FIGURES

| Table | | Page |
|---------------|---|------|
| 1 | COFIDE Loans, 1980-82 | 24 |
| 2 | Approvals and Disbursements from Lines of Credit Administered by COFIDE. | 25 |
| 3 | Capital Contributions to the FRAI Fund 1978-1983. | 26 |
| 4 | FRAI Sources & Applications of Funds: September 1978-June 1983. | 28 |
| 5 | FRAI Discounted Sub-loans By Financial Intermediaries 1978-83 | 31 |
| 6 | FRAI Rediscounted Subloans by Year and Number of ICIs Incorporated to the Program. | 32 |
| 7 | FRAI Subloans by Region and Activity in U.S. Dollars, 1978-83 | 33 |
| 8 | FRAI Subloans by Region and Activity in Percentages. | 34 |
| 9 | Distribution of FRAI Loans By Region and Between New and Ongoing Projects | 40 |
| 10 | Survey Data of FRAI Subloans By Region and Activity | 42 |
| 11 | Financial Performance of FRAI Sub-borrowers Before and After Loans | 45 |
| 12 | Financial Performance of Sampled FRAI Sub-borrowers in 1981 and 1982. | 47 |
| 13 | Expected versus Actual Direct Jobs Created by Surveyed Firms | 51 |
| Figure | | |
| 1 | Distribution of Loans by Size | 38 |

EXECUTIVE SUMMARY

PRIVATE INVESTMENT FUND EXPERIENCE

The Private Investment Fund (PIF) (1968-1976) was capitalized with an AID \$7.5 million soft loan to provide medium- and long-term financing to priority agroindustry activities (particularly the export sector), to stimulate U.S. equipment exports, to improve Peru's balance of payments, and to encourage private Peruvian financial institutions to serve as intermediaries. However, the project fell far short of these objectives and AID ultimately deobligated 80 percent of project funds. The project's failure was due to:

- The inauguration of a government in 1968 that was hostile toward private sector development;
- An interest rate "spread" that was not sufficient to induce commercial financial institutions to intermediate PIF funds; and
- The excessive restrictions placed on the use of funds.

Despite the poor performance of this project, AID continued its support to agribusiness by establishing the Rural Development Agribusiness Fund (FRAI) in 1978. This discount facility was structured to provide a more flexible response to the financial needs of the agroindustrial sector, increased incentives for intermediary credit institution (ICI) participation, and benefited from the inauguration of a government committed to private sector development.

ADMINISTRATIVE AND FINANCIAL OVERVIEW
OF THE FRAI LOAN FUND

The FRAI \$19.6 million Banco Central de Reserva del Peru (Central Bank) discount facility (\$15 million from an AID soft loan) was intended to provide loans through ICIs to agribusinesses that maximized benefits to the rural poor. Agribusinesses were viewed as a means to alleviate key constraints on agricultural development: poor marketing facilities, insufficient processing facilities, inadequate goods and services input industries, and incomplete agribusiness system linkages.

The FRAI terms and conditions offered to ICIs and sub-borrowers were so favorable that all AID funds were disbursed by June 1981 -- 1.5 years prior to the project's terminal disbursement date. The high 7 percent spread enjoyed by ICIs

until March 1981 induced 32 financial institutions, representing almost the entire Peruvian lending community (excluding savings and loan associations and insurance companies), to participate in the program. Since sub-borrowers paid real negative rates of interest for these subsidized loans, demand for them was high until the economic recession began. Between December 1978 and September 1983, \$43 million, representing 183 loans to 146 enterprises, were disbursed.

Delinquency rates for the four largest commercial banks using the fund were almost zero, since, when necessary, loans were rescheduled and, on rare occasion, legal action was taken to foreclose on guarantees when a project seemed unsalvageable. All ICIs met their payment obligations to COFIDE on time.

Over 60 percent of the FRAI funds, representing \$13 million, were lying idle in the Central Bank in June 1983. The high fund liquidity stems from the lack of demand for investment loan funds during this recessionary period as well as insufficient publicity about the fund. COFIDE staff have cautiously maintained FRAI as a development fund, rather than transforming it into a bail-out for firms in trouble.

However, the demand for FRAI loan funds is expected to grow within the next two years in response to worldwide economic revival and the effect of the Government of Peru's policies. The FRAI loan fund will begin to decapitalize, however, if real interest rates remain negative and the Central Bank ceases its maintenance of value contributions. The Central Bank has contributed \$6.05 million to the FRAI fund to comply with the bank's obligation to maintain the fund's real value. FRAI is protected from the ravages of Peru's double and triple digit inflation only until 1985, when this provision ends.

The management of both the PIF and FRAI projects was transferred from the Central Bank to COFIDE during project implementation. However, whereas the PIF project was inefficiently managed, the FRAI project has been well administered by a new unit within COFIDE. This difference not only results from the high caliber staff administering the FRAI loan, but also reflects the pro-private sector stance adopted by the Peruvian government since 1980.

While COFIDE's administration of the FRAI fund has been exemplary, several areas for improvement still remain:

- Clarifying COFIDE's role with regard to the private sector and improving communications between COFIDE's divisions;
- Improving the quality of the financial and economic analyses conducted to analyze loan requests; and
- Increasing publicity of the FRAI loan fund, particularly in the sierra and selva regions.

CHARACTERISTICS OF FRAI SUB-BORROWERS

Project analysis by ICIs is intended to placate COFIDE more than form the basis for loan approval. Commercial banks disburse loans to those that can meet their high collateral requirements -- normally 200-300 percent of the FRAI loan's value -- to protect them against default. One consequence of this approach is that ICIs lend to larger, wealthier, and better established firms to expand their operations. It tends to bias an ICI against lending to emerging entrepreneurs for new kinds of undertakings.

An analysis of all FRAI loan files, ICI files, and survey results derived from interviews with 29 sub-borrowers representing \$10.7 million in FRAI loans reveals that:

- Firms located in the coastal region received 77 percent of funds, indicating that special efforts will have to be made if resources are to flow to the sierra and selva regions;
- All loans have gone to enterprises that fit into one of the four categories identified by AID in its project paper, with over one-half of these loans going to agroprocessing firms;
- About 30 percent of firms that received FRAI loans are owned in part by other companies. Some of these small and medium firms are subsidiaries of large conglomerates that have easy access to alternative sources of finance;
- The average loan size was \$234,000, close to the \$250,000 anticipated in the project paper; almost one-half of the 146 sub-borrowers received loans of less than \$150,000; firms received loans ranging from \$2,500 to finance a feasibility study to \$2.6 million for a fruit-processing plant; and

- Although 37 percent of funds went to finance new activities, this category includes existing firms that diversify into different types of operations as well as entirely new ventures.

IMPACT OF FRAI SUBLOANS

The financial and economic impact of the FRAI loans was unclear because:

- The FRAI period has coincided with drastic macroeconomic influences that obscure the effect of a FRAI loan on operating results;
- Many of the agroindustrial borrowers are vertically integrated with other firms; intragroup pricing of goods and services is designed to minimize the tax liability of the group as a whole, confusing the interpretation of the FRAI borrower's financial statements;
- Agroindustry embraces a broad range of technology, causing generalizations based on aggregate ratios to be suspect;
- Some firms received loans from a variety of sources, thereby obscuring the impact that can be attributed solely to the FRAI loan;
- Most firms purchased raw materials through wholesalers and did not know whether small-scale farmers had supplied these inputs; and
- Too little time had elapsed since the receipt of the FRAI loan to determine its impact on many firms.

Despite these reservations, the financial analysis of 23 sampled firms did yield some credible results that are consistent with expectations. The comparison of financial statements before and after loan receipt reveals an unrelieved deterioration in firms' financial performance. This primarily reflects the severity of the 1982 recession. All profit indicators are down; indeed, most of the sampled firms suffered net losses in 1982. Sales volume decreased, and interest charges constituted an almost insupportable 36 percent of sales in 1982. Plants were operating significantly below capacity as a result of a lack of demand for their product and of working capital. Many firms were on the verge of bankruptcy and needed working capital loans at reasonable rates.

The direct employment effect of the FRAI project was less than anticipated. Although the number of new jobs created would have been greater if the general economic situation had been better, the estimates proposed in the project paper and loan analysis documents still would have been high. Loans to sampled borrowers created 329 direct jobs at an average investment cost per job of \$46,300. If these firms are an accurate reflection of the universe of sub-borrowers, then the FRAI project has generated about 1,310 new direct jobs to date.

The indirect net employment effect of loans could not be determined. The backward employment effect of FRAI loans was weak among firms that imported their raw material inputs; however, the forward employment effect (such as marketing agents) may be significant. The indirect employment effect that could normally be expected from certain agroprocessing activities was reduced due to the government's monopoly on marketing these products.

Since farmers in disaster areas cannot afford to rent or buy tractors and other costly agricultural inputs, the indirect employment and income effect of agricultural machinery production and other input marketing services is now low. However, discussions with agricultural input suppliers and farmers indicate that the potential indirect income and employment effect of using tractors to increase the amount of cultivated land is substantial. Using FRAI loans to induce suppliers to sell tractors on credit to farmers (at the same terms and conditions as the FRAI loan) provides a service that traditionally should be but is not being performed by the Agrarian Bank.

The extent to which these enterprises have contributed to the elimination of the four constraints identified in the project paper is mixed and can be analyzed only on a case basis. The current economic situation prevents a meaningful analysis of FRAI sub-borrowers' ability to address the constraints identified in 1977 and has created new constraints on agroindustry growth.

CHAPTER ONE

GENERAL BACKGROUND

OVERVIEW OF PERUVIAN AGROINDUSTRY

Agroindustry is struggling to survive Peru's worst economic depression in modern history. Domestic demand for agroindustry products and services has declined as a result of a reduction in consumers' real income, product price increases due to high inflation and devaluation, and heightened competition resulting from a radical drop in import tariffs. The worldwide recession has cut demand for Peruvian exports. Although the Belaunde government's economic liberalization policies contributed to a healthy increase in agricultural production in 1981 and 1982 and began to spark some new investments in agroindustry, drought and flooding in early 1983 dashed hopes for the speedy revitalization of these sectors.

Policies adopted by the military government during the 1970s caused a dramatic drop in agricultural production, a decline of private investment in medium and large industries, and the stagnation of food-processing activities. Subsidized credit, tax breaks for profit reinvestment in fixed assets, and mandatory labor benefits that substantially increase labor costs continue to spur larger Peruvian industries to adopt capital-intensive technologies. Although tax incentives have begun to promote the decentralization of agroindustry, 73 percent of plant sites and 82 percent of total employment are concentrated in Peru's coastal departments. And certain more capital-intensive agroindustrial subsectors -- tobacco, milk product, and pulp and paper processing -- appear to be controlled by a small number of large firms.

Despite current gloomy conditions, Peruvian agroindustry still offers many profitable private investment opportunities. Import substitution and non-traditional export activities are in

their nascent stage. The burgeoning agricultural development in the selva region, combined with infrastructure improvements, is creating new opportunities for agroindustrial growth.

GOVERNMENT OF PERU INDUSTRIAL INCENTIVES AND CONSTRAINTS

Two laws that have had a profound effect on agroindustry operations are the General Industrial Law and the Labor Stability Law. The first subsidizes capital investments while the second prevents the dismissal of long-term employees. Both motivate industrialists to use capital-intensive technologies.

The General Industrial Law grants tax credits for salaries and the reinvestment of profits. The employment tax credit is the same for all firms: about 20 percent of each firm's average corporate income tax rate is multiplied by the monthly wage bill for permanent employees. The investment tax credit varies according to the firm's location. Firms within and outside of the Lima/Callao industrial area receive tax credits of 36 and 73 percent respectively. Thus capital investments are subsidized more heavily than those for labor.

In addition, a variety of taxes and mandatory benefit programs increase the true cost of labor for medium and large businesses. Small and informal sector firms are exempt from (or can more easily avoid) some of these regulations, which include:

- A payroll tax (2.5 percent of wages);
- A social security tax (14 percent of wages);
- Contributions to SENATI for training courses (1.5 percent of wages);
- Contributions to FONAVI for housing assistance (4 percent of wages); and
- Profit-sharing plans that include all employees.

The Labor Stability Law prevents employers from firing employees who have worked for more than three years with a company. This promotes high turnover during the early years of employment, since employers do not want to enter into lifetime contracts with employees. Many employers believe that the quality and productivity of permanent employees deteriorate soon after the three-year probationary period. Thus employers' incentive to invest heavily in training short-term employees is also diminished. These factors reduce the productivity of labor and lead to inefficiencies in the labor market. Some employers interviewed for the survey discussed in the subsequent chapter, however, admitted that they avoid these regulations by negotiating seasonal contracts (10 months, for example) with workers.

The government is currently providing incentives for investments in the selva region. For example, a special agreement between Colombia and Peru permits duty-free imports of capital goods to their respective "frontier" selva regions. In addition, tax incentives are provided within the Selva Law.

Non-traditional exports have been promoted through four mechanisms: CERTEX, FENT, SECREX and FOPEX. CERTEX provides rebates for exports, FENT provides subsidized pre- and post-export financing, SECREX insures exports, and FOPEX offers technical assistance to exporters.[1] These agencies have had a positive effect on export promotion.

PRIVATE INVESTMENT FUND PROJECT

AID has funded two major agroindustry development projects during the past fifteen years: the Private Investment Fund (PIF) and the Rural Development Agribusiness Fund (FRAI). PIF (1968-1976) was capitalized with an AID \$7.5 million soft loan to

provide medium- and long-term financing to priority agroindustry activities (particularly the export sector), to stimulate U.S. equipment exports, to improve Peru's balance of payments, and to encourage private Peruvian financial institutions to serve as intermediaries. However, the project fell far short of these goals, and AID ultimately deobligated 80 percent of project funds.

The lessons learned through the disappointing experience of PIF were a valuable input to the FRAI project design. PIF's failure resulted from its inappropriate design, compounded by an unpredicted radical shift in government policy against the private sector. In contrast, FRAI was structured to provide a more flexible response to the financial needs of the agroindustrial sector and benefited from the inauguration of a government committed to private sector development.

The design problems that hindered efficient use of PIF resources included the:[2]

- Lack of sufficient financial incentives to induce intermediary credit institutions to modify their lending operations to include longer-term and higher risk agroindustry loans that entailed higher administrative costs. The ICIs received a 4 percent spread, while the Central Bank received the balance between the interest rate charged on loans and the concessional AID loan;
- Attempt to target resources away from certain subprojects (excluding activities that exported any raw or processed food or feed commodities found in surplus supply at the time of project design) or toward others (only subprojects using domestic products as a principal input could be financed). This planning approach imposed a static criterion upon a dynamic economic environment and subverted the purpose of economic project analysis;
- Excessive restrictions on the use of funds that were imposed to stimulate U.S. exports. As originally designed, each project had to involve a minimum of \$10,000 of U.S. procurement, and at least 50 percent of total project costs had to be used for U.S. imports; and

- Inability to use PIF funds for permanent working capital loans. The Central Bank contribution could be used for working capital loans not to exceed three months.

Amendments to the loan agreement in 1970, 1972, and 1974 attempted to simplify loan eligibility criteria and expand the list of eligible countries for imported equipment. Rather than attempting to increase the participation of the financial intermediaries through improved incentives, however, their role was reduced. Instead, the new executing agency of the project, COFIDE, became its principal financing and promotion agency. Since they were vulnerable to prevailing political trends, however, neither the Central Bank nor its semi-autonomous unit, COFIDE, was committed to private sector agroindustry development. Thus substantial bureaucratic delays and lack of promotion activities contributed to the deobligation of approximately 80 percent of AID's \$7.5 million loan in 1976.

The \$1.5 million of AID funds and \$1.8 counterpart funding from the Government of Peru financed nine loans to eight businesses. Three of the PIF subloans, representing 44 percent of AID funds, were used to purchase aircraft for two firms. Two loans (\$438,900 of AID funds) went to SASA, a charter airline company that transports passengers and cargo in the selva region. COFIDE no longer finances the purchase of aircraft for the selva and sierra regions because of the difficulty in controlling their use for legitimate activities. The third aircraft loan went to a fumigation service company that has since received two additional loans under the FRAI program.

Three additional subloans, accounting for 31 percent of AID funds, were used for wood-processing projects. Based upon the recommendation of a midterm evaluation of the FRAI project, forestry projects are no longer eligible for loans due to their presumed minimal impact on rural sector employment and low

stimulation of demand for agricultural products. The remaining three loans went to a balanced feed mill, a producer of veterinary products, and an agroprocessing plant.

Although the project did meet its objective of providing medium- and long-term financing to a few agribusiness activities, these loans had an insignificant effect on stimulating U.S. exports and improving Peru's balance of payments. Most important, the project failed to strengthen any institutional mechanism through which such lending activities might continue after the project was completed.

NOTES

- 1 This rebate no longer applies to exports to the United States, as of September 1983.
- 2 "Loan Completion Report," USAID/Peru, 1976.

CHAPTER TWO

FRAI PROJECT DESCRIPTION

PROJECT OBJECTIVES

AID's commitment to promote the Peruvian private sector continued, despite the lack of strong government support and the lackluster performance of the PIF fund. Approximately two years after the final disbursement of PIF funds in April 1976, AID signed a loan agreement to establish another agribusiness development fund. Unlike PIF, FRAI was to strengthen the institutional capability of the Central Bank to discount loans through intermediary financial institutions and to promote agribusinesses that maximize benefits to the rural poor.

