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~~FORM~~ J-911 ~~1-1~~

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20521

PROJECT PAPER

Proposal and Recommendations  
For the Review of the  
Development Loan Committee

CHILE, Agricultural Production Credit

AID-DLC/P-2135

PD-AAJ-911

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

UNCLASSIFIED

AID-DLC/P-2135

March 16, 1976

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Chile, Agricultural Production Credit

Attached for your review are the recommendations for authorization of a loan to the Government of Chile ("Borrower") of not to exceed fourteen million United States Dollars (\$14,000,000) to assist in financing the foreign exchange and local currency costs of a project to improve the delivery system in Chile for providing agricultural production credit to the small scale farmers to improve the information systems available in Chile for solving problems in the agricultural sector.

The loan is scheduled for consideration by the Development Loan Staff Committee on March 22, 1976 at 2:30 p.m. in room 3886 NS; please note your concurrence is requested by close of business on March 25, 1976. If you are a voting member a poll sheet has been enclosed for your response.

Development Loan Committee  
Office of Development Program Review

Attachments:

- Summary & Recommendations
- Project Analysis
- Annexes B,C,E,F & H

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# PROJECT PAPER

## Chile - Agricultural Production Credit Loan

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- Annex H - Draft Loan Authorization

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\* = These annexes on file in LA/DR for review as necessary.



**B. Recommendations**

USAID/Chile recommends that a \$14,000,000 Loan be authorized in FY 1976 under the Food and Nutrition funding category (FAA Section 103) for the purpose of implementing the Agricultural Production Credit Project proposed herein. The Government of Chile (GOC) will repay the Loan in 40 years, including a 10 year grace period on principal, with interest at two percent during the grace period and three percent thereafter.

**C. Description of the Project**

The Project has two components: Agricultural Production Credit, including related technical assistance to the principal lending institution; and an agricultural Policy Planning and Information System (PPIS).

**Credit (including related T.A.)**

The purpose of this component of the Project is to increase the volume of agricultural production credit available to Chilean small farmers and to improve its utilization. This component totals \$12,500,000 of A.I.D. Loan funds, of which \$7,500,000 are to be relent through the Institute for Agricultural Development (INDAP), an autonomous entity of the Ministry of Agriculture, \$500,000 are to be used to upgrade INDAP's institutional capacity, and \$4,500,000 are to be relent through the banking system in an effort to establish a private sector source of financing for small farmer production credit needs. The Central Bank will administer the A.I.D. Loan disbursements both to INDAP and to the banking system.

Through A.I.D. Loan funds and matching GOC contributions, INDAP will have a permanently capitalized credit fund of \$15,000,000 equivalent for providing production credit to small farmers by the end of the third year of the Project. INDAP will emphasize and promote delivery of credit and other services through farmer groups organized on either a formal or informal basis. Where farmer organizations already exist that have the potential for serving as the delivery vehicle, INDAP will encourage and assist them to improve the capability of their organizations; and in cases where they do not exist, it will encourage farmers to organize themselves to carry out and manage the services delivery function.

The portion of the A. I. D. Loan to be relent through the banking system represents a pilot approach to involve these banks in the business of small farmer production credit financing, thereby extending the available channels and setting the stage for more dynamic private initiatives in serving the credit needs of the small farmers. The Loan will be used to reimburse the Central Bank for 50 percent of the value of the financing it extends to banks that make eligible subloans. By the end of the third year of the Project, \$ 9,000,000 will be permanently available to finance small farmer credit through this channel.

Banks will be allowed to lend to individual farmers but are expected to lend mainly through farmer groups such as cooperatives, societies of agrarian cooperation (SOCAs), and semi-formal associations of farmers such as the small farmer suppliers of a particular agro-industry. Interest margins will be adequate to cover the costs of participating lending banks. The farmer group entity may charge fees and/or interest overrides for distributing credits to individual farmers. Lending regulations issued by the Central Bank will be required as a condition precedent to first disbursement under this activity.

The development of a detailed plan for utilizing Loan funds for the technical assistance to be furnished INDAP depends partly upon the results of a study being prepared by the U.S. management consulting firm Booz, Allen, and Hamilton. This firm was contracted in October 1975 by the Ministry of Agriculture with IBRD financing to analyze all public sector organizations involved in agriculture. The results should be available by May 1976.

USAID has identified two areas where technical assistance to INDAP will likely be necessary to enhance the results of INDAP's credit operations: integrated rural development planning and bad debt management. Up to \$500,000 of A. I. D. funds will be used to contract U.S. and local consultants and for other appropriate costs such as participant training and observation trips. Specific uses will be subject to prior approval of USAID.

#### Policy Planning and Information System

The PPIS component is to provide an ongoing mechanism for the formulation and evaluation of projects, programs, and policies aimed at improving the welfare of the Chilean rural poor. It is specifically designed to provide guidance on the impact of agricultural credit, both that provided under this loan, and the broader agricultural credit environment. The PPIS component totals \$1,500,000 of A.I.D. Loan funds, (including evaluation costs) and will finance technical assistance, surveys,

data processing, and equipment and supplies. The PPIS involves three different types of information gathering, processing, and analyzing efforts. The first and most important of these is survey based analytical information about agricultural production units, marketing and processing establishments, and consuming households. The second is agricultural census information which provides the PPIS with baseline information on land tenure and the product structure and geographic distribution of agriculture. The third is a variety of information about the agricultural sector from the public institutions serving the sector.

At the end of the three and one-half year disbursement period of the Project, the Ministry of Agriculture Development Planning Office (ODEPA) will have the basic analytical tools and modernized information handling process necessary for improving the allocation of public sector credit and other resources for rural development and to provide a basis for selected policy making. (The Project will not include complex sector modeling activities.)