The change in project focus between PIF and FRAI reflects the shift in U.S. development philosophy from the 1960s to mid-1970s. Rather than promote Peruvian agribusiness explicitly to further U.S. machinery exports, the focus was shifted to its "direct backward or forward linkages to the target group of individual small farmers and members of associative enterprises through the provision of goods and services and the expansion of markets." Agribusiness was viewed as a means by which to alleviate four major constraints inhibiting increased employment and income in the agricultural sector:

- Inadequate marketing facilities;
- Inadequate processing facilities;
- Inadequate goods and services input industries; and,
- Incomplete agribusiness system linkages.

The FRAI project adopted a broad definition of the types of activities that could be funded to correspond with these perceived constraints. These included agribusinesses that:

- Market small farmer and associative enterprise agricultural products;
- Process raw material grown by small producers and associative enterprises;
- Provide goods and services that contribute to improved small farmer and associative enterprise production; and
- Create linkages to the target group through the provision of technical assistance, credit and contractual arrangements for the direct purchase of products from the target group.

Sugar producers or processors were the only group explicitly excluded from the FRAI program at its outset. This was regarded as an extremely profitable activity that, presumably, did not require FRAI assistance. Following a recommendation made in a midterm evaluation, AID eliminated forestry and the processing of animal sub-products (hides and animal fats) into consumer goods from the group of eligible projects.

FRAI FUNDING SOURCES

The FRAI fund was capitalized with \$19.6 million, of which \$14.7 was derived from AID loan funds and \$4.9 million from contributions made by the Central Bank. The loan agreement, signed in April 1978, also provides an additional \$300,000 in AID loan funds for technical assistance to the Oficina de Fideicomisos, the Central Bank's unit administering the loan fund. In addition, the Central Bank was obligated to contribute \$100,000 for start-up expenses. Since intermediary financial institutions were expected to contribute \$2.2 million and sub-borrowers approximately \$3.8 million, the total project size was estimated to be \$26 million.

The \$15 million, 20-year AID concessional loan to the Government of Peru has a 6.5-year grace period. Its interest rate charges are 2 percent per year for seven years following the first disbursement of the loan, and 3 percent thereafter on all outstanding balances.

A key provision of the loan was the Central Bank's obligation "to maintain the value of the fund for at least the grace period of the Loan at an amount in Peruvian soles equivalent to not less than the original U.S. dollar value of the resources provided by AID and the Borrower." [1] Erosion of the fund's value in real terms from the ravages of Peru's double and triple digit inflation is thus prevented until 1985.

SUBLOAN TERMS AND CONDITIONS

The FRAI terms and conditions offered to ICIs and sub-borrowers were so favorable that all AID loan funds were disbursed by June 1981 -- 1.5 years prior to the project's terminal disbursement date. Since the PIF project did not induce the participation of many private financial institutions, FRAI was designed to correct this situation. However, since the FRAI line provided ICIs with a higher spread than other lines, the demand for other subsidized lines of credit was cut. Thus in March 1981, AID agreed to the Central Bank's request to impose the same interest rate structure for the FRAI loan fund as that used by other development funds.

Originally ICIs were to be charged a 9 percent interest fee on the discounted portion of loans; in a September 1978 amendment to the loan agreement, this amount was changed to be 5.5 percent below the prevailing official banking rediscount rate (Tasa de Redescuento Bancario [TRB]), while subloan interest rates were set at 1.5 percent above the TRB. While the four-point spread

provided by PIF might have been too low to induce their participation, the seven-point spread to ICIs was surely excessive.

The system adopted in March 1981 enabled ICIs to refinance loans at 51.5 percent and charge borrowers 56.5 percent. COFIDE considers this five-point spread as adequate to cover FRAI administrative expenses and risk incurred by ICIs. Banks may not charge any extra commissions or expenses on FRAI loans. Since inflation averaged 75 percent in 1981 and 65 percent in 1982, the real cost of funds was negative.[2]

The loan terms range from 1 to 10 years, with a maximum grace period of 2 years. Loans exclusively used for working capital cannot exceed four years, while those used to finance feasibility studies cannot be longer than 18 months.

NOTES

1 Loan Agreement, p.10.

2 Consumer Price Index for the Lima Metropolitan area, "Boletín del Banco Central de Reserva del Perú," Lima, January 1983.

CHAPTER THREE
ADMINISTRATIVE OPERATIONS OF THE FRAI PROJECT

COFIDE OPERATIONS AND PERFORMANCE

The management of both the PIF and FRAI projects was transferred from the Central Bank to COFIDE during project implementation. However, while the PIF project was inefficiently managed, the FRAI project has been well managed by a new unit within COFIDE. This difference is not only explained by the difference in personnel, but rather also reflects the pro-private sector stance adopted by the government since 1980.

From the inception of FRAI operations in December 1978 until March 1981, the Oficina de Fideicomisos, a special unit of the Central Bank, was entirely responsible for managing the FRAI loan fund. In that month, publicity for the program was transferred to COFIDE, and in September 1981 all administrative responsibilities were delegated to the Division de Fondos e Intermediacion within COFIDE. In essence, only the name and organizational location of the Central Bank unit managing the fund changed; the FRAI administrative staff remained constant throughout the project. This staff is highly committed and well qualified to manage the FRAI fund.

COFIDE is efficiently administering the project application and evaluation procedures of the FRAI fund. The rejection rate of loans submitted for refinancing from ICIs is nearly zero, since COFIDE weeds out bad projects in informal discussions with ICI officers before any formal loan application is submitted. This type of advice has helped to strengthen the capability of ICIs to analyze medium- and long-term loans -- an unfamiliar lending activity for most commercial banks. It is an example of the type

of informal technical assistance that often goes undetected but may indeed yield more tangible results than many formal training programs.

Seminars and published materials, such as the FRAI Loan Manual prepared by COFIDE, have helped to improve the quality of loan applications submitted by the ICIs. They are usually complete and in the proper format when presented to COFIDE, thus enabling it to process them promptly.

COFIDE usually is able to approve an application within two to three weeks of its arrival in Lima. ICIs and sub-borrowers occasionally complained to the evaluation team about delays in loan processing. These delays, which generally appear to be modest, usually result from the difficulties the beneficiaries and the ICIs experience in assembling the information required in a loan application. Since the rules are known, these delays cannot be attributed to COFIDE.

While COFIDE's administration of the FRAI fund has been exemplary, several areas for improvement still remain.

- Clarification of COFIDE's Role

There is some confusion, or ambiguity, within COFIDE regarding its organization, policy, and role when dealing with the private sector. Authority for the financial policies governing the FRAI fund and responsibility for FRAI administration sometimes lie within different COFIDE divisions, without any formal communication link between them. For example, one division could change maximum exposure ceilings for individual ICIs, thereby determining how much FRAI money they may intermediate, without consulting the division responsible for administering FRAI or the financial intermediary involved. Thus the FRAI administration division might be

encouraging ICIs to submit loan applications for refinancing only to learn that the latter have reached their lending ceiling. This may hurt the credibility of the organization and endanger the confidence bestowed upon the Division de Fondos e Intermediacion by ICIs and borrowers.

A more serious ambiguity concerns the proper role of COFIDE in dealing with financial intermediaries. Should COFIDE's role be judgmental or should it merely provide a routine check that loan requirements have been satisfied? Since ICIs bear the entire risk for loan repayment to COFIDE, one can argue that COFIDE's role should be more mechanical and less judgmental than at present. The evaluation of whether a project satisfies financial and economic requirements should be relatively free of judgment.

- Project Analysis

The quality of loan analyses should be improved. Internal rate of return (IRR) calculations usually have not been credible, because they have been based on market projections that are unrealistically optimistic. The resultant "best case" IRR calculation, therefore, serves no useful purpose.

The data on which the financial evaluation is based should be questioned more carefully. A simple sensitivity analysis -- how would the project's profitability be affected if sales were less, if product prices fell, if input prices increase -- should be used to direct attention to the assumptions that are critical to performance. The data used for these parameters should be questioned and researched more thoroughly than at present.

In addition, no useful economic project analysis has been performed on sub-borrower loans. The internal economic rate of return (IERR) should be calculated for each project, using better financial data as a base. It is interesting to note, as many loan applications do, the expected investment cost per job and to describe expected indirect employment and income effects of a project. This cannot, by itself, reveal whether Peru would be better with than without the investment. If COFIDE wishes to know the impact of FRAI loans upon the economy and use economic as well as financial criteria for loan approval, then a simple, consistent IERR analysis methodology should be introduced into the loan approval process.

- Promotional Activities

Despite some publicity activities undertaken by COFIDE, some ICIs, particularly in the selva and sierra regions, had not heard of the FRAI program when the evaluation team visited them. The blame for this situation must be shared with Lima-based ICIs that failed to communicate such information to their branches, and with branch office ICI staff who did not take the initiative to inform themselves about potential funding sources. Nevertheless, the current low level of utilization of FRAI funds indicates that COFIDE must assume a greater responsibility for publicizing the FRAI line than at present.

ICI OPERATIONS AND PERFORMANCE

The FRAI program has been well received by ICIs. FRAI has benefited them by increasing the amount of loanable funds available. Moreover, the discount arrangement enables them safely to use their own short-term deposits for medium- and long-term lending. The program has increased the capability of some ICIs that formerly dealt exclusively with short-term loans to analyze and manage medium- and long-term loans.

Nevertheless, the FRAI program has not precipitated any fundamental changes in the way these financial institutions do business. Loans are approved on the basis of collateral rather than project viability, and loan approval authority is still highly centralized in Lima offices. This suggests that future projects that wish to change these private sector banking practices will have to introduce additional incentives.

Only the Industrial Development Bank (Banco Industrial del Peru or BIP) prefinances loans after they have been approved internally. Other ICIs wait until COFIDE approves the FRAI loan and refinancing arrangements are made. However, the BIP can better afford this procedure than commercial banks since it has many lines of credit upon which to draw, and the Government of Peru, ultimately, finances any shortfalls.[1] Thus if COFIDE rejects the request, funds from another line or BIP's internal sources are used.

Some ICI rural branches, particularly those in the sierra and selva regions, lack trained staff to analyze and supervise loans properly. In some cases, bank staff did not conduct on-site spot checks to verify that funds were used for the purpose intended. Loan supervision is primarily focused on the financial

transaction involved rather than on the project funded. Thus if their loan is being repaid on time, ICIs have little motivation to check the status of the funded project.

The high degree of subsidization of FRAI loans tempts borrowers to misuse loans. Borrowers can presently earn a high, risk-free return by placing their loan funds in a dollar savings account at their local bank. FRAI funds cost 56.5 percent per annum, whereas savings in dollar-indexed accounts currently provide a nominal return of 183 percent per annum (10 percent interest in dollar terms); thus the incentive for diverting FRAI loans to unintended purposes is obvious.

Since the favorable terms offered to both ICIs and borrowers are intended to spur development activities rather than merely increasing financial exchanges, some minimum check should be made to verify the status of the FRAI subproject. COFIDE has attempted to have ICIs submit a semi-annual status report that confirms whether current sub-borrower projects are still functioning and describes, if any, their problems. Given the interest rate spread enjoyed by ICIs on FRAI loans, the request does not seem excessive. However, it has been impossible to get ICIs to comply with this request and COFIDE has not imposed any sanctions to spur compliance.

TECHNICAL ASSISTANCE

COFIDE

None of the \$300,000 earmarked by AID for technical assistance for Central Bank staff was used. Instead one month prior to the project's termination in December 1982, AID agreed to allow COFIDE to use these funds for subloans. This was based on the presumption that "COFIDE does not want or need technical assistance." [2]

Technical assistance was intended to introduce and implement an evaluation system, design promotional materials, and provide overseas training for FRAI staff. Although a portion of the \$100,000 contributed by the Central Bank was used for overseas training, the remaining technical assistance activities were not accomplished. The evaluation team believes that there was a need for technical assistance to improve project analysis.

ICIs

In the project paper, one-third of the \$300,000 allocated for technical assistance was to be used to improve the capability of ICIs to conduct long-range economic analyses. Although courses were organized to train ICI rural staff, these focused on the procedures and basic requirements of FRAI loans rather than financial or economic analysis methods. The need for technical assistance therefore still exists.

Sub-borrowers

Up to 4 percent of FRAI funds (\$800,000) were available to finance feasibility studies for sub-borrowers. This provision was included to enable them to hire consulting firms to conduct feasibility studies needed for bank approval.

However, the cost of such feasibility studies in Peru is often prohibitively high in relation to the size of the planned investment. Occasionally, the individuals performing such studies are hired primarily in the expectation that they can ensure project funding. It is not surprising, therefore, that only one loan was used to finance a feasibility study.

Nevertheless, the need for technical assistance to train prospective sub-borrowers to conduct feasibility analyses remains in the sierra and selva regions. Rural bank officials and

entrepreneurs complained about the lack of qualified individuals to perform feasibility studies of the quality required for FRAI funding. Without such assistance, the pool of entrepreneurs who will venture to seek FRAI loans will remain small.

Internal Controls

Loan Approval Authority

Unlike other lines of credit administered by COFIDE, no loan approval authority has been delegated to COFIDE branches outside Lima. This is because the Central Bank unit that originally managed FRAI had no branches; thus, this possible loan approval mechanism was not considered in the loan agreement.

All loans above \$750,000 must be approved by AID. However, it is unclear whether this restriction also applies after AID capital contributions have ended -- that is, when loans are entirely generated through reflows.

Although some ICIs have established loan approval limits for certain branches, most FRAI loans would fall above this limit. Thus most loans must be approved by ICI headquarters in Lima. Since many FRAI sub-borrowers also have offices in Lima, loan requests are frequently submitted directly to ICI headquarters.

COFIDE and ICI headquarters staff contend that the current loan approval system should not be changed since it provides a necessary check against potential abuses. In addition, they say that the system has not resulted in any undue delays.

However, the lack of delegation of loan approval authority to rural branches could constitute a blockage if more loans were made to sierra and selva businesses without Lima connections. If

this group is to be served efficiently in the future, the procedures and potential effect of decentralization of loan approval authority should be analyzed and discussed.

Loan Approval Criteria

According to the loan agreement, each subproject was to be evaluated on the basis of a highly subjective Initial Impact Determination Form. Subprojects that did not achieve a passing grade in terms of positive impact on small-scale farmers were to be automatically rejected even if financially viable. However, four months after the loan agreement was signed, this evaluation procedure was dropped and replaced with a more general procedure to include socioeconomic issues as part of the project approval process. The impact evaluation ranking criteria could not have been used with any confidence; it was appropriately dropped from the loan analysis process.

Unfortunately, this ranking procedure was not replaced with a better alternative for project analysis. FRAI project criteria do not ensure that projects are a good use of scarce resources. Although not required, some ICIs have calculated the IERR of prospective projects. The calculations have been largely useless and have not, in fact, been taken into consideration in the loan approval process:

- Operating projections have been unrealistic. An ex-post calculation by the evaluation team of the IERR for 33 FRAI projects produced rates of return ranging from 25 to 506 percent. The average IERR was 113 percent; the median IERR, 100 percent. These are not credible results. (The World Bank uses 12 percent as an overall opportunity cost of capital for Peru. An IERR greater than 12 percent means that Peru is better off economically with than without the project.) The major shortcoming of these analyses is inadequate market analysis. Sales projections, for example, often have been based upon maximum plant capacity in lieu of estimating product demand;

- Market prices have been used for all factors. This understates the economic cost of capital and foreign exchange and tends to overstate the cost of labor. Without such adjustments, more capital-intensive projects will have higher IERRs; and
- On occasion, the IERR has been confused with the internal financial rate of return by including subsidies, financial costs, depreciation, and transfer payments. These do not reflect resource claims and should be excluded from an economic evaluation.

Project analysis by ICIs is intended to placate COFIDE more than to form the basis for loan decisions. Traditional banking creditworthiness criteria dominate lending decisions. One consequence of this approach is that ICIs lend to larger, wealthier, and better established firms to expand their operations. High collateral requirements tend to bias an ICI against lending to emerging entrepreneurs for new kinds of undertakings. This tendency will continue until the results of the economic evaluation of projects become an actual investment criterion. Future FRAI-type projects should include some technical assistance to promote meaningful economic project analysis without overburdening the ICIs.

ICI and Sub-borrower Contribution

Under the loan agreement, FRAI was to refinance 90 percent of the subloan amount, with ICIs contributing the remaining 10 percent. No criteria were established to govern the minimum contribution required by the loan applicant. In March 1981, these terms were changed. Both the ICI and the loan applicant are now each required to contribute at least 10 percent of the total investment cost of the project.[3] FRAI will refinance only 70 percent of the total investment cost of the project. Since sub-borrowers typically contribute 20 percent of the total investment cost, FRAI usually refinances about 87.5 percent of the total loan amount.

An examination of 41 FRAI loans indicates that ICIs, not surprisingly, have contributed the minimum necessary from their own resources towards the FRAI loan (see Annex A). Sub-borrowers usually contributed about 20 percent of the total investment cost of the project even before a formal change in regulations was made. This sub-borrower contribution level appears adequate to ensure their commitment to the investment.

Collateral

The collateral requirements currently required by commercial banks are excessive for a development project. Commercial banks usually require 200-300 percent of the FRAI loan's value in collateral to protect them against any financial losses due to default. The Industrial Development Bank has more lenient criteria; it requires collateral to cover 125 percent of the loan, but its philosophy of lending on the basis of collateral rather than project viability does not appear to be significantly different from that of commercial banks.

Lower collateral requirements need not result in higher delinquency or default rates. At a minimum, more emphasis should be placed upon the ability of a project itself to generate the income to service its debt rather than on collateral. Thus the exclusive dependence on collateral as the sole criterion for project approval should be reduced and replaced with an examination of project viability as well as the character and credit history of the loan applicant.

Given the highly risk-averse nature of the ICIs participating in the FRAI project, it is unlikely that training courses alone will have a significant effect on current lending practices. If donors wish to change these practices so that resources flow to borrowers who lack alternative sources of finance, then two options are available. Either the return earned on such loans must be significantly increased to cover the

perceived greater risk due to lower collateral requirements, or the ICI's risk must be lowered through the establishment of a loan guarantee mechanism.

NOTES

- 1 The BIP's cost of funds on foreign exchange loans is zero; the government pays for BIP's foreign exchange loans and allows the latter to retain sub-borrowers' repayments.
- 2 Letter from AID to COFIDE, November 16, 1982, USAID/Lima files.
- 3 Sub-borrowers are required to contribute 20 percent toward an investment of over \$250,000, and 15 percent for those less than that amount. The discretion of the ICI prevails for loans used for expansion or for medium-term working capital loans.

CHAPTER FOUR

FINANCIAL OVERVIEW OF THE FRAI PROJECT

RELATIONSHIP TO OTHER COFIDE OPERATIONS

FRAI is a relatively small part of COFIDE operations. It is one of several trust fund financial operations -- including FONCAP, FIRE, FONEX, PROPEN, and the BID Multisectoral Credit Program -- that COFIDE administers. The total trust fund operations approved in 1982 amounted to only 4 percent of total COFIDE loan approvals (see Table 1). FRAI, in turn, accounted for 14.4 percent of the approvals from these funds as of July 31, 1983 (see Table 2).

Another measure of the relative importance of the FRAI program is that it is administered by 17 people out of a total of 507 COFIDE staff members. Thus 3.4 percent of the staff of COFIDE administers a program that makes up only 0.6 percent of its financial operations.

When FRAI is placed in relation to the total volume and variety of COFIDE operations, the attention given to this relatively insignificant activity is commendable. FRAI has had a disproportionate effect on COFIDE and the ICIs, to the benefit of both.

SOURCES AND APPLICATIONS OF FUNDS

Sources of FRAI funds were composed of initial and subsequent capital contributions by AID and the Central Bank, principal and interest repayments made by ICIs, and Central Bank maintenance of value contributions (see Table 3). The Central Bank has complied with its obligations to maintain the \$20 million equivalent value of FRAI. In addition to the Central

TABLE 1

COFIDE LOANS, 1980-82
(in millions of \$ equivalent)

| | 1980 (in percentages) | 1981 (in percentages) | 1982 (in percentages) |
|--|--------------------------|--------------------------|--------------------------|
| <u>Credit Line</u> | | | |
| Cofide Resources | 277 (41.1) | 209 (30.1) | 397 (43.6) |
| Agent for GOP Credits | 396 (58.8) | 295 (42.3) | 235 (25.8) |
| Financial Agent for State Enterprises | --- | 160 (23.0) | 243 (26.6) |
| Trust Funds | --- | 32 (4.6) | 37 (4.0) |
| Total | 673 (100) | 696 (100) | 462 (100) |

Source: Cofide 1982 Annual Report.

TABLE 2

APPROVALS AND DISBURSEMENTS FROM
LINES OF CREDIT ADMINISTERED BY COFIDE

As of July 31, 1983
(in millions of US \$)

| | <u>Approved</u> (in percentages) | <u>Disbursed</u> (in percentages) |
|--------|-------------------------------------|--------------------------------------|
| FRAI | 11.0 (12.8) | 9.7 (14.4) |
| FONCAP | 13.3 (15.4) | 10.0 (14.9) |
| FIRE | 22.5 (26.1) | 18.6 (27.7) |
| FONEX | 19.7 (22.9) | 11.1 (16.5) |
| BID | 19.6 (22.8) | 17.8 (26.5) |
| TOTAL | 86.1 (100.0) | 67.2 (100.0) |

Note: \$1.00=soles 1,723

TABLE 3

CAPITAL CONTRIBUTIONS TO THE FRAI FUND 1978-1983
(And Method of Calculating Maintenance of Value Contribution)

| Capital Contribution | Dec. 1978 | June 1979 | Dec. 1979 | June 1980 | Dec. 1980 | June 1981 | Dec. 1981 | June 1982 | Dec. 1982 | June 1983 |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| A. AID during six months (\$ thousands) | 2,934 | 0 | 6,800 | 0 | 1,000 | 3,966 | 0 | 0 | 300 | 0 |
| B. BCRP during six months (\$ thousands) | 978 | 0 | 2,267 | 0 | 333 | 1,322 | 0 | 0 | 100 | 0 |
| C. AID cumulative (\$ thousands) | 2,934 | 2,934 | 9,734 | 9,734 | 10,734 | 14,700 | 14,700 | 14,700 | 15,000 | 15,000 |
| D. BCRP Counterpart Cumulative (\$ thousands) | 978 | 978 | 3,245 | 3,245 | 3,578 | 4,900 | 4,900 | 4,900 | 5,000 | 5,000 |
| E. Total B+C (\$ thousands) | 3,912 | 3,912 | 12,978 | 12,978 | 14,312 | 19,600 | 19,600 | 19,600 | 20,000 | 20,000 |
| F. Total B+C in current equivalent soles (millions) | 765 | 879 | 3,238 | 3,684 | 4,869 | 8,183 | 9,896 | 13,216 | 19,744 | 31,640 |
| G. Total B+C in soles (millions) | 748 | 765 | 3,104 | 3,104 | 3,672 | 6,004 | 6,354 | 6,857 | 9,110 | 13,304 |
| H. Loan repayments in soles (millions) | 0 | 19 | 134 | 412 | 868 | 1,829 | 3,039 | 4,501 | 6,439 | 8,759 |
| I. BCRP Maintenance of Value (F-G-H) in soles (millions) | 17 | 96 | 0 | 168 | 329 | 350 | 503 | 1,858 | 4,195 | 9,577 |
| J. BCRP Maintenance of Value (\$ thousands) | 86 | 425 | 0 | 591 | 968 | 837 | 995 | 2,756 | 4,249 | 6,054 |

Source: COFIDE

Bank's original \$5 million contribution (\$4.9 million in loan funds plus \$100,000 for start-up costs), it had placed an additional \$6.05 million (in soles) into the fund as of June 1983.

The FRAI claim on the central government budget will increase with rising inflation and devaluation rates. When the Central Bank's obligation to maintain the real value of the fund ends in 1985 (the end of the grace period of the AID loan), then, if real interest rates remain negative, FRAI will begin to decapitalize rapidly.

As shown in Table 4, funds were used for loans, general expenses, and interest payments; any surplus was deposited in a checking account with the Central Bank.

The FRAI loan fund has been extremely liquid since its inception. Over 60 percent of FRAI funds were lying idle in a checking account at the Central Bank as of June 1983. Approximately soles 20 billion (\$13 million) were available for medium- and long-term agro-industrial loans that were not being disbursed. The high liquidity of the fund is due to the lack of demand for investment loan funds during this recessionary period, as well as insufficient publicity about the fund.

COFIDE staff have cautiously maintained FRAI as a development fund rather than transforming it into a bail-out for firms in trouble. Thus despite low demand for investment loans, COFIDE still analyzes loans in terms of whether they will increase production and income; it excludes those needing loans to survive. These strict criteria mean that COFIDE must publicize the fund more to attract clients and increase the activity of the portfolio.

TABLE 4

FRAI Sources & Applications of Funds: September 1978-June 1983

(Millions of Current Soles)

| <u>Sources</u> | <u>1978</u> | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| AID and BCRP | 772 | 3,110 | 4,008 | 6,857 | 13,207 | 22,882 |
| Other Income ^{a/} | - | 575 | 1,605 | 2,933 | 6,373 | 8,699 |
| Total | 772 | 3,686 | 5,612 | 9,790 | 19,580 | 31,581 |
| | | | | | | |
| <u>Uses</u> | <u>1978</u> | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
| Loans (net) | 53 | 1,783 | 4,603 | 7,025 | 10,377 | 11,638 |
| BCRP checking account | 715 | 1,508 | 583 | 2,753 | 9,081 | 19,756 |
| Other ^{b/} | 3 | 394 | 426 | 12 | 122 | 187 |
| Total | 772 | 3,686 | 5,612 | 9,790 | 19,580 | 31,581 |

a/ Interest, loan repayments, devaluations, etc.

b/ General expenses, interest on overdraft risk

Note: Discrepancies due to rounding

Source: COFIDE
September 1983

PORTFOLIO QUALITY

COFIDE suffers no delinquencies or arrearages on FRAI operations. ICIs uniformly meet their payment obligations to COFIDE, even if the sub-borrower is delinquent or in default.

The evaluation could not determine the delinquency rates for all ICIs participating in the FRAI program. Four of the largest commercial banks using the fund, however, reported that their FRAI delinquency rates were close to zero. Unfortunately, this information was not available from the Industrial Development Bank, so the performance of the public and private banks cannot be compared.

Most financial intermediaries were aware of problem loans and quickly rescheduled these loans when necessary. They were equally quick to take legal action to foreclose on legal guarantees when a project seemed unsalvageable.

PORTFOLIO COMPOSITION

Distribution of Loans by ICI

ICI participation in the FRAI program has been much greater than expected. The project paper estimated that from 9 to 12 ICIs would become involved; instead, 20 commercial and development banks and 12 "financieras" took advantage of the program. This represents almost the entire Peruvian financial lending community, excluding savings and loan associations and insurance companies.

Although 32 financial institutions participated in the program, four financieras accounted for 55 percent of FRAI loans by volume, representing 40 percent of the number of loans

(see Table 5). Peruinvest, alone, received more than 30 percent of loans by volume and disbursed about 20 percent of the entire number of FRAI loans.

The Industrial Bank of Peru received only 3 percent of FRAI loan funds, but disbursed 10 percent of the number of subloans. Its average size loan (\$66,000) was about one-fifth the size of loans disbursed by Peruinvest (\$369,000); smaller loans are to be expected of the development bank, given its mandate to serve smaller enterprises.

The greatest numbers of subloans was disbursed by ICIs in 1979-80 (see Table 6). The decline in the number of loans extended since then may be due to a reduction in the spread enjoyed by ICIs until early 1981; Peru's economic recession, which has lowered demand for funds; and a decline in COFIDE's promotion of the fund.

Distribution of Subloans by Region and Activity

During December 1978-September 1983, FRAI disbursed \$42.8 million through 183 loans. The Lima/Callao industrial area, alone received 45 percent of all loans (see Annex C), while the coastal region, in general, accounted for 77 percent of funds (see Tables 7 and 8). This geographic distribution reflects the highly centralized nature of Peruvian agroindustry. It reveals that the project did not achieve its aim of funding operations "where substantial members of the small farmer target group are located." [1]

The selva received almost one-fifth of funds, while the sierra accounted for an insignificant portion. The low participation of the sierra results from the lack of promotion of the program in this region and its low level of agroindustrial activity. This indicates that special efforts will have to be made if resources are to flow to this area.

TABLE 5

FRAI DISCOUNTED SUB-LOANS BY FINANCIAL INTERMEDIARIES 1978-83^[1]

| Financial Intermediary | Number of Loans Processed | | Amount of Processed Loans ^[2] | | Average Size Processed Loan/ICI |
|--|---------------------------|-----------|--|-----------|---------------------------------|
| | (number) | (percent) | (\$) | (percent) | |
| <u>Banks^[3]</u> | | | | | |
| Banco Commercial del Peru | 9 | 4.8 | 2,363,784 | 5.5 | 262,643 |
| Banco de Credito del Peru | 5 | 2.7 | 1,275,975 | 3.0 | 255,195 |
| Banco Popular del Peru | 10 | 5.4 | 1,365,760 | 3.2 | 136,576 |
| Banco Industrial del Peru | 20 | 10.6 | 1,329,017 | 3.1 | 66,301 |
| Banco Continental | 2 | 1.1 | 632,058 | 1.5 | 316,029 |
| Banco de los Andes | 5 | 2.7 | 1,299,131 | 3.0 | 259,826 |
| Banco Amazonico | 5 | 2.7 | 1,745,204 | 4.0 | 349,041 |
| Banco Regional del Norte | 3 | 1.6 | 125,649 | 0.3 | 41,883 |
| Banco Regional Sur Medio y Callao | 1 | 0.5 | 56,702 | 0.1 | 56,701 |
| Banco Wiese Ltda. | 4 | 2.2 | 1,580,580 | 3.7 | 395,145 |
| Banco de la Industria de la Construcción | 3 | 1.6 | 730,515 | 1.7 | 243,505 |
| Banco Internacional | 9 | 4.8 | 1,192,957 | 2.8 | 132,551 |
| Banco de Tokyo Ltda. | 1 | 0.5 | 491,215 | 1.1 | 491,215 |
| Banco del Sur del Peru | 3 | 1.6 | 577,116 | 1.3 | 192,385 |
| Banco de Lima | 2 | 1.1 | 336,311 | 0.8 | 168,155 |
| Banco Nor-Peru | 1 | 0.5 | 109,845 | 0.3 | 109,844 |
| Banco de Londres | 2 | 1.1 | 318,581 | 0.7 | 159,290 |
| Banco de Desarrollo de la Construcción | 1 | 0.5 | 28,517 | 0.1 | 28,517 |
| Banco Agrario | 3 | 1.6 | 191,333 | 0.4 | 63,778 |
| Banco Latino | 1 | 0.5 | 125,826 | 0.3 | 125,826 |
| Sub-Total | 90 | 47.9 | 15,876,076 | 37.0 | 192,720 |
| <u>Finance Firms^[4]</u> | | | | | |
| Peruinvest | 37 | 19.6 | 13,638,598 | 31.6 | 368,611 |
| Finsapesa | 14 | 7.4 | 3,445,470 | 8.0 | 246,105 |
| Finanpro | 17 | 9.1 | 3,575,521 | 8.3 | 210,325 |
| Fincooper | 3 | 1.6 | 776,295 | 1.8 | 258,765 |
| Promotora Peruana | 4 | 2.2 | 188,674 | 0.4 | 47,169 |
| Fonaps | 2 | 1.1 | 256,176 | 0.6 | 128,088 |
| Cofide | 3 | 1.6 | 287,356 | 0.7 | 95,785 |
| Caja de Ahorros de Lima | 3 | 1.6 | 211,217 | 0.5 | 70,406 |
| Financiera de Credito del Peru | 10 | 5.4 | 3,189,473 | 7.4 | 318,947 |
| Financiera Nacional | 2 | 1.1 | 828,853 | 2.0 | 414,426 |
| Financiera Sudamericana | 1 | 0.5 | 236,701 | 0.6 | 236,700 |
| Financiera Peruana | 2 | 1.1 | 690,612 | 1.6 | 94,337 |
| Sub-Total | 98 | 52.1 | 27,524,946 | 65.0 | 207,472 |
| TOTAL | 188 | 100.0 | 43,201,022 | 100.0 | 198,252 |

1 Source: COFIDE through August 1983.

2 \$ are calculated by converting the sole value by the exchange rate at respective dates.

3 Calculations omit two loans canceled by BCP.

4 Calculations omit one loan canceled by FCP.

TABLE 6

FRAI Rediscouted Subloans by Year and Number of
ICIs Incorporated to the Program

| <u>Financial Intermediary</u> | <u>1978</u> | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>Thru June 1983</u> | <u>TOTAL</u> | <u>% of TOTAL</u> | |
|--|----------------|-------------|-------------|-------------|-------------|-------------------------------|--------------|-----------------------|---------------|
| <u>Banks</u> | | | | | | | | | |
| 1. Comercial (BCP) | 1 | 1 | 8 | - | - | 1 | 11 | 5.73 | |
| 2. Crédito (BCr) | - | 4 | - | - | - | 1 | 5 | 2.60 | |
| 3. Popular (BFP) | - | 2 | 3 | 2 | 2 | 1 | 10 | 5.21 | |
| 4. Industrial (BIP) | - | 5 | 1 | 1 | 12 | 1 | 20 | 10.42 | |
| 5. Continental (BC) | - | 2 | - | - | - | - | 2 | 1.04 | |
| 6. Los Andes (BAN) | - | 3 | 2 | - | - | - | 5 | 2.60 | |
| 7. Amazónico (BAM) | - | 2 | 2 | 1 | - | - | 5 | 2.60 | |
| 8. Regional del Norte (BRN) | - | 2 | - | - | 1 | - | 3 | 1.56 | |
| 9. Regional Sur Medio y Callao (SMC) | - | 1 | - | - | - | - | 1 | 0.54 | |
| 10. Wiese (BW) | - | 1 | 1 | 2 | - | - | 4 | 2.08 | |
| 11. Industrial de la Construcción (BIC) | - | - | 2 | 1 | - | - | 3 | 1.56 | |
| 12. Internacional (BIN) | - | - | 3 | 2 | - | 4 | 9 | 4.69 | |
| 13. De Tokyo (BTL) | - | - | 1 | - | - | - | 1 | 0.54 | |
| 14. Del Sur del Perú (BSP) | - | - | - | 1 | 1 | 1 | 3 | 1.56 | |
| 15. De Lima (BL) | - | - | - | 2 | - | - | 2 | 1.04 | |
| 16. Nor-Perú (BNP) | - | - | - | - | 1 | - | 1 | 0.54 | |
| 17. De Londres (BLO) | - | - | - | - | 1 | 1 | 2 | 1.04 | |
| 18. Del Desarrollo de la Construcción (BDC) | - | 1* | - | - | 1 | - | 2 | 1.04 | |
| 19. Agrario (BAP) | - | - | - | - | 1 | 2 | 3 | 1.56 | |
| 20. Latino (BLA) | - | - | - | - | 1 | - | 1 | 0.54 | |
| | | | | | | Sub-Total | 93 | 48.44 | |
| <u>Finance Firms</u> | | | | | | | | | |
| 21. PERUINVEST (PRI) | 1 | 10 | 8 | 7 | 6 | 5 | 37 | 19.27 | |
| 22. San Pedro S.A. (FINSAPESA) (FIN) | - | 6 | 5 | 1 | 1 | 1 | 14 | 7.29 | |
| 23. Progreso S.A. (FINANPRO) (FNP) | - | 11 | 6 | - | - | - | 17 | 8.85 | |
| 24. FINCOPEL (FCR) | - | 3 | - | 1 | - | - | 3 | 1.56 | |
| 25. Promotora Peruana (PP) | - | 2 | 1 | 1 | - | - | 4 | 2.08 | |
| 26. FONAPS (FOM) | - | - | 2 | - | - | - | 2 | 1.04 | |
| 27. COFIDE (COF) | - | - | - | - | - | - | 3 | 1.56 | |
| 28. Caja de Ahorros de Lima (CAL) | - | 1 | - | 1 | 1 | - | 3 | 1.56 | |
| 29. Crédito (FCP) | - | - | 2 | 5 | 3 | 1 | 11 | 5.73 | |
| 30. Nacional (FN) | - | - | 1 | - | 1 | - | 2 | 1.04 | |
| 31. Sudamericana (FS) | - | - | - | 1 | - | - | 1 | 0.54 | |
| 32. Peruana (FP) | - | - | - | 1 | 1 | - | 2 | 1.04 | |
| | Totals: | 2 | 57 | 48 | 29 | 34 | 18 | 192 | 100.00 |
| | %: | 1% | 30% | 26% | 16% | 18% | 9% | 100% | |
| Number of Intermediaries Incorporated to the Project: | | | | | | | | | |
| | (A) By year | 2 | 16 | 6 | 4 | 5 | 0 | | |
| | (B) Cumulative | 2 | 18 | 24 | 28 | 33 | 33 | | |