The PPIS is directly related to the agricultural credit programs in that it will provide the basis for thorough and in-depth evaluation of the credit programs and will make possible a better understanding of the target farmer. It will provide monitoring and portfolio distribution guidance during the later part of the disbursement period.

#### D. Summary Findings

The Project is socially and economically sound. A portion of the target group is already using agricultural production credit. Many more small farmers used production credit reasonably well prior to the general and drastic cutback in overall credit availabilities that occurred during recent years. The large unfilled demand for agricultural credit will promote prompt utilization of A.I.D. funds.

The GOC has adopted a series of sound policies that favor the productive use of credit, including a positive market rate of interest for credit, world prices for agricultural products, a realistic exchange rate that eliminates the previous disincentives to export, and encouragement of the use of cooperatives as a logical way to organize the large number of new small farms resulting from Latin America's most extensive land reform. Plagued by poor

past policies and financial problems, INDAP is now completing the implementation of a series of institutional reforms. These include a major revamping of its personnel, a serious effort to improve collections, and adoption of a rate of interest that should prevent future decapitalization.

The PPIS component reflects methodology previously developed in connection with A.I.D. programs in other Latin American countries and incorporates improvements based on those experiments. Its implementation plan is based on a feasibility assessment and the cost estimates are reasonably firm.

The Project meets all applicable statutory criteria as indicated in the completed checklist attached as Annex D. The Mission Director's certification that Chile has the capacity to maintain effectively and utilize the Project is attached as Annex E.

#### E. Project Issues

The guidance cable (State 272223) received in response to USAID's Interim Report on this Project stated: "The Mission should proceed with the development of the PP on the basis of this (target group) definition with the clear recognition that the Project should be so structured that the major share of loan resources reaches the poorest half of the Chilean land holders". As a result, and taking into account INDAP's absorptive capacity, USAID increased the allocation of loan funds to INDAP from \$6,000,000 to \$8,000,000 with a corresponding reduction in the allocation of credit to be channelled through the banking system from \$7,500,000 to \$4,500,000. Part 3, Section C contains a discussion of the target group that is pertinent to this issue.

The guidance cable further recommended that within the first year of the Project a detailed evaluation be made of whether the objective of reaching the poorest 50% of the Chilean land holders was being achieved. As discussed further in Part 4, Section C, this would require an immediate allocation of \$40,000 in technical support Food and Nutrition funds to USAID to begin the necessary planning and field work for a baseline study prior to the date by which Loan funds are expected to be available.

## **PART 2. Project Background and Detailed Description**

### **(A) Background**

**The Project has two components: Agricultural Production Credit, including related technical assistance to the principal lending institution; and an agricultural Policy Planning and Information System (PPIS).**

The problem to be addressed by the credit component is the severe shortage of small farmer agricultural credit in Chile. This shortage is directly related to hyper-inflation and other disruptive measures that occurred under the previous administration. As inflation ballooned during 1971-1973, interest rates did not keep pace. Public agencies that provided agricultural credit, such as the Banco del Estado de Chile (BECH) and the Institute for Agricultural Development (INDAP), were lending money at significantly negative interest rates when the new government took power in September of 1973. These negative interest rates coupled with lack of serious collection intent resulted in decapitalization of credit resources; credit became, in effect, a mechanism for permanent resource transfer and one of the principal means by which a "cheap food policy" was kept afloat, at least temporarily.

The present administration is taking severe monetary and fiscal actions to combat inflation. Although progress is being made - the Consumer Price Index (CPI) increase for October 1975 was 8.4 percent compared with 22.3 percent for October 1974 - restrictions will have to continue for the next several years if inflation is to be curtailed to tolerable levels. One of the corrective measures taken has been contraction in the amount of credit available. Even though monetary and fiscal authorities are giving increasing priority to agriculture, the amount of agricultural credit available in real terms has dropped to less than 60 percent of the 1969 levels, according to USAID estimates.

At the same time, the GOC has announced the policy that public sources of agricultural credit should charge a real rate of interest of no less than eight percent. It plans to achieve this through variable monthly rates which will be adjusted in accordance with movements in the CPI. Other actions being taken to favor the agricultural sector (e.g., elimination of price and export controls, favoring of farmer organizations in the sale of State-owned agro-industries, and adoption of realistic

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1/ See DAP of February 1975 for discussion of the downturn in agricultural production during the Allende administration and the resulting food import bill.

exchange rates) were discussed in the FY 1977 Annual Budget submission as well as in previous loan documents and will not be repeated for the sake of Project Paper brevity.

The availability of A. I. D. Loan resources will permit the GOC to increase the amount of agricultural production credit it can release into the system without adversely affecting its anti-inflation program. More important, the design of the Project is such that the additional resources will be directed towards low income credit users. The Project is therefore directly responsive to the concern expressed in the DAP guidance message regarding increased availabilities of agricultural credit and to Congressional mandates regarding the focus of A. I. D. assistance on the rural poor.

In Chile rural poverty is concentrated in pockets whose geographic, cultural, and economic location make policy and project formulation particularly difficult. Little is known about the status and potential of the rural poor; that they are poor is about the extent of current knowledge. The principal rural poverty groups are:

1. small farmers (whether in collective or individual ownership patterns);
2. rural landless agricultural workers; and
3. rural households employed in various rural agricultural service activities, such as marketing, or rural industries such as food processing (mostly villagers).

Until more is known about the specific resource situation of the rural poor, their economic potential, and the specific enterprises in which they can engage, policies and programs aimed at them will continue to be difficult to formulate and even harder to evaluate. The PPIS is designed to help overcome this problem.

In preparation for this Project, USAID undertook a small farmer survey with a sample size of slightly less than 500. Pertinent conclusions of this survey are incorporated in Part 3, Section C, and in a separate report available in LA/DR project files.