Source: COFIDE

FRAI - SUBLOANS BY REGION AND ACTIVITY, 1978 - 83
(Current US\$)

| ACTIVITY | REGION | | | | | | | |
|---|--------|------------|--------|-----------|-------|-----------|--------|------------|
| | COSTA | | SIERRA | | SELVA | | TOTALS | |
| | N° | Amount | N° | Amount | N° | Amount | N° | Amount |
| Durable Good and Agricultural Inputs | | | | | | | | |
| 1.1 Agricultural Machinery & Equipment (3822) | 14 | 2,165,256 | - | - | 3 | 199,661 | 17 | 2,364,917 |
| 1.2 Fertilizers and Pesticides (3512) | 3 | 482,305 | - | - | - | - | 3 | 482,305 |
| 1.3 Services (1120) | 16 | 1,440,961 | 1 | 7,778 | 5 | 1,883,933 | 22 | 3,398,498 |
| Processing of Agricultural Products | | | | | | | | |
| 2.1 Slaughter houses & Meat Products (3311) | 15 | 4,820,743 | - | - | - | - | 15 | 4,820,743 |
| 2.2 Dairy & Milk Products (3112) | 5 | 1,976,958 | 1 | 428,905 | - | - | 6 | 2,405,863 |
| 2.3 Fruit & Vegetable Products (3113) | 24 | 9,507,427 | 3 | 128,173 | 1 | 373,160 | 28 | 10,008,762 |
| 2.4 Fish Products (3114) | 1 | 304,813 | - | - | - | - | 1 | 304,813 |
| 2.5 Milled Grains & Products (3116) | 5 | 307,142 | 1 | 125,156 | 5 | 531,605 | 11 | 963,904 |
| 2.6 Sugar Refineries & Products (3118) | - | - | - | - | - | - | - | - |
| 2.7 Cacao, chocolate & confectionary (3119) | 1 | 944,985 | - | - | - | - | 1 | 944,985 |
| 2.8 Misc. Non-Food Products (3121) | 14 | 2,888,810 | 1 | 31,985 | 1 | 88,998 | 16 | 3,009,792 |
| 2.9 Alcoholic Beverages (3131) (3132) | 1 | 75,495 | - | - | - | - | 1 | 75,495 |
| 2.10 Tobacco Products (3140) | - | - | - | - | - | - | - | - |
| 2.11 Non-Alcoholic Beverages (3134) | 1 | 12,257 | - | - | - | - | 1 | 12,257 |
| Processing of by-products | | | | | | | | |
| 3.1 Leather tanning & finishing & Leather Products (3233) (3240) (3231) | 8 | 1,489,947 | - | - | - | - | 8 | 1,489,947 |
| 3.2 Animal & Vegetable Fats (3115) | 6 | 1,889,365 | - | - | 5 | 2,069,520 | 11 | 3,958,885 |
| 3.3 Animal Feed (3122) | 5 | 332,910 | - | - | - | - | 5 | 332,910 |
| 3.4 Other | - | - | - | - | - | - | - | - |
| Forestry Industry | | | | | | | | |
| 4.1 Saw Mills & Wood Products (3311) (3319) | 3 | 691,828 | 1 | 103,510 | 4 | 1,233,795 | 8 | 2,029,133 |
| 4.2 Miscellaneous Wood Products (3312) | - | - | - | - | 6 | 1,475,340 | 6 | 1,475,340 |
| Other | 8 | 1,906,133 | - | - | - | - | 8 | 1,840,606 |
| Retail, Wholesale | 11 | 2,190,888 | 2 | 485,427 | 2 | 241,538 | 15 | 2,917,853 |
| TOTAL: | 141 | 33,428,304 | 10 | 1,310,933 | 32 | 8,097,630 | 183 | 42,836,867 |

Source: Derived from Cofide files. Discrepancies due to rounding.

TABLE 8 FRAI - SUBLOANS BY REGION AND ACTIVITY (*)

(in percentages)

| ACTIVITY | REGION | | | | | | | |
|---|--------------|--------------|-------------|-------------|--------------|--------------|---------------|--------------|
| | COSTA | | SIERRA | | SELVA | | TOTALS | |
| | N° | Amount | N° | Amount | N° | Amount | N° | Amount |
| 1. Durable Good and Agricultural Inputs | 18.03 | 9.54 | 0.55 | .018 | 4.37 | 4.86 | 22.95 | 14.58 |
| 1.1 Agricultural Machinery & Equipment (3822) | 7.65 | 5.05 | - | - | 1.64 | .47 | 9.29 | 5.52 |
| 1.2 Fertilizers and Pesticides (3512) | 1.64 | 1.13 | - | - | - | - | 1.64 | 1.13 |
| 1.3 Services (1120) | 8.74 | 3.36 | 0.55 | .018 | 2.73 | 4.40 | 12.02 | 7.93 |
| 2. Processing of Agricultural Products | 36.62 | 49.63 | 3.27 | 1.66 | 3.83 | 2.31 | 43.72 | 52.64 |
| 2.1 Slaughter houses & Meat Products (3311) | 0.20 | 11.25 | - | - | - | - | 8.20 | 11.25 |
| 2.2 Dairy & Milk Products (3112) | 2.73 | 4.61 | 0.54 | 1.00 | - | - | 3.27 | 5.62 |
| 2.3 Fruit & Vegetable Products (3113) | 13.11 | 22.19 | 1.64 | .29 | 6.55 | .87 | 15.30 | 23.36 |
| 2.4 Fish Products (3114) | 0.55 | .71 | - | - | - | - | 0.55 | 0.71 |
| 2.5 Milled Grains & Products (3116) | 2.73 | .72 | 0.55 | .29 | 2.73 | 1.24 | 6.01 | 2.25 |
| 2.6 Sugar Refineries & Products (3118) | - | - | - | - | - | - | - | - |
| 2.7 Cacao, chocolate & confectionary (3119) | 0.55 | 2.21 | - | - | - | - | 0.55 | 2.21 |
| 2.8 Misc. Non-Food Products (3121) | 7.65 | 6.74 | 0.54 | .07 | 0.55 | .20 | 8.74 | 7.03 |
| 2.9 Alcoholic Beverages (3131) (3132) | 0.55 | .17 | - | - | - | - | 0.55 | .18 |
| 2.10 Tobacco Products (3140) | - | - | - | - | - | - | - | - |
| 2.11 Non-Alcoholic Beverages (3134) | 0.55 | .03 | - | - | - | - | 0.55 | .03 |
| 3. Processing of by-products | 10.38 | 8.66 | - | - | 2.73 | 4.83 | 13.11 | 13.50 |
| 3.1 Leather tanning & finishing & Leather Products (3233) (3240) (3231) | 4.37 | 3.40 | - | - | - | - | 4.37 | 3.40 |
| 3.2 Animal & Vegetable Fats (3115) | 3.28 | 4.41 | - | - | 2.73 | 4.83 | 6.01 | 9.24 |
| 3.3 Animal Feed (3122) | 2.73 | .77 | - | - | - | - | 2.73 | .78 |
| 3.4 Other | - | - | - | - | - | - | - | - |
| 4. Forestry Industry | 1.64 | 1.61 | 0.55 | .24 | 5.47 | 6.32 | 7.66 | 12.48 |
| 4.1 Saw Mills & Wood Products (3311) (3319) | 1.64 | 1.61 | 0.55 | .24 | 2.19 | 2.80 | 4.38 | 4.74 |
| 4.2 Miscellaneous Wood Products (3312) | - | - | - | - | 3.28 | 3.44 | 3.28 | 3.44 |
| 5. Other | 4.37 | 4.45 | - | - | - | - | 4.37 | 4.30 |
| 6. Retail, Wholesale | 6.01 | 5.11 | 1.09 | 1.13 | 1.09 | .56 | 8.19 | 6.01 |
| TOTAL: | 77.05 | 77.99 | 5.46 | 3.05 | 17.49 | 18.98 | 100.00 | 99.98 |

Source: Derived from Table 22. Discrepancies due to rounding.

Firms that processed agricultural products received over one-half of FRAI funds, with 23 percent of FRAI funds used for fruit and vegetable product processing. Slaughterhouses, miscellaneous food product processing (including coffee, tea, coconut, and nuts) and dairy products accounted for most of the rest of the agroprocessing activities. Over 90 percent of these loans went to agroprocessing firms in the coast.

Although forestry and the processing of animal and fruit by-products received more than 20 percent of loans, some of these activities have been eliminated from the list of eligible subloans due to suspected weak backward linkages to small-scale farmers. This restriction was developed without adequate analysis of these subsectors. The leather and forestry product subsectors, for example, seem to demonstrate strong backward linkages. These products contain high percentages of domestic inputs and value added; and although wood product processors may not purchase raw materials from small-scale farmers, discussions with tanners indicate that small-scale cattlemen do provide hides to the leather industry.

Other major activities funded by FRAI were service companies that provided agricultural inputs to farmers. These loans included working capital loans to agricultural machinery dealers so that they would provide suppliers' credit to their customers. The terms and conditions of loans made to farmers were required to be identical to the soft terms received under the FRAI loan. Dealers were thereby transformed into lenders, providing a service traditionally performed by the Agrarian Credit Bank. The Agrarian Bank's inefficiency and perennial lack of funds have left a vacuum that, in the short run, may begin to be filled through this type of mechanism.

Other input services funded by FRAI have included the provision of irrigation and sprinkler systems, crop fumigation, installation of wells, agronomic technical assistance, and farm implements parts and repairs.

Thus FRAI loans have been disbursed to enterprises that fit into one of the four categories identified by AID in its project paper. Loans were concentrated in the Lima and coastal regions, despite the project's aim of promoting the geographic decentralization of agribusiness.

Ownership Groups and Size of Firms

Small firms that borrow from FRAI are not necessarily small in the sense of being independent units. Instead, they are often independent units for legal reasons (to limit liability or take advantage of special tax legislation), while constituting a part of a multi-firm group. Use of normal criteria (assets, sales, and equity) qualify these firms for loans to small and medium-size firms without access to alternative sources of finance on reasonable terms. Yet they are part of a larger group that is neither small nor without alternative sources of financing.

About 30 percent of the firms that received FRAI loans are owned in part by other companies. Several were members of the well-known Romero, Nicolini, Benavides, Banchemero, Fow Chou, Lau Kong, or Berkemeyer conglomerate groups. It is unlikely that these groups lack access to non-FRAI sources of finance.

Although the FRAI fund was not intended to be directed to enterprises that could not secure alternative, unsubsidized funds, AID should decide whether it wishes its resources to benefit those with easy access to capital. Access to alternative sources of financing should not be an automatic cause for loan refusal; however, the economic benefits of projects generated by

these groups should be carefully evaluated as well as an analysis done of whether the project would be financed even without subsidized funds.

When the project paper was written, it was assumed that "social property" and cooperatives would be major beneficiaries of the FRAI loan fund. The change in government has eliminated the political impetus to aid these high-risk borrowers whose management problems often condemn them to unprofitability. Thus only four FRAI loans went to pure cooperatives, and five were disbursed to businesses owned by cooperatives and private individuals.

Although most FRAI loans went to Peruvian enterprises, six firms had majority ownership by foreign individuals or companies. It is unusual to find development credit programs in developing countries that do not restrict funds to nationals or to certain ethnic groups within those countries. FRAI, instead, was designed to assist projects on the basis of their positive contribution to the economy, rather than serving as a credit source for preselected ethnic groups.

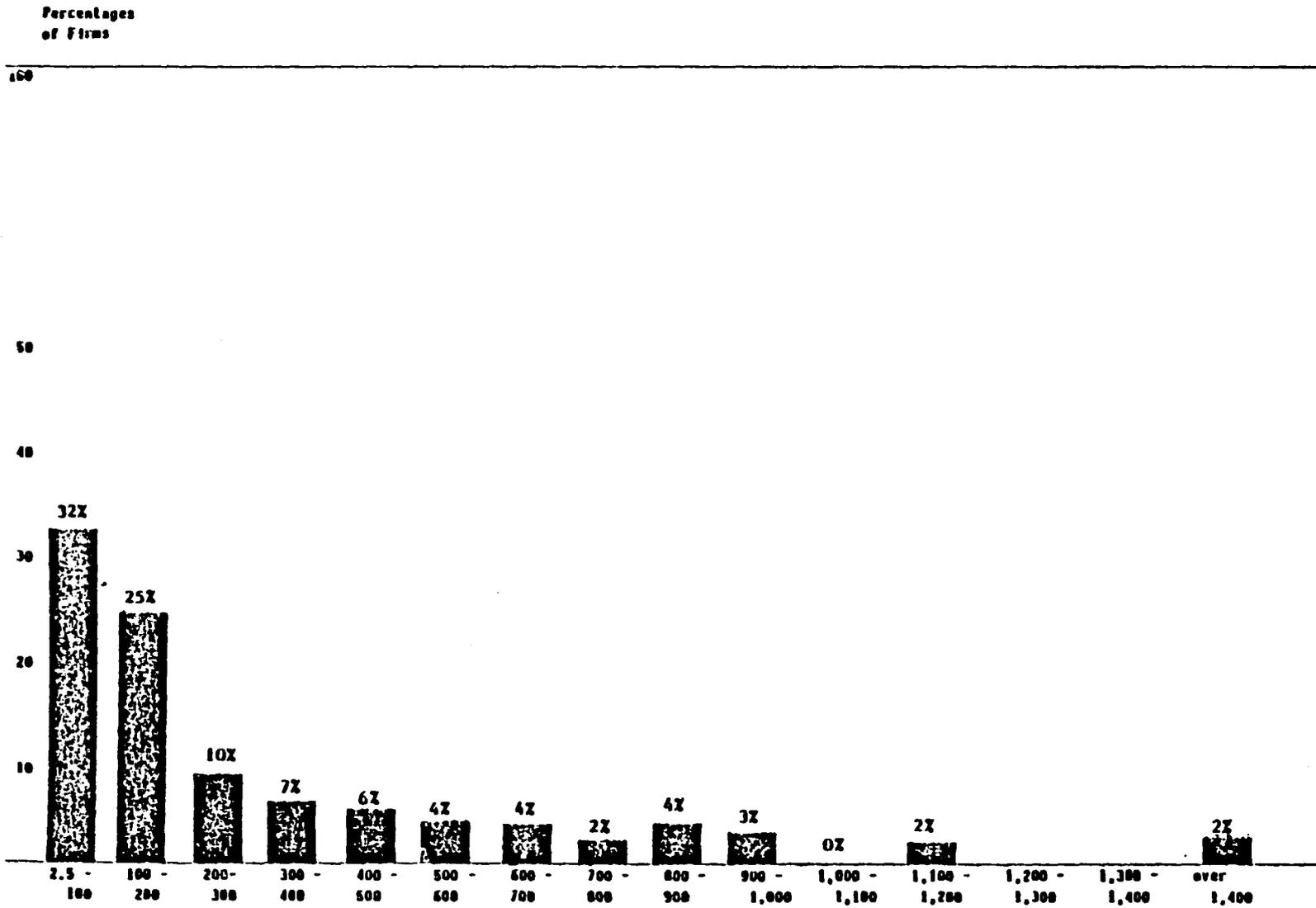
Size of Loans

The project paper correctly predicted the average FRAI loan size. It anticipated an average loan size of \$250,000; the actual average loan size was \$234,000.

However, 29 firms receiving more than one loan each received about 43 percent (\$18.8 million) of the value of disbursed loans. The average loan size per firm is \$293,000.

Almost half of the 146 subborrowers received loans less than \$150,000, as shown in Figure 1; 20 percent received loans of less than \$50,000. Loans ranged from \$2,500 to finance a feasibility study to \$2.6 million for a fruit-processing plant.

FIGURE 1
DISTRIBUTION OF LOANS BY SIZE
(in thousands of current V\$)



Distribution of Loans to New versus Existing Activities

About 37 percent of funds went to finance new activities (see Table 9). This includes existing firms that diversify into different types of operations as well as entirely new ventures. While most were located on the coast, the selva accounted for 23 percent (12 loans) of loans to new activities.

The failure rate for new enterprises is extremely high throughout the world. Thus Peruvian commercial banks particularly will shy away from funding such ventures unless their risk is covered. Either borrowers must be backed by substantial resources, or the loan must be guaranteed by an unimpeachable source. It may therefore be presumed that most of the "new activities" funded by FRAI involved the establishment of subsidiaries by existing firms or their diversification into new product lines.

NOTES

- 1 "Rural Development Agribusiness Development Fund Project Paper," p. 20.

TABLE 9DISTRIBUTION OF FRAI LOANS BY REGION AND BETWEEN NEW AND ON GOING PROJECTS

| <u>Region</u> | <u>New Projects</u> | | <u>On-Going Projects</u> | | <u>Total</u> | |
|---------------|---------------------|------------------------------|--------------------------|------------------------------|---------------|------------------------------|
| | <u>Number</u> | <u>Amount</u> <u>(\$)</u> | <u>Number</u> | <u>Amount</u> <u>(\$)</u> | <u>Number</u> | <u>Amount</u> <u>(\$)</u> |
| Costa | 38 (23.0) | 11,909,882 (29.6) | 86 (52.1) | 19,342,929 (48.1) | 124 (75.1) | 31,252,811 (77.7) |
| Sierra | 3 (1.8) | 340,133 (0.9) | 12 (7.3) | 1,941,076 (4.8) | 15 (9.1) | 2,281,209 (5.7) |
| Selva | 12 (7.3) | 2,577,647 (6.4) | 14 (8.5) | 4,099,504 (10.2) | 26 (15.8) | 6,677,151 (16.6) |
| Total | 53 (32.1) | 14,827,662 (36.9) | 112 (67.9) | 25,383,509 (63.1) | 165 (100) | 40,211,171 (100.0) |

Note: Figures in parenthesis are percentages. Amount in constant US dollars derived from converting soles at the exchange rate prevailing when the loan was approved. Information for this table was not available for 16 cases.

Source: BCR/COFIDE/FRAI files.

CHAPTER FIVE
IMPACT OF THE FRAI PROJECT

EVALUATION METHODOLOGY

Financial and economic data on the universe of 183 subloans disbursed until August 1983 was collected through an examination of FRAI files at COFIDE. Updated financial information on about 30 sub-borrowers also was obtained from five ICIs. After reviewing these files, the evaluation team visited 29 FRAI sub-borrowers in Lima, Pisco, Ica, and Tumbes (coast); Arequipa and Junin (sierra); and Tarapoto and San Martin (selva) (see Annex B for discussion of survey methodology). These interviews were to:

- Obtain first-hand, updated information on the nature, intent, and results of FRAI loans;
- Identify problems and constraints on these firms; and
- Inquire about future interests and opportunities in Peru for agroindustrial development.

CHARACTERISTICS OF SAMPLED FRAI SUB-BORROWERS

The 29 firms the evaluation team visited have received 41 loans totaling \$10.7 million (see Table 10). This represents one quarter of the amount of loans disbursed under the FRAI program. The survey covered 26 loans to coastal regions (\$8.1 million), 4 to the sierra region (\$ 1 million), and 11 to the selva region (\$1.7 million).

Respondents' economic activities provide a good reflection of the universe of loans, with 51 percent of loan amounts being used for processing of agricultural products (universe: 53 percent), 14 percent for processing of by-products (universe: 14 percent), and 9 percent for retail and wholesale trade (universe:

SURVEY DATA OF FRAI SUBLOANS BY REGION AND ACTIVITY

TABLE 10

| ACTIVITY | REGION | | | | | | | |
|---|-----------|------------------|----------|----------------|-----------|------------------|-----------|-------------------|
| | COSTA | | SIERRA | | SELVA | | TOTALS | |
| | N° | Amount | N° | Amount | N° | Amount | N° | Amount |
| 1. Durable Goods and Agricultural Inputs | 10 | 1,374,272 | - | - | 6 | 1,363,019 | 16 | 2,737,291 |
| 1.1 Agricultural Machinery & Equipment (3022) | 7 | 806,539 | - | - | 3 | 238,787 | 10 | 1,045,326 |
| 1.2 Fertilizers and Pesticides (3512) | 2 | 361,482 | - | - | - | - | 2 | 361,482 |
| 1.3 Services (1120) | 1 | 206,251 | - | - | 3 | 1,124,232 | 4 | 1,330,483 |
| 2. Processing of Agricultural Products | 10 | 4,900,508 | 3 | 522,812 | 3 | 45,571 | 16 | 5,476,891 |
| 2.1 Slaughter houses & Meat Products (3311) | 2 | 1,551,908 | - | - | - | - | 2 | 1,551,908 |
| 2.2 Dairy & Milk Products (3112) | 4 | 1,520,094 | 1 | 428,905 | - | - | 5 | 1,948,999 |
| 2.3 Fruit & Vegetable Products (3113) | 2 | 816,024 | 2 | 93,907 | 1 | 34,267 | 5 | 944,198 |
| 2.4 Fish Products (3114) | - | - | - | - | - | - | - | - |
| 2.5 Milled Grains & Products (3116) | - | - | - | - | 2 | 11,304 | 2 | 11,304 |
| 2.6 Sugar Refineries & Products (3118) | - | - | - | - | - | - | - | - |
| 2.7 Cacao, chocolate, & confectionary (3119) | 1 | 944,985 | - | - | - | - | 1 | 944,985 |
| 2.8 Misc. Non-Food Products (3121) | - | - | - | - | - | - | - | - |
| 2.9 Alcoholic Beverages (3131) (3132) | 1 | 75,495 | - | - | - | - | 1 | 75,495 |
| 2.10 Tobacco Products (3140) | - | - | - | - | - | - | - | - |
| 2.11 Non-Alcoholic Beverages (3134) | - | - | - | - | - | - | - | - |
| 3. Processing of by-products | 5 | 1,514,045 | - | - | - | - | 5 | 1,514,045 |
| 3.1 Leather tanning & finishing & Leather Products (3233) (3240) (3231) | 1 | 143,931 | - | - | - | - | 1 | 143,931 |
| 3.2 Animal & Vegetable Fats (3115) | 3 | 1,332,625 | - | - | - | - | 3 | 1,332,625 |
| 3.3 Animal Feed (3122) | 1 | 37,490 | - | - | - | - | 1 | 37,490 |
| 3.4 Other | - | - | - | - | - | - | - | - |
| 4. Forestry Industry | - | - | - | - | - | - | - | - |
| 4.1 Saw Mills & Wood Products (3311) (3319) | - | - | - | - | - | - | - | - |
| 4.2 Miscellaneous Wood Products (3312) | - | - | - | - | - | - | - | - |
| 5. Other | - | - | - | - | - | - | - | - |
| 6. Retail, Wholesale Trade | 1 | 289,471 | 1 | 399,270 | 2 | 324,082 | 4 | 1,012,823 |
| TOTAL: | 26 | 8,006,296 | 4 | 922,082 | 11 | 1,732,673 | 41 | 10,741,050 |
| Average Loan/Region | | 311,011 | | 230,520 | | 157,516 | | 261,978 |

Source: COFIDE files through August 1983. Numbers in parenthesis in first column are SIC categories. Regional breakdown made according to plan or office location where FRAI loan would be used. The dollar amounts are converted from soles at the approximate exchange rate prevailing when the loan was approved. Discrepancies due to rounding.

7 percent). Durable goods and agricultural input manufacturing and services are over-represented in the sample (26 percent of subloans versus 15 percent in the universe), since the team did not visit projects in the forestry industry. This was because these projects are no longer eligible for FRAI loans and because FRAI recipients were geographically concentrated in an area the team did not visit. (See Annex E for more information on sampled sub-borrowers' activities.)

Almost 60 percent of firms interviewed received FRAI loans shortly after they became incorporated. About one-half of these used their loans to establish new operations. Some of the newer activities promoted by the fund include producing and/or processing fruits and vegetables, cacao, chicken, dairy products, feedgrain, citrus fruits, cotton, rice, and brazil nuts; refining eucalyptus oil; and providing tractor rental services to farmers and mechanical equipment repair services.

Although five firms received loans exclusively for working capital, most were either for fixed investments or a combination of working capital and fixed investments.

FINANCIAL REVIEW OF FRAI SUB-BORROWERS

Financial data on sub-borrowers must be interpreted with caution. Several caveats must be stated prior to attempting to attribute observed financial changes to the FRAI loan:

- The FRAI period has coincided with drastic macroeconomic influences that obscure the effect of a FRAI loan on operating results. Investment results tend to be swamped by the larger issues of reduced domestic and foreign demand, inflation, and devaluation.

- Many of the agroindustrial borrowers are vertically integrated with other firms and have interlocking or common ownership groups. Some of the firms in a group may qualify for tax exemption as agricultural firms or as firms located outside the Lima area. Other firms do not qualify for special tax treatment. Intragroup pricing of products and services is designed to minimize the tax liability of the group as a whole. While this is a legal way to avoid taxes (in contrast with an illegal tax evasion), the diversion of operating profits to the lower-taxed group firms confuses the interpretation of financial statements. Operating results shown in the financial statements, to some extent, may be a product of creative bookkeeping.
- Agroindustry embraces a broad range of technology. Generalizations based on changes in aggregate ratios (capital/output, for example) can be suspect. Ratios may reflect changes in the relative weighting of firms with different technological processes rather than the effect of FRAI loans. However, the sample is too small to yield any significant results when disaggregated by technology.
- Some firms received loans from a variety of sources, thereby obscuring the impact that can be attributed solely to the FRAI loan.

In addition, the comparison of operating results before and after a FRAI loan is not trustworthy statistically because the comparison is between loans made in different years with 1982 operating results. The macroeconomic difference in the loan years clouds the association (much less attribution) of causality between the FRAI loan and operating results.

Despite these reservations, the financial analysis does yield some credible results that are consistent with expectations. Table 11 compares the financial performance of firms before they received FRAI loans and their status in 1981 and 1982. The 1981 financial information for firms that received loans in 1982 is classified within the "before-loan" category.[1] No firms receiving loans after mid-1982 were included, since not enough time had elapsed to evaluate their effect.

TABLE 11

FINANCIAL PERFORMANCE OF FRAI SUBBORROWERS
BEFORE AND AFTER LOANS

| | Before Loan | 1981 | 1982 |
|--|----------------|----------------|----------------|
| Gross Profits/Sales | .22 (n=15) | .35 (n=17) | .12 (n=23) |
| Net Profits/Sales | -.03 (n=16) | .04 (n=17) | -.08 (n=23) |
| Interest Charges/ Sales | .27 (n=15) | .17 (n=17) | .36 (n=23) |
| Interest Charges/ Net Income | 1.18 (n=15) | 3.14 (n=16) | -.67 (n=21) |
| Current Assets/ Current Liabilities | 1.34 (n=15) | 1.23 (n=17) | 2.24 (n=23) |
| Long-Term Debt/ Equity | .38 (n=15) | .46 (n=17) | .25 (n=22) |

Table 11 shows the severity of the recession in 1982 and an overall decline in sampled FRAI borrowers' performance. Gross margins declined dramatically between 1981 and 1982 as firms cut their margins when demand fell. Since net profits were negative for many firms in 1982, the burden of interest charges to net profits as well as the return on sales is correspondingly negative. The debt burden when compared with sales declined in 1981, and then became an insupportable 36 percent of sales in 1982.

However, while interest charges on outstanding debts were choking firms, the principal amount of short- and long-term debt declined. The ratio of current assets to current liabilities increased, while long-term debt to equity decreased. This reflects a situation in which firms were either unable or unwilling to borrow additional funds in 1982.

Another perspective on the sampled firms' financial condition is provided in Table 12. It compares the financial status of firms by year, irrespective of when they received their FRAI loan. Thus the 1981 figures reflect before-loan financial status for some firms and the after-loan status for others.

The result of the financial analysis is unambiguous in its comparison of 1981 and 1982 results. It reflects an unrelieved deterioration of financial performance during the deepening depression. All profit indicators are down; the volume of activity is down; unit costs of financial charges and inventory are up in relation to (reduced) sales; and liquidity is down.

Two financial indicators yield surprising results. Long-term debt/equity fell in 1982, and equity increased in absolute amounts. However, the two figures are consistent with each other as well as with the hypothesis that (a) long-term debt was

TABLE 12

FINANCIAL PERFORMANCE OF SAMPLED
FRAI SUBBORROWERS IN 1981 AND 1981

| | 1981 | 1982 | (1982-1981)+ 1981 |
|--|-----------------|------------------|----------------------|
| Gross Profits/Sales | .32 (n=22) | .09 (n=22) | |
| Net Profits/Sales | .07 (n=22) | -.09 (n=22) | |
| Interest Charges/Sales | .15 (n=22) | .38 (n=22) | |
| Interest Charges/ Net Profits | 82.40 (n=22) | 126.10 (n=22) | |
| Sales/Assets | 1.08 (n=22) | .96 (n=22) | |
| Inventory/Sales | .24 (n=22) | .30 (n=22) | |
| Net Profits/Equity | 1.94 (n=22) | .27 (n=22) | |
| Current Assets/ Current Liabilities | 1.25 (n=20) | 1.12 (n=20) | |
| Long-Term Debt/Equity | .44 (n=22) | .25 (n=22) | |
| Change in Sales 1981-82 | | | -.09 |
| Change in Gross Pro- fits 1981-82 | | | -.12 |
| Change in Net Profits 1981-82 | | | -.08 |
| Change in Equity 1981-82 | | | .17 |

not renewed as it was amortized during the recession and (b) the scarcity of loanable funds forced firms to substitute equity increases for long-term loans.

The calculation of IRR was not useful in comparing projected and actual returns. The IRR calculated by COFIDE are so high that they are not credible, while actual IRR cannot be calculated since net profits for many firms have been negative in recent years.

The expected versus actual IRR and IERR calculated for about 10 firms indicates that they fall short of projections. Benefits were less, and costs were higher than expected. Although the current recession has caused a decline in operating levels and profits, the gap between actual and anticipated performance reflects primarily the unrealistic assumptions used in calculating the expected IRR.

REACHING THE TARGET GROUP

AID's traditional target group, "the poor majority," was intended to benefit indirectly from this project. As stated in the project paper:

Benefits generated under the proposed project will accrue to two major groups: (i) the entrepreneurs (private, social property or cooperatives) and (ii) small farmers, both individual and in groups, who will receive benefits in the form of lowered input costs, more efficient marketing systems, medium term working capital for effecting production shifts and a more stable market for their crops. [2]

Survey results indicate that in some cases small-scale farmers did benefit indirectly from the FRAI loan recipient's activities; in other cases, they did not. Many firms bought their raw material inputs from wholesalers and larger farmers, since

dealing directly with small suppliers is costly. Thus many FRAI sub-borrowers do not know who actually produces these inputs. However, some of the interviewed sub-borrowers, those involved in dairy product processing, do purchase directly from small- and medium-scale local cattlemen.

Industries that import their raw material inputs (Vina Ocucaje imports grape mash from Argentina rather than buying from a nearby grape-producing cooperative; a chicken broiler operation imports all of its chicken feed ingredients from the United States) had little effect on local farmers. Tractor loans disbursed by Enrique Ferreyros and Maquinarias Arequipa went to medium- and large-scale farmers. These farmers, in turn, may rent their tractor services to those with smaller land holdings. However, the current lack of credit for farmers could inhibit their ability to take advantage of this service.

Agroprocessing projects that rely upon small- and medium-scale farmers as their source of supply usually generate benefits that vary greatly as the project matures.[3] Initially, the processing plant management often initiate promotional campaigns and offer high prices to induce local farmers to switch to the crop that the plant needs. An evaluation conducted at this moment would detect high direct and indirect income and employment benefits.

However, once these promotional campaigns achieve their purpose of ensuring adequate sources of input supply, then a process of normalization begins during which profit maximization becomes the processor's key incentive. Prices drop, standards become higher, and any subsidies that were originally offered are reduced or eliminated. Any impact evaluation should be conducted several years after the normalization period has begun to determine the project's actual long-run benefits.

Most agroprocessors interviewed by the evaluation team were in the early period. This was either because the firm was relatively new or, more often, because poor weather had drastically cut their supply of agricultural raw materials. Thus many were determining strategies by which they could help increase agricultural production in their region.

EMPLOYMENT GENERATION

The FRAI project was expected to generate a relatively high number of jobs within assisted agribusinesses. The project paper estimated that approximately 144 subprojects would be implemented during the first five years of the project. Each subproject was expected to generate 40-60 new direct jobs, or a total of about 7,200 new jobs at the enterprise level. Since the average loan size was estimated to be \$234,000, this yields a total investment of about \$306,000, when ICI (10 percent of loan amount) and sub-borrower contributions (15 percent of investment) are included. The marginal capital cost per new direct job was thus assumed to be only about \$6,120.

The actual direct employment effect of the FRAI project was much less than anticipated. Although the number of new jobs created surely would have been greater if the general economic situation had been better, the estimates in the project paper still would have been high. Loan applications estimated that the 41 loans received by the sample group would create 1,032 jobs at an average cost per job of about \$18,000 (see Table 13). These loans actually created 329 direct jobs at an average investment cost per job of \$46,300. If these firms are an accurate reflection of the universe of sub-borrowers, then the FRAI project has generated about 1,310 new direct jobs to date.