USAID also is financing an agricultural sector assessment being prepared by Catholic University of Santiago. The first stage of the assessment is comprised mainly of a detailed description of agriculture and is expected to lead to recommendations on policy and program areas that warrant further study. A status summary of the assessment is also available in LA/DR project files. USAID is planning to undertake a second stage of its sector assessment, which will focus in greater detail on possible future areas for programs directed to the rural poor.

## **(B) Project Description**

### **1. Introduction and Logical Framework**

The goal of the Project is twofold: To achieve greater agricultural production and to increase the income, productivity and employment opportunities of the Chilean small farmer. This goal clearly implies opting for a small farmer food production strategy. Nevertheless, at this point in time, the bulk of the GOC's agricultural recovery policy instruments being employed, such as free market pricing and realistic exchange rates, as well as the existing agricultural credit programs, are scale neutral endeavors. This Project is one of the GOC's special efforts targeted at the rural poor, in this instance principally reform and minifundista sectors.

The purpose of the Agricultural Production Credit component of the Project is to increase the volume of production credit available to Chilean small farmers and to improve its utilization. In order to achieve this purpose the Project must improve the functioning of the Chilean small producer credit system by increasing its capitalization, efficiency, and number of credit channels.

The key assumption of this Project component is that increased availability and better utilization of credit will in fact increase Chilean small producer activity, employment opportunities and incomes as well as increase overall agricultural production. In the course of Project review USAID has become increasingly convinced of the validity of this key assumption on the basis of facts presented elsewhere in this Paper, the DAP, other Project documentation, and the Small Farmer Survey.

The Project provides for a more rigorous testing of this assumption in the course of its implementation by means of PPIS and survey based special evaluations.

The purpose of the PPIS component is to provide an ongoing mechanism for in the formulation and evaluation of projects, programs and policies aimed at improving the welfare of the rural poor.

- The key assumptions underlying this Project component are:
- that better information will lead to better policy and project formulation,
  - that properly interpreted survey results are a reliable source of information for these purposes,
  - that the information obtained can be used selectively to aid the rural poor, and
  - that well planned programs aimed at improving the situation of the rural poor will actually have that effect.

The PPIS is related to the agricultural credit programs in that it will provide the basis for thorough and in-depth evaluation of the credit programs and make possible a better understanding of the target farmer. The urgent need for the system, became apparent during the course of Project development; there is an immediate opportunity to proceed with implementing it.

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project: From FY 1976 to FY 1979  
Total U.S. Funding: \$16,000,000  
Date Prepared: 12/11/75

Project Title & Number: Agricultural Credit

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>To improve incomes, farm productivity, and employment opportunities of Chilean small farm families; and achieve greater agricultural production.</p>	<p>Measures of Goal Achievement: (A-2)</p> <ul style="list-style-type: none"> <li>- Increased real small farm incomes.</li> <li>- Increased value of small farm output.</li> <li>- Expansion of rural industrial employment.</li> <li>- Progress in meeting GOC 1980 targets of 43% inc. in ag. prod., 16% inc. in land under cultivation, 112% inc. in food exports, and 65% dec. in food imports over 1975 base.</li> </ul>	<p>(A-3)</p> <ul style="list-style-type: none"> <li>- Analysis of field data collected through the Ministry of Agriculture -- Agricultural Policy Planning Information System (PPIS).</li> <li>- National statistics particularly those of the National Statistics Institute (INE) and the Ministry of Agriculture Planning Office (ODEPA).</li> </ul>	<p>Assumptions for achieving goal targets: (A-4)</p> <ul style="list-style-type: none"> <li>- GOC will: continue pricing policies, fiscal support, extension, research and other programs for agricultural recovery.</li> <li>- Continued GOC interest in small farmer development programs.</li> <li>- Other donors will carry out plans to provide financial and technical assistance to the agricultural sector.</li> </ul>

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

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

Life of Project:  
From FY 1976 to FY 1979  
Total U.S. Funding \$16,000,000  
Date Prepared 12/16/75

Project Title & Number: Agricultural Credit

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose</p> <p>Increase volume of production credit available to Chilean small farmers, and improve its utilization, (i.e., improve the effectiveness of small farmer use of credit and the allocation of scarce credit resources nationally.)</p>	<p>End of Project Status</p> <ul style="list-style-type: none"> <li>- 26,250 additional INDAP clients over 1975 total (est. at 25,000)</li> <li>- Increase INDAP volume from \$6.6 million in 1975 to \$22.6 million in 1979.</li> <li>- % INDAP loans delinquent declines from 60% in 1975 to 10% in 1979.</li> <li>- 11,250 banking system recipients through this program by 1979.</li> <li>- New credit users incomes increase by 30% from 1976 to 1979.</li> <li>- Continuous evaluation being made of public agricultural credit policies.</li> </ul>	<ul style="list-style-type: none"> <li>- INDAP records.</li> <li>- Central Bank and commercial bank records.</li> <li>- Analysis of field data as stated in Evaluation Plan.</li> <li>- PPIS and Agricultural Census publications.</li> </ul>	<p>Assumptions for achieving purpose</p> <ul style="list-style-type: none"> <li>- INDAP (or successor institution) continues to be responsible for providing assistance to the small farmer.</li> <li>- Production inputs available.</li> <li>- Properly interpreted survey results are a reliable source of information for those purposes.</li> <li>- The GOC will consider PPIS activities to have sufficient merit to justify their continuation.</li> <li>- Better information will lead to better policy and project formulation.</li> </ul>

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 1976 to FY 1979  
Total U.S. Funding \$14,000,000  
Date Prepared: 12/16/79