The marginal cost of a new jobs created within assisted firms is higher than projected for several reasons:

TABLE 13

EXPECTED VERSUS ACTUAL DIRECT JOBS
CREATED BY SURVEYED FIRMS

| Expected Job to be Created per Loan | Expected Cost/Job | Actual New Investment | Actual Jobs Created |
|--|----------------------|--------------------------|------------------------|
| 42 | 8,704 | 365,549 | -20 |
| NE | | 908,319 | 13 |
| 82 | 10,889 | 892,857 | -30 |
| 0 | | 635,294 | 0 |
| 27 | 12,783 | 345,143 | 36 |
| NE | | 131,406 | 0 |
| 20 | 8,482 | 169,643 | 0 |
| 34 | 6,696 | 227,679 | NA |
| NE | | 619,374 | 6 |
| NE | | 1,227,332 | 0 |
| 7 | 2,999 | 20,993 | 9 |
| 7 | 2,999 | 20,993 | 0 |
| 8 | 6,051 | 48,404 | 0 |
| 58 | 5,557 | 322,330 | 180 |
| 45 | 39,557 | 1,780,064 | 6 |
| 18 | 59,858 | 1,077,441 | 0 |
| NE | | 588,235 | 0 |
| 110 | 1,086 | 119,506 | 0 |
| 50 | 3,583 | 179,147 | 65 |
| NE | | 65,309 | 0 |
| 35 | 469 | 16,424 | -24 |
| NE | | 639,656 | 8 |
| 229 | 3,275 | 750,000 | NA |
| 21 | 11,905 | 250,000 | 22 |
| 3 | 7,921 | 23,764 | 0 |
| 4 | 14,118 | 56,471 | 3 |
| 8 | 9,650 | 77,204 | 0 |
| NE | | 51,603 | 0 |
| 7 | 24,029 | 168,200 | 0 |
| 24 | 10,677 | 256,242 | 15 |
| 7 | 142,857 | 1,000,000 | 9 |
| 67 | 2,393 | 160,325 | 0 |
| 5 | 15,029 | 75,146 | 11 |
| 20 | 50,298 | 1,005,961 | 20 |
| 20 | 15,625 | 312,500 | 0 |
| 0 | | 1,050,095 | 0 |
| 74 | 3,811 | 282,000 | 0 |
| NE | | 80,752 | 0 |
| NE | | 149,791 | 0 |
| 0 | | 31,000 | 0 |
| 0 | | 30,789 | 0 |
| Total | <u>1,032</u> | <u>16,212,941</u> | <u>329</u> |
| Average | <u>33</u> | <u>395,438</u> | <u>8</u> |

NE = Not estimated
NA = Not available

- In some cases, the expected employment generation effect stated in loan applications was unrealistically high;
- Plant capacity is being underutilized; and
- Agroindustry is capital-intensive in Peru.

The relatively high cost per job, however, does not reflect the true impact of agroindustrial investment. The true measure should include the increase in employment (and the increased productivity of underemployed labor) of workers who otherwise would not be employed. This indirect employment effect, which can be significantly higher than the direct employment effect, must be included to measure the economic impact of agroindustry investment.

The project paper estimated that FRAI loans would create new jobs for 14,400 farm laborers. It was estimated that each new factory job would create two new agricultural jobs. Unfortunately, the indirect employment effect of loans could not be determined. The backward employment effect of FRAI loans was weak among firms that import raw material inputs (such as Leche La Gloria and Avicola San Fernando). However, the forward employment effect (marketing agents) may be significant.

Since farmers in disaster areas currently cannot afford to rent or buy tractors and other costly agricultural inputs, the indirect employment effect of agricultural machinery production and other input marketing services is now low. However, discussions with agricultural input suppliers and farmers indicate that the potential indirect employment effect of increasing the amount of cultivated land is substantial. Substitution of capital equipment for labor on land already cultivated would have the opposite effect.

The indirect employment effect that could normally be expected from certain agroprocessing activities was reduced due to government policies. For example, rice-processing plants normally should help to create a demand for rice, and thus generate farmer employment. In Peru, however, they cannot perform this function well. Since the government sets rice and milling prices, as well as imposes a quota on the amount of rice that each mill may process, the mill's effect on rice production is extremely low. Until 1982, the same situation existed with cotton. Prices were maintained at extremely low levels during 1981 and 1982 (no change in price occurred despite raging inflation), so that the 1983 crop was extremely low. However, now that the government has removed itself from cotton marketing and prices have jumped, the future income and employment effect of cotton ginning activities can be expected to be more positive.

CAPITAL INTENSITY OF AGROINDUSTRY

Peruvian industry is capital-intensive compared with its resource base. A number of institutional and legal considerations bias investment decisions toward a more capital-intensive technology than would be indicated by the resource base itself. These considerations include the following:

- Sector financial policy subsidizes investment capital. Although government policy has been to increase real interest rates, investment capital continues to be available at negative real interest rates and has to be rationed by extra pricing devices. Inflationary expectations justify the selection of capital-intensive technologies that use relatively more of the cheaper (subsidized capital) input;
- The real cost of capital is lowered by charging low or zero import duties on machinery;
- Tax advantages favor investments outside the Lima metropolitan area, where labor skills are scarcer and the advantages of economizing on labor by using more capital are correspondingly greater;

- Since labor legislation makes it difficult to dismiss workers, management tends to economize on the use of labor; and
- Export incentives (CERTEX, FENT) provide an inducement to produce for export markets, where quality is a more important consideration than in the domestic markets. This promotes more reliance on machines rather than on labor.

UTILIZATION OF PLANT CAPACITY

Most of the survey respondents were operating at levels significantly below capacity. The number of operating hours per day as well as the number of work days per week had been cut. This trend was attributed largely to lack of demand, a shortage of working capital, and, in some cases, a lack of raw materials.

IMPACT ON GROSS DOMESTIC PRODUCT AND THE BALANCE OF PAYMENTS

The project paper expected the FRAI loans to "contribute significantly towards reversing actual productivity declines, thereby stimulating the diminishing contribution of the agriculture sector to GDP." In addition, "an absolute increase in the value of agricultural exports and a slowdown in the rising percentage of imports going towards food products" were expected to improve the negative balance of payments situation existing at the time of project design.

Not surprisingly, the FRAI program cannot counteract the devastation caused by floods in the north and drought in the south. However, firms established through FRAI should contribute to the recovery process and spur agricultural production in the future.

Although FRAI has helped to establish some export industries (including brazil nut processing and cacao), and some import substitution firms (cheese production), their effect on Peru's balance of payments to date has been insignificant.

FRAI CONTRIBUTION TO THE ELIMINATION OF CONSTRAINTS ON AGRICULTURAL DEVELOPMENT

The extent to which these enterprises have contributed to the elimination of the four constraints identified in the project paper is mixed and can only be analyzed on a case basis. The devastating current economic situation prevents a meaningful analysis of FRAI sub-borrowers' ability to address the constraints identified in 1977 and has created new constraints on agroindustry growth.

The PIF and FRAI projects assumed that credit was the key constraint on agribusiness development. The provision of subsidized medium- and long-term credit, it was hypothesized, would lead to the establishment or expansion of self-sustaining agrobusinesses, which in turn would stimulate agricultural production, income, and employment. However, the fact that only 40 percent of FRAI funds are being used indicates that lack of medium- and long-term credit is not a constraint for many firms at this time. The problems affecting agribusiness development are more complicated and difficult to resolve than those identified in the FRAI Project Paper; if they are not addressed, this sector's potential to improve rural incomes will not be achieved.

NOTES

- 1 Some firms di not have financial information for years prior to 1981 and 1982 even though they had received loans prior to 1982; others had information from all three years -- before loan, 1981, and 1982; all financial information has been included to give a better idea of financial trends.
- 2 FRAI Project Paper, p. 74.
- 3 For example, see The Social Impact of Agrobusiness: A Case Study of Asparagus Canning in Peru by Ken Kusterer, AID, February 1982.

EXCHANGE RATE FOR THE PERUVIAN SOLE

| | Number of Soles per U.S. dollar at end of period |
|----------|---|
| 1974 | 43.38 |
| 1975 | 45.00 |
| 1976 | 69.37 |
| 1977 | 131.56 |
| 1978 | 196.68 |
| 1979 | 250.75 |
| 1980 | 342.61 |
| 1981 | 508.36 |
| 1982 | 992.14 |
| 1983 | |
| January | 1,064.19 |
| February | 1,134.62 |

SELECTED BIBLIOGRAPHY

AID/Peru. Loan Completion Report of Loan 527-L-051 for Private Investment Fund. August 1976.

_____. Private Investment Fund Project Paper.

_____. "Reporting on El Nino Disasters." Cables sent 4/24/83-7/3/83.

_____. Rural Development Agribusiness Fund Loan Agreement.

_____. Rural Development Agribusiness Fund Project Paper.

AID/Peru. Office of Agriculture and Rural Development. Agriculture in Peru and its Changing Role in the National Economy: A Proposed USAID Strategy for Assistance. June 1983.

American Embassy/Lima. Labor Trends in Peru. April 1981/October 1982.

American Embassy/Lima. Commercial Attache. Market Survey: Food Processing and Packaging Machinery in Peru.

Austin, James E. Agroindustrial Project Analysis. Economic Development Institute of the World Bank. Baltimore and London: Johns Hopkins University Press, 1981.

Banco Central de Reserva del Peru. Boletin del Banco Central de Reserva del Peru. Lima, February 1983.

Banco Industrial del Peru. Programa Integral para el Desarrollo de la Agroindustria (PROINDA). June 1983.

Boucher, Michael. "Some Further Results on the Linkage Hypothesis," Quarterly Journal of Economics. Vol. XC, No. 2, May 1976.

CODIFE. Annual Reports, 1978-1982.

_____. FRAI-Manual de Credito.

_____. Guia Para el Empresario.

Compania Peruana de Seguro de Credito a la Exportacion (SECREX). Annual Report, 1981.

Cooperative Resources Committee. Cooperative Status Assessment and Development Strategy for Peru.

Coopers and Lybrand. Peru-USAID Strategy for Economic Development: Draft Final Report. May 1983.

Previous Page Blank

- Daines, Samuel R. Agribusiness and Rural Enterprise Project Analysis Manual. Practical Concepts, Inc., March 1979.
- Espino, Cesar. Statistical Review and Analysis of Promotion Related Activities for the Rural Development Agrobusiness Fund Project. Loan 527-T-060 Memorandum. September 16, 1982.
- GAMCO, Inc. Comments and Recommendations Concerning the Proposed Rural Agribusiness Fund. June 1977.
- Gittinger, J. Price. Economic Analysis of Agriculture Projects. Development Institute of the World Bank. Baltimore and London: Johns Hopkins University Press, 1981.
- Harrison, Kelly. "Public Policies and the Development of Effective Agricultural Marketing Systems," Proceedings of the Seminar on Agricultural Policy: A Limiting Factor in the Development Process. Washington, D.C.: Inter-American Development Bank, 1975.
- Hirschman, Albert O. The Strategy of Economic Development. New Haven: Yale University Press, 1958.
- Koenig, Nathan. An Economic Review of the Agricultural Sector of Peru, Latin America and the Caribbean Regional Office Country Programs Department (confidential). IBRD, June 30, 1981.
- Kusterer, Kenneth. The Social Impact of Agribusiness: A Case Study of Asparagus Canning in Peru. Agency for International Development (LAC/PP/PPE), February 1982.
- Mann, Fred. Agricultural Services Development for the Sierra of Peru. Lima: USAID, undated.
- McClintock, Cynthia, and Lowenthan, Abraham. The Peruvian Experiment Reconsidered. Princeton, New Jersey: Princeton University Press, 1983.
- Ministerio de Industria, Turismo e Integracion Oficina de Estadistica. Clasificacion Industrial Internacional Uniforme. 1982.
- Reca, Lucio G. An Evaluation of the Agribusiness Rediscount Fund. June 1980.
- Salavery, Jose A. El Credito Agrario en el Peru. Banco Central de Reserva del Peru, January 1983.
- Semi-Annual Loan Review. June 1975.

U.S. Presidential Mission. Report of the U.S. Presidential Agricultural Mission to Peru. April 1982.

Wohanka, George. (Credit Adviser AID/Peru). Memorandums on Indexation. March 1982.

World Bank. Peru: Major Development Policy Issues and Recommendations. two vols. April 1981.

_____. Sector Report on Marketing and Pricing Policies of Agricultural Products. (Office Memorandum from A.J.H Otten). June 1981.

_____. Staff Appraisal Report: Peru Alto Mayo Rural Development Project. Latin America and the Caribbean Regional Projects Department, November 1982.

Yotopoulos, Pan, and Nugent, Jeffrey. "A Balanced Growth Version of the Linkage Hypothesis: A Test," Quarterly Journal of Economics. Vol. XC, No. 2, May 1973.

ANNEX A
LIST OF KEY PERSONS CONSULTED

ANNEX A

LIST OF KEY PERSONS CONSULTED*

Corporacion Financiera de Desarrollo (COFIDE)/Lima Office

| | | |
|--------------------|--------|-----------|
| Carlos Neuhaus | COFIDE | Director |
| Carlos Klinge | COFIDE | Manager |
| Carlos del Rosario | COFIDE | Manager |
| Rosa Pareja Diaz | COFIDE | Assistant |

FINANCIAL INTERMEDIARIES/LIMA OFFICES

| | | |
|-------------------------|---------------------------------------|--------------------------------------|
| Luis Castillo Telleria | Peruinvest | Credit Manager |
| Balthuzar Asencios R. | Peruinvest | Assistant Manager |
| Carmen Rosa Martorellet | Peruinvest | Head of Project Evaluation |
| Jorge Alvarado V. | Banco Industrial del Peru | Adjunct Ass't Manager of Credit |
| Alberto Salazar | Financiera San Pedro | Manager |
| Ernesto Bettocchi | FINANPRO | General Manager |
| Luis Barua Castaneda | FINANPRO | Executive Director |
| Jose Cortez R. | Financiera del Credito del Peru | Credit Manager |
| Federico Melo | Banco de la Vivienda del Peru | Manager, Int'l Dept. |
| Alejandro Chironos | Banco Industrial del Peru | Assistant Manager Planning Office |

* This list does not include sub-borrowers interviewed for the FRAI survey.

63

| | | |
|-------------------|---------------------------|---------------------------|
| Peggy Baldwin | Banco Industrial del Peru | Manager |
| Jorge Alvarado V. | Banco Industrial del Peru | Adjunct Ass't Manager |
| Armando Olortegui | Banco Industrial/ FENT | Chief, Financial Analysis |

GOVERNMENT OF PERU OFFICIALS

| | | |
|------------------------|--|--------------------------|
| Balisno Esteves O. | Ministry of Commerce | Adviser |
| Luis Perez | Ministry of Economics Minister | Adviser to Vice- |
| Rene Rodriguez Heredia | Instituto de Investigacion y Desarrollo de la Autogestion (INDA) | General Manager |
| Miguel Fort | Instituto Nacional de Desarrollo Agroindustrial | Chief |
| Isabel Roncal de Oyola | Direccion de Estadistica Ministerio de Industrias | Chief |
| Pedro Menendez | Ministerio de Industria | Chief, Sectoral Planning |
| Luis Cabieses | Oficina Nacional de Alimentacion | Manager |
| Arturo Calderon | Fundacion Para la Investigacion y Desarrollo de Recursos y Tecnologias | Adviser |
| Hugo Gallegos | CORDEANCASH | Staff |
| Carlos Torrejon | CORDEANCASH | Staff |

PRIVATE SECTOR REPRESENTATIVES

| | | |
|-----------------------|---------------------------------|---------------------------------|
| Alfredo Olaechea | Sociedad Nacional de Industrias | Director |
| Nestor Pedraza | Sociedad Nacional de Industrias | Legal Dep't |
| Gonzalo Garland | Asociacion de Exportadores | President |
| Gaston Benza Pflucker | Asociacion de Exportadores | Director |
| Eduardo Watson | | Private Consultant and Investor |

EDUCATIONAL/TRAINING INSTITUTIONS

| | | |
|------------------------------|--|-------------------------------------|
| Nissim Alcabes | Escuela de Administracion de Negocios para Graduados | Administrative Director |
| Rev. Raymundo Villagrasa | Universidad del Pacifico | Acting Rector |
| Eulogio Romero | Universidad del Pacifico | Management Post-Graduate Department |
| Dr. Alfredo Palomino | Instituto Peruano de Administration de Empresas | Director of Programs |
| Luciano del Castillo Vasquez | Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI) | Chief, Training Division |
| Artenio Villalobos Davila | SENATI | Chief, Projects Department |
| Luciano del Castillo Vasquez | SENATI | Chief, Training Division |

65

| | | |
|------------------------------|--------|-------------------------------|
| Artenio Villalobos Davila | SENATI | Chief, Projects Department |
| Jaime Espinoza | ALIDE | General Adviser |

AGRIBUSINESS DEVELOPMENT INSTITUTIONS

| | | |
|-----------------------------|--|--|
| Hernando Otero | Acuerdo Cartagena | Staff Member |
| Bolivar Patino Guardiola | Fondo de Promocion de Exportaciones No Tradicionales (FOPEX) | Promotion Manager |
| Charles Morin | FOPEX | Chief, Agricul- tural Products Promotion |
| Javier Lamarque | Compania Peruana de Apoderado Seguro de Credito a la Expor- tacion (SECREX) | Manager |
| Luis Vega Castro | Technoserve | General Manager |

AREQUIPA CONTACTS

| | | |
|------------------------------|-------------------------------|-----------------------------|
| Maximo Valdivia | FOPEX/ Chamber of Commerce | Staff |
| Julio Velazco Linares | Project Majes | Director |
| Victor Vignolo Castellano | COFIDE | Chief, Credit Department |

SAN RAMON CONTACTS

| | | |
|--------------------|------------------------------|--------------------------|
| Jorge Leon Briones | Banco Industrial del Peru | Chief, Credit Section |
|--------------------|------------------------------|--------------------------|

ICA CONTACTS

| | | |
|----------------------------|--|-----------|
| Jorge Rebagliati Garcia | Corporacion Departamental de Desarrollo de Ica | President |
|----------------------------|--|-----------|

TARAPOTO CONTACTS

| | | |
|----------------------------|------------------------------|----------------------------------|
| Nicanor Rodriguez Silva | Huallaga Central Project | Planning and Evaluation Chief |
| Herbert Koenig Villacis | Banco Industrial del Peru | Administrator |
| Roger Reategui Rengifo | Banco Amazonico | General Manager |

TINGO MARIA CONTACTS

| | | |
|-------------------------|--|---|
| RamonCornejoSaavedra | Proyecto Especial | Executive |
| Jose Perea Caceres | | Assistant Director |
| Jorge Santa Cruz Diaz | Proyecto Especial Alto Huallaga | Chief Public Relations and Communications |
| Raul Palacios | | Technical Director |
| Manuel Feijoo | | Technical Coordi- nator |
| Luis Lossio Piniella | | AssistantDirector of Marketing and Agroindustries |
| Rene Rodriguez Heredia, | Instituto de Investigacion y Desarrollo de la Autogestion (INDA) | General Manager |
| Julio Montoya | Banco Agrario | Administrator |
| Gustavo Mundaca | Comite Nacional de Productores De Arroz y Organizacion Nacional Agraria | President |

U.S. GOVERNMENT STAFF

| | | |
|----------------|------------|-----------------|
| John Sanbrailo | USAID/Lima | Director |
| George Hill | | Deputy Director |

| | | |
|----------------------|--|------------------------------|
| David Bathrick | | Chief, Agriculture Office |
| Robert Maushammer | | Chief, Program Office |
| Mary Likar | | Loan Officer |
| Danilo Cruz de Paula | | Program Officer |
| Bob Burke | | Economist |
| George Wachtenheim | | Chief, Development Resources |
| George Wohanka | | Credit Adviser |
| Fred Mann | | Agriculture Office |

| | | |
|-----------------|--------------|-------------------------|
| Thomas P. Clary | U.S. Embassy | Commercial Attache |
| Luis Arrese | U.S. Embassy | Agricultural Specialist |
| Ken Murray | U.S. Embassy | Agricultural Attache |

INTERNATIONAL DONORS

| | | |
|----------------|---|------------------------------|
| Hector Lopez | Interamerican Development Bank | Agriculture Specialist |
| Andre Godin | Canadian International Development Agency | Adviser |
| Anthony Takken | United Nations Industrial Development Program | Staff |
| Reynaldo Ortiz | International Finance Corporation | Investment Officer |
| Urich Thumm | International Bank for Reconstruction and Development | Peru Resident Representative |

ANNEX B
EVALUATION METHODOLOGY

ANNEX B

EVALUATION METHODOLOGY

Three data collection methods were used to analyze sub-borrowers of the FRAI loan program:

- * Examining records at both COFIDE's Central Office in Lima and selected branch offices;
- * Administering questionnaires to a sample of the FRAI sub-borrowers and examining their records; and,
- * Conducting interviews and examining records of intermediary banks in Lima and selected branch offices.

Central Records

COFIDE records were examined in Lima. All 183 files, on loans disbursed July 1983, were used to derive information on the following:

- * Location, type, and amount of loan(s) as well as the firms characteristics;
- * Identification of intermediary bank, location and direct amount added to the loan;
- * Financial history and performance of sub-borrowers:

Evaluation Methodology

origin of firm, pre-loan sales, import requirements, gross and net incomes, and liabilities at the time of loan disbursements; and,

- * Impact information: salaries paid, number and type of workers employed, wages, type of equipment and expected purchases by firm.

The above was combined with an analysis of ICI records on about 30 subborrowers and statistics gathered from appropriate government of Peru Ministeries. Ministry records were used to identify the general universe of agro-industrial business in Peru.

Financial and Business Survey of FRAI Sub-borrowers

A list of agribusiness establishments was prepared from COFIDE records. Given time and distance constraints we selected 30 businesses from 180 possible enterprises. The sample represented a cross section of agribusiness activities and geographic spread (designed to cover the Sierra, Coast and tropical jungle regions). Contact was made with the sample firms by telephone by COFIDE in order to briefly describe the project, identify our AID affiliations and to arrange a date. Background research at COFIDE on the businesses preceded each interview. Interviews were held

Evaluation Methodology

in August 1983 at the plant and on Offices of the business. In some cases additional interviews were held in Lima where financial records were held.

A questionnaire was prepared for each interview. Initial discussion and/or tours at each place elicited general information on the business operation and management. Often these introductions helped to alert us to important features about the business that required further inquiry. The respondent was encouraged to discuss specific actions, events or processes of which he or she had direct knowledge.

We also encouraged the respondent to provide generalizations or impressions on questions regarding the prospects for agribusiness and potentially profitable investments. We promised all the interviewees that their conversations would be confidential and that information provided would not be attributed to them or necessarily to their business or employer. We took extensive notes during the meetings and did not rely on mechanical recording devices. Interviews, tours and general discussions lasted an average of 2 hours.

Two team members were involved in each of the interviews. In Tarapoto and Ica COFIDE's information officer accompanied the DAI team member. The questionnaire was divided into 7 sections:

* the firm's general input requirements and productive

72

Evaluation Methodology

- capacity of the firm;
- * problems with marketing and trade;
- * the supply and acquisition of raw materials;
- * technical aspects of processing and energy requirements of the firm;
- * financial problems and credit needs;
- * problems in labor relations, training and supply; and,
- * government policies affecting business operations.

Attempts were made to interview the business owners. In some cases involving large firms, business managers were interviewed. Those interviewed were also asked to supply the interviewers with business records at least through December 1982. In some cases this involves further discussions with the businesses' administrator or accountant.

In no instance were the interviewers refused. Business owners and managers were very cooperative with the interviewing teams.

Financial Intermediaries

At the end of July 1983, there were 17 private banks and 13 financieras (e.g. Peruinvest, FONAPS, COFIDE, Caja de Ahorros de Lima) which provided FRAI rediscounted sub-loans. Of these, 5 were visited in Lima and in some branch locations for information on the repayment records of firms and on the quantity and quality of applications submitted for FRAI loans.

ANNEX C

DISTRIBUTION OF FRAI DISCOUNTED
SUB-LOANS BY DEPARTMENT; 1978-83

ANNEX C

Distribution of FRAI Discounted Sub-Loans by Department, 1978-83 */

| Department | Loans | | US\$ Value of Processed Loans | | Average Size Loan |
|-------------------|--------|--------|-------------------------------|------------|-------------------|
| | Number | (%) | Amount | % of Total | |
| 1. Amazonas | 1 | 0.56 | 133,036.56 | 0.33 | 133,037 |
| 2. Ancash | 3 | 1.68 | 1'068,464.55 | 2.68 | 356,155 |
| 3. Arequipa | 8 | 4.47 | 2'077,222.68 | 5.20 | 259,653 |
| 4. Ayacucho | 2 | 1.12 | 355,724.65 | 0.89 | 177,862 |
| 5. Bagua | 1 | 0.56 | 88,997.07 | 0.22 | 88,997 |
| 6. Cajamarca | 1 | 0.56 | 170,018.69 | 0.43 | 170,019 |
| 7. Cuzco | 4 | 2.23 | 257,428.33 | 0.64 | 64,357 |
| 8. Ica/Pisco | 13 | 7.26 | 365,575.29 | 0.92 | 258,890 |
| 9. Iquitos | 5 | 2.79 | 1'685,664.00 | 4.22 | 337,132 |
| 10. Junín | 3 | 1.68 | 128,173.39 | 0.32 | 42,725 |
| 11. La Libertad | 12 | 6.70 | 3'486,781.74 | 8.73 | 290,565 |
| 12. Lambayeque | 5 | 2.79 | 3'422,957.70 | 8.57 | 684,592 |
| 13. Lima/Callao | 80 | 44.69 | 17'982,867.79 | 45.03 | 224,786 |
| 14. Madre de Dios | 1 | 0.56 | 242,495.70 | 0.61 | 242,496 |
| 15. Piura | 12 | 6.70 | 1'922,272.06 | 4.81 | 160,189 |
| 16. Pucallpa | 8 | 4.47 | 2'004,782.16 | 5.02 | 250,597 |
| 17. San Martín | 14 | 7.82 | 3'703,737.18 | 9.27 | 264,555 |
| 18. Tarapoto | 2 | 1.12 | 196,785.79 | 0.49 | 98,393 |
| 19. Tumbes | 4 | 2.23 | 644,083.73 | 1.61 | 161,021 |
| TOTALS | 179 | 100.00 | 39'937,069.06 | 100.00 | 223,112 |

*/ Source: COFIDE files through August 83; conversion to dollar from soles based on exchange rates of the respective periods. This table omits consideration of 3 cancelled loans since no funds were disbursed.

75

ANNEX D
COFIDE FINANCIAL STATEMENTS

ANNEX D

COFIDEIncome Statement
(US\$ Millions equivalent)

| | <u>1982</u> | <u>1981</u> | <u>1980</u> * | <u>1979</u> * | <u>1978</u> * |
|------------------------------|-------------|-------------|---------------|---------------|---------------|
| <u>INCOME</u> | | | | | |
| Interest | 71.3 | 62.3 | | | |
| Commissions | 3.8 | 2.7 | | | |
| Dividends | 4.8 | 5.3 | | | |
| Guarantees | 4.1 | 3.4 | | | |
| Other | <u>15.3</u> | <u>13.5</u> | | | |
| Total Income | <u>99.3</u> | <u>87.2</u> | <u>58.6</u> | <u>58.8</u> | <u>49.0</u> |
| <u>EXPENSES</u> | | | | | |
| Interest | 62.5 | 52.4 | | | |
| Personnel and Administration | 6.1 | 5.6 | | | |
| Reserve Funds | 12.2 | 9.3 | | | |
| Other | <u>8.1</u> | <u>8.7</u> | | | |
| Net Income | <u>10.4</u> | <u>11.2</u> | 7.2 | 9.1 | 4.4 |
| Total Expenses | 88.9 | 76.0 | | | |

SOURCE: COFIDE ANNUAL REPORTS

* FURTHER BREAKDOWN ON INCOME AND EXPENSES NOT AVAILABLE

COFIDE

Balance Sheet ^a
(US\$ millions equivalent)

| | 31 December | | | | |
|----------------------------|--------------|--------------|---------------------|--------------|--------------|
| | 1982 | 1981 | 1980 | 1979 | 1978 |
| <u>ASSETS</u> | | | | | |
| Cash on hand + in Banks | 11.8 | 16.2 | 25.1 | 29.9 | |
| Loans & liquid investments | 140 | 141.5 | | | |
| Accounts receivable | 42.6 | 24.3 | 19.9 | 15.7 | |
| Other | 0.3 | 0.8 | | | |
| Current Assets | <u>195.0</u> | <u>182.8</u> | | | |
| Long-term loans | 351.1 | 367.7 | 198.1 ^{a/} | | |
| Investments | 52.7 | 21.5 | 257.5 ^{a/} | | |
| Fixed & other assets | 4.8 | 4.6 | | | |
| Long-term Assets | <u>408.6</u> | <u>393.8</u> | | | |
| <u>TOTAL ASSETS</u> | <u>603.6</u> | <u>576.5</u> | <u>468.7</u> | <u>379.6</u> | <u>632.3</u> |
| <u>LIABILITIES</u> | | | | | |
| Current Liabilities | 168.7 | 137.2 | | | |
| Long-term liabilities | 286.7 | 249.7 | | | |
| Equity | <u>148.2</u> | <u>189.6</u> | <u>197.8</u> | <u>166.0</u> | <u>102.8</u> |
| <u>TOTAL LIABILITIES</u> | <u>603.6</u> | <u>576.5</u> | | | |

^{a/} Published Financial Statements do not distinguish between long-term & short term assets or liabilities before 1981.

SOURCE: COFIDE ANNUAL REPORTS

AB

ANNEX E
ACTIVITIES OF FRAI SAMPLED SUBBORROWERS

ACTIVITIES OF SAMPLED FRAI SUBBORROWERS

| <u>LOAN DATE</u> | <u>ICI</u> | <u>Loan #</u> | <u>SUB-BORROWER</u> | <u>year founded</u> | <u>TYPE OF FIRM</u> | <u>TOTAL AMOUNT OF LOAN Constant US\$</u> |
|------------------|------------|---------------|--------------------------|---------------------|--------------------------------|---|
| <u>COAST</u> | | | | | | |
| <u>LIMA</u> | | | | | | |
| 02/79 | BC | 06 | Agro Ind. El Sol, S.A. | (78) | Fruit and vegetable processing | 561,925 |
| 11/79 | FCP | 57 | Curtiembre Cocodrilo | (48) | Tannery (skins) | 143,931 |
| 02/81 | BW | 100 | Avícola San Fernando | (69) | Broiler processing plant | 711,532 |
| 06/81 | PRI | 113 | Farmagro S.A. | (63) | Pesticide Mfg. & Distributor | 214,838 |
| 08/81 | BL | 119 | Agro Ind. El Sol, S.A. | (78) | Fruit & vegetable processing | 274,100 |
| 09/81 | PRI | 120 | Ransa Comercial S.A. | (39) | Cold Storage | 206,251 |
| 04/82 | BPP | 140 | Avícola San Fernando | (69) | Broiler processing | 81,586 |
| 08/82 | PRI | 150 | Oleoginosa Pisco, S.A. | (76) | Edible Oils Processing Plant | 865,846 |
| 01/83 | PRI | 164 | Enrique Ferreyros y Cía. | (39) | Machinery Purchase & Rental | 366,445 |
| 04/83 | PRI | 170 | Enrique Ferreyros y Cía. | (39) | Farm Machinery Sales & Service | 286,471 |
| 04/83 | BIN | 172 | Enrique Ferreyros y Cía. | (39) | Farm Machinery Sales & Service | 80,596 |
| 08/83 | BIN | 178 | Enrique Ferreyros y Cía. | (39) | Farm Machinery Sales & Service | 125,265 |
| 08/83 | BIN | 179 | Enrique Ferreyros y Cía. | (39) | Farm Machinery Sales & Service | 26,145 |
| 08/83 | BIN | 180 | Enrique Ferreyros y Cía. | (39) | Farm Machinery Sales & Service | 25,417 |
| <u>ICA/PISCO</u> | | | | | | |
| 03/80 | PRI | 71 | Química Peruana, S.A. | (78) | Pesticide Mfg | 146,644 |
| 05/80 | PRI | 75 | Oleoginosa Pisco, S.A. | (76) | Edible Oils & Soap Mfg. | 102,579 |
| 07/80 | PRI | 86 | Procacao S.A. | (80) | Cacao processing | 364,200 |
| 07/81 | FCP | 115 | Empacadora del Sur | (80) | Chicken processing | 840,376 |
| 05/82 | BIP | 142 | Carlos Parodi | (81) | Feedgrain processing | 37,490 |
| 09/82 | PRI | 159 | Cacao Industrial S.A. | (81) | Cacao processing | 944,985 |
| 09/82 | BIP | 160 | Viña Ocucaje | (46) | Wine & Pisco production | 75,495 |
| 10/82 | FCP | 163 | Agraria El Escorial S.A. | (81) | Dairy: milk products | 518,574 |
| 08/83 | PRI | 176 | Agraria El Escorial S.A. | (81) | Dairy: milk products | 218,750 |

*/ Conversion from soles to dollars based on the average rate of exchange for 1978, 1979; quarterly period for 1980; and the respective months of 1982 and 1983.