Project Title & Number: Agricultural Credit

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs	Implementation Target (Type and Quantity)		Assumptions for providing Outputs
<p>1. Permanent INDAP Small Farmer Credit Fund. 2. INDAP integrated rural development planning capability. 3. Commercial bank small farmer credit system. 4. Mechanism for the formulation and evaluation of credit project programs, policies, and the small farmer credit environment (PPIS).</p>	<p>1. a. Real capital value \$15 million equivalent by 1979; b. Debt management policy in place; c. Fund's direct operating costs met out of earning by 1978. 2. Area Development Plans: 2 by 1977; 5 by 1978. 3. a. Real capital value \$9 million equivalent by 1979; b. 5 participating banks by 1977. 4. a. Three farm level surveys completed by 1979; b. Two household surveys completed by 1979; c. Agricultural Census processing and publication completed by 1978; d. Institutional Information System in place by 1978 e. Three evaluations by 1979.</p>	<p>- INDAP, Central Bank, and private bank records. - PPIS and Agricultural Census publications.</p>	<p>Assumptions for achieving outputs</p> <ul style="list-style-type: none"> <li>- GOC continues policy of market interest rates for agricultural credit.</li> <li>- Commercial banks continue to have interest in small farmer lending.</li> <li>- A.I.D. will be able to provide \$40,000 of grant funding of evaluation work early in CY 76.</li> <li>- COMPAN will provide \$95,000 for PPIS in early CY 76.</li> <li>- Adequate GOC personnel can be hired or trained and retained in both INE and ODEPA.</li> </ul>

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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 1976 to FY 1979  
Total U.S. Funding \$14,000,000  
Date Prepared: 12/10/79

Project Title & Number: Agricultural Credit

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS					MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)					(D-3)	Assumptions for providing inputs (D-4)
	(\$000)						
	Yr.1	Yr.2	Yr.3	Yr.4	Total		
1. INDAF Subloans						- AID/GOC Budget (Figures on the left include \$40,000 AID Grant and \$95,000 COMFAN contribution - for Project costs only see Financial Plan.)	- Equipment, T.A. and Software will be available on a timely basis.
a. A.I.D.....	2,850	3,250	1,400	-	7,500		
b. GOC .....	1,400	3,250	2,850	-	7,500		
2. Banking System Subloans							
a. A.I.D.....	2,000	1,500	1,000	-	4,500		
b. GOC .....	1,000	1,500	2,000	-	4,500		
3. TA to INDAF							
a. A.I.D.....	100	300	100	-	500		
4. FPIS							
a. A.I.D.							
- DP equipment, software,							
supplies and service							
contract .....	605	65	23	16	709		
- Training and TA .....	203	198	80	69	550		
- Survey costs .....	117	122	137	-	376		
b. GOC							
- Survey and personnel costs.	750	33	33	34	850		
Total .....	9,025	10,218	7,623		26,985		
A.I.D.....	5,875	5,435	2,740		14,135		
GOC .....	3,150	4,783	4,883		13,850		

\*Includes \$135,000 from other other projects and tech support.

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- 10-2 -

## **2. Detailed Description of Agricultural Production Credit Component**

This component totals \$12,500,000 of A. I. D. Loan funds of which \$7,500,000 are to be relent through the Institute for Agricultural Development (INDAP), an autonomous entity of the Ministry of Agriculture, \$500,000 are to be used to upgrade INDAP's institutional capacity, and \$4,500,000 are to be relent through the banking system in an effort to establish a private sector source of financing for small farmer production credit needs.

### **INDAP Small Farmer Production Credit - \$7,500,000**

A permanently capitalized credit fund of \$15,000,000 equivalent is to be established for INDAP's exclusive use in providing production credit to small farmers and subsistence or marginal farmers (mini-fundistas) outside the reform sector (i. e. , farmers who have been provided land under the agrarian reform program).

The A. I. D. Loan funds, together with a matching GOC contribution, will be used to establish a special Project account in the Central Bank. The Central Bank will reimburse INDAP from the account for the full amount of qualifying subloans it makes. Recuperations by INDAP from subloans will remain in the permanent credit fund in INDAP for relending. By the end of the three year disbursement period, INDAP will be extending production credits to an estimated 26,250 clients, assuming an average loan size of \$570.

INDAP will establish a special administrative office for managing this credit fund. All general overhead and auxiliary services related to the loan program will be covered from regular INDAP budget resources.

The GOC will assure through two devices that the credit fund will not become decapitalized:

a) the interest rate charged to farmer borrowers will reflect the rate of inflation, plus the market value of money in Chile, and

b) annual budget transfers to INDAP to replace bad debts as determined under an A. I. D. approved bad debt management policy.

As explained in more detail in Part 4, INDAP will assure the provision of necessary auxiliary services for small farmer borrowers, either by direct action or through other public or private organizations. Such services include technical assistance related to production and productivity improvements, input supplies, and market access for output. INDAP will emphasize and promote delivery of credit and other services through farmer groups organized on either a formal or informal basis. Where farmer organizations already exist that have the potential for serving as the delivery vehicles, INDAP will encourage and assist them to improve the capabilities of their organization, and in cases where they do not exist, it will encourage farmers to organize themselves to carry out and manage the services delivery function.

#### INDAP Technical Assistance - \$500,000

As a necessary complement to the A.I.D. input for INDAP's credit activities, Loan resources will also finance technical assistance to INDAP for improving its general operations and the effectiveness of its lending program. The use of the AID loan funds for technical assistance will be subject to prior review and concurrence of USAID. The Loan Agreement will provide that no more than \$500,000 of Loan funds can be used for this component.

USAID has identified two areas where technical assistance will likely be necessary, both of which involve the carrying out of already stated INDAP policy objectives:

Improvement of Rural Development Planning (\$300,000): One of the technical assistance activities will concern INDAP's rural development planning studies. In 1975 INDAP initiated the preparation of rural development programs as a basis of its lending activities. The objective is gradually to develop overall area development plans or frameworks for areas with high incidence of rural poverty, a concentration of minifundia, and resource potential for development. These plans will enable INDAP to allocate its human and financial resources among different rural areas in accord with poverty level priorities. Some twenty-five (25) separate areas of the country have been tentatively identified by INDAP as having high concentrations of rural poverty. Over the next five years INDAP will prepare rural development plans for most of these areas.

Within a given zone a study will enable INDAP to direct its credit resources to activities that provide for optimal utilization of the zone's resources and any inherent advantages due to market

location, human skills, climatic conditions, etc. The studies, together with other available information, will also identify important needs other than production credit that must be addressed in order to catalyze the development process in the zone. Some of these needs will be within INDAP's capacity to address, such as cooperative marketing facilities, complementary artisan activities, etc. Other needs will depend on coordination with, and inputs from public and private agencies other than INDAP. USAID will require that expenditures related to preparation of rural development programs be fully coordinated with the Ministry of Agricultural Planning Office (ODEPA) in view of the possible non-INDAP inputs that such programs may require in the planning or execution phases.

Two types of consulting services will be made available to INDAP under this activity. One will relate directly to the preparation of individual studies for specific areas. To the extent INDAP requires skills not available within its own staff (or within the capacity of other collaborating Ministries and agencies) to complete a specific rural development program, loan funds will be available to finance contracts for professional services from individuals, firms, and other entities. For example, this could involve the preparation of a feasibility study for an agro-industry, the assistance of Chilean universities in reviewing potential cultural/social improvements in the design or execution of a specific area program, and general feasibility review of programs of more than average complexity.

It is estimated that during the disbursement period of the AID loan that approximately five of the specific area rural development programs will require technical assistance appropriate for financing under the loan, with an average expenditure of \$20,000 per program for a total of \$100,000.

The other type of consulting services will be for the preparation of industry-wide studies that cut across all or several of the regional development programs. For example, Chile's exports of honey have dropped off during the last several years. Honey production is especially suited to the operations of the small farmer. It requires minimum land base, occupies labor, and can be managed in a complementary manner to the normal farming operations (i.e. does not require attention during peak planting and harvest periods). To regain former levels of honey exports and to establish a competitive base for sustaining increase in exports, it is necessary to have an industry-wide study of honey. Such a study would determine market potential, packaging requirements, sanitary requirements, tariff restrictions, local production and processing problems and potential, optimal location for plant infrastructure and standard designs for farm level structures. Because of ODEPA's more general responsibility and capacity for agriculture development planning, these studies will be carried out under its direction, but with close collaboration and joint decision with INDAP concerning agro-industries selected for study.

INDAP will only be interested in collaborating in studies that offer high potential impact for its small farmer clientele. It is expected that not more than three industry wide studies will be selected for financing. The \$200,000 budgeted for this subcomponent would thus enable an average AID input of almost \$67,000 per study. This, together with other inputs expected from ODEPA, would be adequate for studies that can be carried out by Chilean professionals. To the extent outside consultants are used, the average cost of the studies will likely increase and a greater ODEPA input may be required.

Upgrading of INDAP Operations - (\$200,000): Because INDAP has a number of new policy departures and because there has been a drastic turnover and reduction of personnel, it is important that funds under the AID loan be available to attend to technical assistance needs of INDAP for installing the lean, streamlined look INDAP is attempting to attain.

A detailed plan for these technical assistance activities will await the results of the study now being prepared by the U.S. management consulting firm, Booz, Allen and Hamilton. This firm was contracted in October, 1975, by the Ministry of Agriculture with IBRD financing to analyze all public sector organizations involved in agriculture. The report should be available by May, 1976, and will include recommendations for organizations and procedural improvements. There are no other external funds available to follow up with any management recommendations on INDAP's organization that may flow out of the Booz Allen Hamilton Study.

A crucial area for consulting services is INDAP's credit delinquency experience. INDAP is attempting to reverse dramatically its past loan collections experience. The past unfavorable record was due largely to the hyper-inflation phenomenon combined with the policy of subsidized interest rates of the previous GOC administration. These factors combined to militate against collecting overdue loans since the costs involved were greater than the current value of the amounts due. If a significant reduction in the amount of overdue loans in INDAP's portfolio is to take place as planned, a systematic and thorough collection procedure must be installed. Such a procedure will have to provide for timely reports to the different levels of INDAP management for decision making and control. It is planned to use loan funds to finance a contract between INDAP and a local public accounting firm to assist in developing a bad debt management plan. This work would occur during the first year of the Project and would require about 18 man-months of Chilean professional services with total estimated costs of approximately \$40,000.

Another activity that will be considered for Loan funding will be the incountry training of INDAP's field staff, particularly those involved in production credit operations. This could be done in conjunction with a Chilean university and possibly the U.S. Department of Agriculture (see AIDTO Circular A-631 of November 11, 1975). Approximately four short term training cycles will be organized and carried out during the Project disbursement period, with each cycle costing up to \$30,000 depending on the length of each training cycle (not more than two months per cycle is planned), and the degree to which U.S. advisors are utilized. This would leave \$40,000 of the total amount under this component as contingency. In sum, it is expected that the \$200,000 earmarked for technical assistance to upgrade INDAP will be sufficient to finance a reasonably adequate level of consulting services and training. If additional funds are required for this activity, the Loan Agreement will be flexible enough to permit the transfer of funding from the rural development planning element of this component.

#### Banking System Small Farmer Production Credit - \$4, 500, 000

The portion of the A. I. D. Loan to be relent through the banking system will be used to reimburse the Central Bank for 50 percent of the value of financing it extends to banks that make subloans to small farmers meeting A. I. D. eligibility criteria. The rollovers will continue to be made available by the Central Bank for the special purpose of small farmer financing. It is estimated that when fully disbursed this component will be satisfying the production credit needs of some 11,250 small farmers, assuming an average loan size of \$800.