13

... Continued

| <u>LOAN DATE</u> | <u>IIC</u> | <u>PNo.</u> | <u>SUB-BORROWER</u> | (year founded) | <u>TYPE OF FIRM</u> | <u>TOTAL AMOUNT OF LOAN</u> Constant US\$ * |
|----------------------------|------------|-------------|-------------------------|----------------|--------------------------------|--|
| <u>SIERRA</u> | | | | | | |
| <u>AREQUIPA</u> | | | | | | |
| 12/78 | BCP | 01 | Promesa | (68) | Farm Implements | 399,270 |
| 03/79 | PRI | 05 | Gloria S.A. | (7) | Evaporated Milk Cannery | 673,879 |
| 08/79 | BCP | 38 | Soc.Ganadera del Centro | (10) | Dairy: milk derivatives | 428,905 |
| 04/80 | FIN | 73 | Maquinarias Arequipa | (71) | Farm Machinery sales & service | 15,791 |
| 05/80 | FIN | 76 | Maquinarias Arequipa | (71) | Farm Machinery sales & service | 166,881 |
| 05/82 | BIP | 141 | Soc.Ganadera del Centro | | Cheese | 108,892 |
| <u>JUNIN</u> | | | | | | |
| 05/80 | FNP | 81 | Ind. San Lorenzo | (77) | Refinery of eucalyptus oil | 34,267 |
| 03/81 | BL | 104 | INDALSA | (67) | Fruit canning | 62,211 |
| 10/82 | BAN | 162 | Lorenzo Romero Pérez | (80) | Fresh Citrus processing | 31,696 |
| <u>SELVA/HIGH JUNGLE</u> | | | | | | |
| <u>TARAPOTO/SAN MARTIN</u> | | | | | | |
| 12/80 | BAM | 93 | Molinera La Selva | (80) | Rice processing | 759,405 |
| 12/80 | BIP | 94 | Jorge Valencia Rada | (75) | Rice processing plant | 76,376 |
| 11/81 | BAM | 125 | Molinera La Selva | (80) | Rice processing | 345,188 |
| 04/82 | BIP | 138 | Garate e Hijos S.R.L. | (81) | Machinery | 19,639 |
| 04/82 | BIP | 139 | Serv. Agrop. RINI | (81) | Farm Machinery Service | 24,624 |
| 05/82 | BIP | 143 | David López Malca | (81) | Farm Machines: Service | 42,001 |
| 07/82 | BIP | 147 | Emp. Piladora Juanjuf | (82) | Rice processing plant | 34,928 |
| 08/82 | PRI | 154 | Selva Industria | (80) | Cotton gin | 172,163 |
| <u>MADRE DE DIOS</u> | | | | | | |
| 06/80 | BCP | 83 | Protesa | (7) | Brazil nut processing | 242,496 |

ANNEX F
QUESTIONNAIRE FOR FRAI SUB-BORROWERS

ESTUDIO AGRO-INDUSTRIAL QUESTIONNAIRE FOR FRAI SUBBORROWERS
DAI/ USAID / PERU

CODIGO _____

ANTECEDENTS DE LOS ARCHIVOS COFIDE

NUMERO DE PRESTAMO(S) _____ UBICACION _____
 NOMBRE DE EMPRESA _____ FECHA DE CONSTITUCION _____
 TIPO DE NEGOCIO _____

COMO ESTA REGISTRADA LA PROPIEDAD:

- | | |
|-------------------------|----------------|
| 1. EMPRESA INDIVIDUAL | 4. COOPERATIVA |
| 2. SOCIEDAD ENCOMANDITA | 5. COMBINACION |
| 3. SOCIEDAD ANONIMA | |

VALOR NOMINAL

| | PRESTAMO 1 | PRESTAMO 2 | PRESTAMO 3 |
|---------------|------------|------------|------------|
| ICI/ ANO | _____ 19__ | _____ 19__ | _____ 19__ |
| <u>APORTE</u> | | | |
| PROPIO | | | |
| ICI | | | |
| FRAI | | | |
| TOTAL | | | |

VALOR REAL (DIC. 1982)

| <u>APORTE</u> | PRESTAMO 1 | PRESTAMO 2 | PRESTAMO 3 | TOTAL |
|---------------|------------|------------|------------|-------|
| PROPIO | | | | 004 |
| ICI | | | | 005 |
| FRAI | | | | 006 |
| TOTAL | | | | 007 |

OBJETIVOS

(%XPAIS)

| | | | | |
|--------------------|--|--|--|-----|
| EQUIPO | | | | 008 |
| EDIFICIO | | | | 009 |
| TIERRA | | | | 010 |
| CAPITAL DE TRABAJO | | | | 011 |
| OTRO | | | | 012 |

EMPLEO

NUMERO DE EMPLEADOS ANTES DEL PRESTAMO _____
 CUANTOS PUESTOS DE TRABAJO ESPERABAN CREAR CON EL PRESTAMO _____

INVERSION TOTAL _____

83

II CARACTERISTICAS GENERALES DE LA EMPRESA

ANTES DE IDENTIFICAR PROBLEMAS, DESEAMOS SABER ALGO SOBRE LA MAGNITUD DE SU EMPRESA:

- 2.1 CUANTOS ACCIONISTAS TIENE LA EMPRESA?
- 2.2 VENDEN ACCIONES AL PUBLICO?
- 2.3 VALORIZACION DE LA EMPRESA

ADEMAS NECESITAMOS ALGUNAS CIFRAS SOBRE LA SITUACION: ANTES Y DESPUES DEL PRESTAMO FRAI:

| | ANO | ANO | ANO | ANO | ANO | ANO |
|---|-----|-----|-----|-----|-----|-----|
| A. VALOR TOTAL DE VENTAS | | | | | | |
| B. PRECIO(S) DEL PRODUCTO POR UNIDAD | | | | | | |
| C. CANTIDAD DEL PRODUCTO PRODUCIDO | | | | | | |
| D. CANTIDAD DE PRODUCTO VENDIDO | | | | | | |
| E. CANTIDAD DEL PRODUCTO EXPORTADO | | | | | | |
| F. PORCENTAJE DEL MERCADO | | | | | | |
| G. HORAS QUE TRABAJA LA PLANTA | | | | | | |
| H. DIAS POR SEMANA QUE TRABAJAN | | | | | | |
| I. PRODUCCION ACTUAL % CAPACIDAD DE SU PLANTA | | | | | | |
| J. NUMERO DE EMPLEADOS | | | | | | |
| K. NUMERO DE ADMINISTRADORES | | | | | | |
| L. NUMERO DE JEFES DE PLANTA | | | | | | |
| M. NUMERO DE OBREROS | | | | | | |

84

III ENTREVISTA

Fecha :

Por :

Deseamos hacer una evaluación del préstamo FRAI (COFIDE) y hemos considerado 6 tipos de preguntas. También deseamos - identificar problemas o dificultades que confronta la em presa ahora. Las seis áreas de preguntas incluyen :

- 1.- Mercadeo, comercialización y venta del producto.
- 2.- Adquisición de materia prima, cantidad y calidad.
- 3.- Procesamiento o conversión de materia prima, aspectos tecnológicos.
- 4.- Financiamiento del crédito, posible ampliación del mis mo.
- 5.- Personal, empleo y capacitación del trabajador.
- 6.- Políticas y leyes sociales.

Con su buena voluntad, trataremos de cubrir estos tópicos - con una serie de preguntas breves. Su información es confi- dencial. No usaremos su nombre o la de la empresa en nues tra presentación a COFIDE y AID. Más importante es aprender de Usted y otros empresarios los problemas que confrontan - Con su información esperamos hacer sugerencias para nuevos programas agro-industriales en el Perú.

IV. MERCADEO, COMERCIALIZACION Y VENTA DEL PRODUCTO

4.1 CUAL ES LA TENDENCIA DE SUS VENTAS, AHORA:

A. SUBE B: BAJA C:CONSTANTE

PORQUE:

4.2 HAY MUCHO COMPETENCIA LOCAL EN LA VENTA CON RESPECTA COM OTRAS EMPRESAS:

4.3 HAY COMPETENCIA CON IMPORTADOS O CONTRABANDO?

4.4 COMPARE SUS PRECIOS CON LOS PRECIOS DE SU COMPETENCIA:

4.5 COMO CONSIDERA LA CALIDAD DE SU PRODUCTO COM RESPECTO DE SU COMPETENCIA?

4.6 HA MEJORADO LA CALIDAD DEL PRODUCTO RECIENTEMENTE?

4.7 HAY MUCHA VARIACION DURANTE EL AÑO EN LA VENTA DEL PRODUCTO? EXPLIQUE.

4.8 ES ADECUADO EL SISTEMA DE DISTRIBUCION DE SU PRODUCTO MERCADO?

4.9 HAY FALTA DE INTERMEDIARIOS PARA VENDER EL PRODUCTO?

4.10 COMO DETERMINA EL PRECIO DEL PRODUCTO?

4.11 NECESITA MEJOR INFORMACION SOBRE SU COMPETENCIA Y POTENTIAL DE VENTA DE SU PRODUCTO?

4.12 a. HAY SUB-PRODUCTOS DE LA EMPRESA QUE NO PUEDE VENDER PERO TIENE VALOR COMERCIAL?

b. CUALES SON Y PORQUE NO VENDE?

4.13 HAY OTROS PROBLEMAS RELACIONADOS CON LA VENTA DEL PRODUCTO QUE NO HEMOS MENCIONADO?

86

4.14 DE LOS PROBLEMAS MENCIONADOS, CUAL ES EL MAS SERIO PARA VD?
EXPLIQUE?

4.15 DE LOS PROBLEMAS MENCIONADOS, CUAL ES EL MAS SERIO PARA UD?
PORQUE?

4.16 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?

(NOTA: COMPETENCIA, IMPORTACION, PRECIO, CALIDAD, VARIACION ANUAL
SISTEMA DE DISTRIBUTION, FALTA DE INTERMEDIARIOS,
INFORMACION, INFORMACION DE MERCADO, ETC.)

4.17 ELABORACION

A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN
AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL
PROBLEMA?

D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER
EL PROBLEMA?

COMENTARIOS ADICIONALES:

V. ADQUISICION DE MATERIA PRIMA

5.1 QUE MATERIA PRIMA UTILIZA?

| | NOMBRE | NACIONAL | IMPORTADA |
|----|--------|----------|-----------|
| A. | | | |
| B. | | | |
| C. | | | |

5.2 TIENE DIFICULTAD EN LA ADQUISICION DE MATERIA PRIMA?

- A.
- B.
- C.

5.3 VARIARON LOS PRECIOS DE MATERIA PRIMA CON RELACION AL AÑO PASADO? QUE PORCENTAJE?

5.4 ES ADECUADA LA MATERIA PRIMA EN TERMINOS DE CALIDAD?

QUE NECESITA PARA MEJORARLA?

5.5 HAY PERIODOS QUE LA PLANTA CIERRA POR FALTA DE MATERIA PRIMA?

5.6 COMO ADQUIERE LA MATERIA PRIMA?

5.7 TIENE DIFICULTAD CON EL SISTEMA DE LA ADQUISICION:

- A. LO ADQUIERE DIRECTEMENTE
- B. USA INTERMEDIARIOS

(POR EJEMPLO, CON EL TRANSPORTE, _____ PERDIDAS DE CANTIDAD)

5.8 HAY OTROS PROBLEMAS EN LA ADQUISICION QUE NO HEMOS MENCIONADO?

5.9 SOBRE LA MATERIA PRIMA, CUAL ES EL PROBLEMA MAS SERIO. PORQUE?

5.10 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?

5.11 ELABORACION

- A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

- B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

- C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL PROBLEMA?

- D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER EL PROBLEMA?

COMENTARIOS ADICIONALES:

VI. PROCESAMIENTO O CONVERSION DE MATERIA PRIMA

- 6.1 HAY PROBLEMA TECNICOS EN LA PLANTA? CUALES SON?
- 6.2 TIENE EQUIPOS INADECUADOS O VIEJOS?
- 6.3 ES PROBLEMA CONSEGUIR REPUESTOS O SERVICIOS PARA LA MAQUINARIA DE LA PLANTA?
- 6.4 HAY FALTA DE CAPACIDAD EN LA PLANTA DURANTE EL AÑO? DEBIDO A QUE
- 6.5 HAY PROBLEMAS CON LA ENERGIA O ELECTRICA?
- 6.6 HAY SUFICIENTE AGUA PARA LA EMPRESA?
- 6.7 HAY OTROS PROBLEMAS RELACIONADO CON EL PROCESAMIENTO DEL PRODUCTO QUE NO HEMOS MENCIONADO? EXPLICA.

- 6.8 SOBRE DE LOS PROBLEMAS MENCIONADOS SOBRE EL PROCESAMIENTO, CUAL ES EL MAS SERIO PARA UD? PORQUE?

- 6.9 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?

6.10 ELABORACION

A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL PROBLEMA?

D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER EL PROBLEMA?

COMENTARIOS ADICIONALES:

VII. FINANCIAMIENTO DEL CREDITO, POSIBLE AMPLIACION DEL MISMO:

7.1 REQUIERO CAPITAL ADICIONAL PARA INVERTIR?

SI NO

PORQUE?

7.2 CONSIDER DIFICIL OBTENER NUEVOS CREDITOS PARA INVERTIR EN SU EMPRESA?

SI NO

PORQUE?

7.3 HA TENIDO PROBLEMAS PARA CONSEGUIR PRESTAMOS DE CORTO PLAZO?

SI NO

7.4 NECESITA MAS CREDITO ESTE AÑO A LARGO O MEDIANO PLAZO?

7.5 SI EL BANCO TUVIERA DINERO EN ESTE MOMENTO, SOLICITARIA PRESTAMO A LA TASA DE INTERES CORRIENTE?

7.5 SI EL BANCO TUVIERA DINERO EN ESTE MOMENTO, SOLICITARIA PRESTAMO A UNA TASA DE INTERES IGUAL A LA TASA DE INFLATION?

7.6 CONSIDERA MEJOR INVERTIR SU DINERO EN OTRO NEGOCIO QUE NO ESTE RELACIONADO CON LA AGRICULTURA?

7.7 A SU CONCEPTO, CUAL SERIA UNAS BUENAS INVERCIONES EN LA AGROINDUSTRIA PARA EL FUTURO?

7.8 QUE OTROS PROBLEMAS TIENE SOBRE FINANCIAMIENTO?

7.9 DE LOS PROBLEMAS FINANCIEROS, CUAL ES LO MAS SERIA PARA VD? EXPLIQUE?

7.10 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?

7.11 ELABORACION

A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL PROBLEMA?

D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER EL PROBLEMA?

COMENTARIOS ADICIONALES:

VIII. PERSONAL, EMPLEO Y CAPACITACION DEL TRABAJADOR:

- 8.1 HAY PROBLEMAS EN EL EMPLEO DE BUENOS ADMINISTRADORES Y/O JEFES DE PLANTA?
- 8.2 ES ADECUADO EL NUMERO Y CALIDAD DE OBREROS?
- 8.3 QUE EDUCACION O PREPARACION TIENEN?
- 8.4 HAY PROBLEMAS CON
 - A. SINDICATOS DE OBREROS O
 - B. DIFICULTADES EN LAS RELACIONES LABORALES?
- 8.5 HAY DEFICIENCIA EN TECNICOS CAPACITADOS?
- 8.6 NECESITA PROGRAMAS O LITERATURA PARA EDUCADOR SUS EMPLEADOS? CUALES?
- 8.7 ES POSIBLE ENTRENAR A SUS EMPLEADOS ADECUADAMENTE EN ESCUELAS PUBLICAS O NECESITAN PROGRAMMES ESPECIALES?
- 8.8 HAY OTROS PROBLEMAS SOBRE PERSONAL:
- 8.9 SOBRE SUS EMPLEADOS, CUAL ES EL PROBLEMA MAS SERIO EN LA EMPRESA?
- 8.10 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?
- 8.11 ELABORACION
 - A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

 - B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL PROBLEMA?

D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER EL PROBLEMA?

COMENTARIOS ADICIONALES:

IX. QUE POLITICAS SOCIALES AFECTAN SU NEGOCIO?

9.1 LE AFECTA CONTROLES DE IMPORTACIONES DE EQUIPO Y/O INSUMOS?

9.2 HAY CONTROL SOBRE LA EXPORTACION DE SU PRODUCTO?

9.3 HAY SUFICIENTE PROTECCION CONTRA LA IMPORTACION O CONTRABANDO DE PRODUCTOS SIMILARES?

9.4 HAY ALGUNOS OBSTACULOS EN LAS POLITICAS SOCIALES QUE NO HEMOS MENCIONADO?

9.5 QUE POLITICAS SOCIALES IMPIDEN MAS SERIAMENTE SU PRODUCCION O VENTA?

9.6 CUAL ES EL PROBLEMA DE MENOS IMPORTANCIA?

9.7 ELABORACION

A. COMO RESPONDERIA AL PROBLEMA MAS SERIO?

B. EN TERMINAS DE PORCENTAJE DE PRODUCCION, CUANTO HUBIERAN AUMENTADO LAS VENTAS DE NO HABER TENIDO EL PROBLEMA?

93

C. CUANTOS EMPLEOS HUBIERAN CREADO DE NO HABER TENIDO EL PROBLEMA?

D. CUANTO REDUCIRIA LOS COSTOS DE PRODUCCION DE NO TENER EL PROBLEMA?

COMENTARIOS ADICIONALES:

ASPECTOS GENERALES

X. HEMOS CUBIERTO 6 TIPOS DE PROBLEMAS TYPICAS QUE CONFRONTA LA EMPRESA. CUALES DE LOS SIGUIENTES HAN SIDO REDUCIDO POR LA LINEA DE CREDITO FRAI:

- 10.1 PROBLEMAS DE MERCADEO O VENTA DEL PRODUCTO
- 10.2 PROBLEMAS DE PROCESAMIENTO DE MATERIA PRIMA
- 10.3 PROBLEMAS DE ADQUISACION DE INSUMNOS
- 10.4 LA EXTENSION DE CONTACTOS CON MERCADOS E/O MATERIA PRIMA

10.5 DE LA MATERIA PRIMA QUE VD COMPRA, QUE PORCENTAGE, MAS O MENOS, ES PRODUCIDA EN PEQUENAS FINCAS? _____

10.6 DIRIA VD QUE SU EMPRESA AYUDA EL PEQUENO AGRICULTOR? _____
1. SI 2. NO

10.7 EMPLEA VD PERSONAS DEL CAMPO _____
1. SI 2. NO

10. EN CASO DE SER SI:

APROXIDAMENTE QUE PORCENTAJE DE SUS TRABAJADORES VIENEN DEL CAMPO? _____

11. HAY LA POSIBILIDAD DE UTILISAR MAS PRODUCTOS DEL PEQUENO AGRICULTOR? _____
1. SI 2. NO

12. SERIA NECESARIO CAMBIAR LAS VARIADADES DE CULTIVOS PRODUCIDOS POR EL AGRICULTOR PARA MEJORAR LA CUALIDAD DE MATERIA PRIMA? _____

13. QUE SUGERENCIAS TIENE PARA MEJORAR LA MATERIA PRIMA: LA CANTIDAD Y CALIDAD?