The banking system is comprised of the Central Bank and the banks that operate directly with the general public. These are the state-owned Banco del Estado de Chile (BECH) and the 19 commercial banks, all with various degrees of state-owned capital. Other sources of credit for the agricultural sector are the state-owned Development Corporation (CORFO), the private Cooperative Financing Institute <sup>1/</sup> (IFICOOP), and various agro-industrial and marketing organizations. The banking entities that would have access to the Central Bank rediscount fund under this sub component of the A. I. D. Loan would be the commercial banks and IFICOOP.

The groups through which these banks will lend the A. I. D. resources are: cooperatives; societies of agrarian cooperation (SOCAS); and semi-formal associations of farmers such as the suppliers of farm products to a particular agro-industry. Subject to A. I. D. approval, the Central Bank will provide general parameters for the rights and responsibilities of the parties to the credit contacts, but it is important that the parameters be flexible and general enough to let the groups and the banks negotiate their own arrangements.

Cooperatives that will be eligible to participate will be regular agricultural cooperatives (cooperativas agrícolas), the peasant (campesino) cooperatives, and the multi-service cooperatives (multirrecoops) promoted by the GOC on a regional basis as second level service organizations for collectively operated land reform settlements (asentamientos). These categories do not provide clear cut classifications of different farmer types. For example, an asentamiento could be a member of a multirrecoop for obtaining general inputs or machinery services and a member of a dairy cooperative classified in the cooperativas agrícolas category for marketing its milk production.

Moreover, the rural cooperative movement is in flux as a result of the new policies of the GOC. One of the important policy changes is the decision to stop the fostering of rural cooperatives based on class differences. Instead, the GOC favors the concept of regional cooperatives that provide services across a number of product lines to all income levels of

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<sup>1/</sup> Industria Azucarera Nacional (IANSAs) for sugar beets; Empresa Nacional de Semillas (ENDS) for seed production in general; Compañía de Oleaginosas y Maravilla, S. A. (COMARSA), for edible oil seeds; Carozzi and Luchetti for hard wheat; CCU, Malterías Unidas, and Maltería Aconcagua for barley, and Compañía Chilena de Tabacos for tobacco, and rice mills for rice production.

farmers in their regions. These are called cooperativas agropecuarias regionales. While this is a stated GOC policy preference, it is entirely voluntary. Such cooperatives offer a number of advantages in terms of being able to afford more talented management, effect economies of scale and generally operate with greater business efficiency. Eleven of these new regional cooperatives have been formed and at least nine more are currently in the process of formation. All involve the restructuring and/or merging of existing cooperatives.

Another major departure from past GOC policies is the decision to complete the land reform process by distributing individual land titles to the farmer beneficiaries. This process will be completed by the end of 1977. As the asentamiento structure disappears through individual titling, an alternative group organization must be developed at the farm level in order to provide management for common services needs, such as the use of jointly owned warehouse space and machinery, distribution of irrigation water, etc. The alternative organization structure will be the SOCA, a quasi-cooperative for which the governing laws and implementing regulations only recently have been promulgated. Although the potential of the SOCA has not been fully tested, it appears to be a viable concept and also may be appropriate for groups outside the reform sector. Any producer group wishing to associate legally may form a SOCA without a lengthy approval process. The SOCA itself can be a member in a cooperative. Also, the SOCA will be able to facilitate the provision of extension services on a group basis, with resulting economies and efficiencies. The SOCA may be the ideal form for less formal producer associations to organize themselves better for negotiating services and sales price with local agro-industries and other purchasers of their outputs.

All of the groups described in the preceding paragraphs reach in different degrees the A. I. D. target farmer. A problem arises in that the groups may not be comprised exclusively of the target farmer. This will be handled in two alternative ways depending on the individual situation. First, and preferably, only those members of the group falling within the A. I. D. target definition will receive credit from A. I. D. assisted sources, e. g., in the case of cooperatives that have a fairly broad based membership structure and can satisfy the needs of their higher income members with financing available from other sources. Alternatively, a group will be considered eligible in the event that 75 percent of its members fall within the target definition. In this case, the total amount of financing made available to the farmers outside the target group will be limited to not more than 50 percent of the total loan amount. Also, the maximum amount of credit any farmer outside the target group may receive will be limited to the amount necessary to work not more than 12 basic irrigated hectares (see Part 3-C for explanation of BIH concept).

These restrictions will be reflected in the Central Bank operating regulations to be presented as a condition precedent document. The operating regulations also will set forth the general criteria to be used in formulating appropriate credit size and the input components that can be financed. These criteria will be developed by the Ministry of Agriculture and will reflect small farmers needs as realistically as possible.

### 3. Detailed Description of the Policy Planning Information System (PPIS)

The PPIS component totals \$1,500,000 of A.I.D. Loan funds, including project evaluation costs. The primary focus of PPIS is two fold:

1. To provide evaluation and implementation guidance for the agricultural credit programs contemplated under this loan as well as the broader range of Chilean agricultural credit activities;
2. To modernize and improve the analytical/planning capacity of ODEPA so that it can better perform its guidance and policy function on all programs focused on rural poverty.

It involves three different types of information gathering, processing and analyzing efforts. The most important is survey based analytical information about agricultural production units, marketing and processing establishments, and consuming households. The second is census based information on the tenure, product and geographic structure of agriculture. This structural information is required in PPIS to improve the definition of the target population and provide a sample frame for the surveys. The third component is an institutional information system in ODEPA to assist them in carrying the statistical products to policy conclusions and strengthen their analytical and decision-making capacity.

#### Survey Based Analytical Information

This subcomponent is a problem oriented information system and is the core of the PPIS. The problems on which it is focused are:

1. insufficient income level of the poverty level households in the rural sector;
2. income related problems of unemployment and under-employment of the mass of the rural population; and
3. malnutrition.

These problems provide the sorting mechanism for deciding about the content, coverage, and analytical nature of the system. Information gathered must be directly related not only to the poor but to these particular problems as well. Although there are literally thousands of

different types of information which could be extracted from the wealth of basic data which will be gathered as a part of PPIS, only those pieces which have a direct relationship to these problems will be directly surfaced and analyzed by PPIS. This does not eliminate the possibility that the data base could be made available to private and public entities for other kinds of analysis, but it does mean that the PPIS will not get lost in the task of trying to engage in the broader analytical effort.

For the purpose of clarifying the nature and content of this sub-component four types of information are defined:

1. Summary basic data from surveys. This type of information can be extracted directly from a survey and printed in tables by region, farm size, processing scale, etc. It is distinguished from the other types of information in that the only activity required after the survey in order to produce this information is data processing and cross tabulation. These data are "raw" in the sense that no accounting or analytical work is required.

2. The second type of information is termed accounting information. For example, most small farmers do not know what their net incomes are; in fact, the accounting concept of net income is unfamiliar to them as are the accrual and deferral procedures required to compute it. Only careful accounting manipulation of the physical and financial flows and asset information gathered at the farm level can produce useful estimates of family income. In the case of nutrition a similar example might be given for consumption data. Knowledge of the physical quantities of food consumed needs to be subjected to simple accounting transformations to quantify nutrient intake accounts. The accounting type of information, then, includes a wide variety of information which takes an intermediate amount of analytical effort to produce.

3. The third group of information is the product of rather simple and theoretically neutral analytical procedures, and is therefore termed simple analytical information. These results are generally repetitive computations of a particular economic or social phenomenon or of indicators such as an income elasticity of demand for many products, income levels, geographic regions, family sizes, etc. The techniques are generally partial and non-relational in that they do not usually seek to quantify sector level inter-relationships which require either an elaborate theoretical or analytical model.

4. The last type of information is termed information on aggregate interrelationships. This information is characterized by the necessity of rather long time lags between conception and completion, but requiring a narrowly focused, theoretically rich analytical process, such as sector model building.

The PPIS process will not include the fourth category of information. The accounting and simple analytical information is its principal focus, along with elaborating and processing basic unanalyzed structural data on the sector. Complex interrelational analyses of the data gathered in the survey process will be left to specialized entities and will not form a part of the PPIS. For example, analysis of yield response to varietal differences will be left for the agricultural research network, the nutrition/health interrelationships to CONPAN, and other analytical efforts to the relevant university, public or private entities best suited. The PPIS will only provide the information base for such analyses.

The data for the survey subcomponent of the PPIS originate in three national sample surveys which will be conducted by the National Statistics Institute (INE) on a recurring basis. The intent is to cover the economic entities and households which are either an integral part of the focus problems or have critical and direct impact on alternative solutions. The first group to be covered are farms themselves by means of a national sample survey of agricultural production units. Because of the importance of agricultural marketing and processing activities in Chile, the second sample survey will cover agricultural marketing and processing establishments. The last major group to be surveyed are households, both urban and rural, which generate the demand for agricultural products.

Each of these sample surveys and the accounting/analytical information which they will provide present distinct issues: problems, financial and personnel requirements, which are discussed in more detail in Annex B and in a technical feasibility assessment available in USAID and LA/DR project files.

#### Census Based Data on the Structure of Agriculture

The last decade has seen a dramatic change in the basic structure of the agricultural sector in Chile. The most important part of this change has been the shift in tenure patterns due to massive land reform.

There is no available baseline statistical description of the composition of the entire sector which post-dates these structural shifts - the last agricultural census was carried out in 1965. This means that target group identification for credit or other programs is difficult. Without an overall view of the farm size, product and geographical distribution of the farm population program target man definitions lack context. Census breadth is useful to improve these definitions and to improve the sampling frame for more detailed program impact evaluation studies. It is therefore critical that an agricultural census be undertaken, and that its results be processed and released in a timely fashion.

The U.S. Bureau of Census has provided the Mission and the GOC with an advisory team charged with jointly elaborating the necessary elements to process and publish the census in a timely and efficient manner. Its report is available in the Mission and LA/DR files. Additional cost information on this subcomponent is also presented in Annex B.

The major conclusion of the Bureau of Census team was that over the last five years the institutional capacity of the National Statistics Institute (INE) had deteriorated greatly. The principal reason for this deterioration was INE's lack of orderly evolution in the data processing area. The team found that in the data processing area, INE was far behind comparable institutions in other Latin American countries. In areas outside of data processing such as sampling, methodology, etc. INE's capacity was generally found to be outstanding from a theoretical point of view; however, even these capacities were limited by a lack of contact with modern data processing techniques.

The reasons why INE has not developed in the data processing area are twofold: (1) Government policy in the late 1960's and early 1970's emphasized the creation of a centralized public sector data processing facility, ECOM, at the expense of data processing capability in other public sector entities; and (2) the GOC austerity program has forced a cut in data processing budgets generally.

At the present time there exists an awareness in the GOC that all public sector data processing activities cannot be centralized and ECOM has lost its public sector data processing monopoly. It also is generally realized within the GOC and especially within INE that it is not possible to develop a modern statistical facility without an expertise in data processing and relatively easy access to processing facilities.

An important by-product of the PPIS is the building of INE institutional ability to integrate modern data processing techniques into its statistics processes. Both the processing of the agricultural census and the three surveys will contribute to that end. The planned technical assistance and short-term training as well as the in-service training practice on the censal and survey exercises using modern data processing should leave INE with a modern statistical data processing capability.

#### Institutional Data of Public Entities Serving the Agricultural Sector

A wide variety of institutions are concerned with the agricultural sector in Chile. Many of them are directly connected to the Ministry of Agriculture and function in some way as a part of the Ministry. The planning and control functions of these institutions is an information problem of significant proportions. The third subcomponent of the PPIS is intended to provide a framework for both modernizing these institutional information flows and drawing useful information from each of the individual institutions into the overall sector information system.

### Part 3 PROJECT ANALYSES

#### A. Technical Analysis for Credit Activities

##### 1. Rationale for Selecting Lending Channels

The IRR for this Project, prepared in January 1975, identified four possible lending channels to be studied during Intensive Review: the Banco del Estado (BECH); INDAP; a proposed new mechanism in the cooperative movement; and food processors and marketers through commercial banks or CORFO. DAEC guidance (see Annex A) discouraged the selection of INDAP due to the high subsidy level involved in its operations. The use of processors and marketers was considered a possible experimental adjunct, but on a limited basis.

As discussed in the Interim Report submitted to AID/W in mid-October 1975, and as noted in this Paper, INDAP has terminated its policy of highly subsidized lending and is taking other actions that overcome the previous objections to dealing with INDAP. (Annex A also contains AID/W comments on the Interim Report.) The possible new cooperative mechanism to house an agricultural production credit function envisaged in the IRR has not yet materialized. The selection decisions thus became (a) whether INDAP or BECH should be the principal credit channel and (b) how might the proposed A.I.D. Loan best respond to the opportunities to involve the cooperative movement and other producer groups to serve small farmer credit needs in the absence of an overall cooperative production credit mechanism.

With respect to the first decision, BECH is by far the predominant lending institution in agriculture, with over 80% of the outstanding credit. Yet its target is not small farmer specific as is INDAP's. Moreover, the amount of A.I.D. funds available compared to BECH's total resources is not significant enough to expect that A.I.D. could influence BECH to increase substantially and permanently its resource allocation to the A.I.D. target group. (Section 3-C below discusses the composition of the target group.)

BECH currently has access to external financing. It signed in April 1974 a \$22 million loan with the IDB for agricultural re-lending. As of October 1975, \$10.3 million had been disbursed, including approximately \$4.8 million for agricultural machinery. Orders have been placed for another \$3.7 million of imported equipment. An IBRD agricultural credit loan of \$20 million, signed in April 1974, includes \$13.2 million for relending through BECH using a discount operation with the Central Bank. As of October 1975, \$10.4 million of the BECH portion had been disbursed. The entire loan amount is expected to be disbursed before mid-1976.

Under these conditions, the addition of A.I.D. resources to BECH's portfolio does not appear appropriate when INDAP, with much fewer resources, clearly has been charged by the GOC with assisting the small farmers in A.I.D.'s target group. INDAP has limitations. It is undergoing a large reduction and turnover in personnel at all levels. It is adopting new operating policies, some of which are not yet fully installed and functioning (e.g., rural development programming, bad debt management procedures, amplification of production credit regulations, etc.). Its former clientele is somewhat confused about future sources of credit and technical assistance and perhaps a bit wary of the implications of a free market pricing system. Moreover, the Ministry of Agriculture is undertaking a serious management analysis of all agencies operating in the agricultural sector (the Booz, Allen, Hamilton study referred to earlier).

Despite the fact that the GOC is still studying the planned organizational restructuring of the agricultural sector, it recognizes that there is an urgent need for reestablishing an agricultural production credit channel to service the small farmer group. The GOC's interim policy is to implement this function through a revitalized and reoriented INDAP, and to re-establish an expanded small farmer credit and development services program as quickly as possible. This urgent need, together with the conviction that INDAP top management has the capability of translating GOC general policy directives into functioning programs, particularly with technical assistance in certain key areas, provides the basis for USAID's recommendation to proceed with the INDAP component.

In fact, USAID views the early availability of the A.I.D. input as an excellent opportunity to influence positively INDAP's policies. A.I.D. will be able to influence INDAP's lending criteria, delivery systems, and procedural aspects in an environment propitious for testing various alternatives for incorporating and sustaining target group participation in its own development process.

The use of cooperatives and other producer associations through channels that supplement INDAP's outreach to the A.I.D. target group is based on two factors: First, cooperatives and producer associations are favored by the GOC as a means of achieving certain economies of scale for services in an agricultural sector where most farm land is in the hands of small scale producers. Second, private sector cooperatives and associations can tap local level initiative and effort and increase the active participation of the target group in the development process. The latter point is in accordance with the GOC's development philosophy while also being responsive to U.S. Congressional mandates concerning cooperatives, local level participation, and private sector involvement.

Given the reservations discussed previously regarding the channelling of limited A.I.D. resources through BECH, the Central Bank and the banking system is the most appropriate alternative. Further, the selection of this channel responds to the GOC's concern about reversing the trend of reduced participation of the commercial banking system in agricultural financing that has occurred since 1969 and to the GOC's desire to foster increased competition in banking, particularly as a means to stimulate more dynamic operations within BECH. (To foster increased competition, the GOC is currently selling shares in the commercial banks that were acquired under the Allende administration.)

Of the 19 commercial banks presently operating in Chile, nine are providing agricultural financing through the crédito por pauta discount mechanism of the Central Bank. This involves a fixed amount of financing per hectare for certain crops and certain zones of the country. The mechanism is not entirely satisfactory for financing the diverse small farmer credit needs because of its limitations.

In a meeting sponsored by the agricultural cooperative confederation (COPAGRO) USAID discussed the nature and objectives of the proposed loan with six of these banks. All were interested in participating in such a scheme provided that individual loan requests could be combined (e.g. by using cooperatives). Three of the banks involved are already providing crédito por pauta to agricultural cooperatives, including cooperatives with small farmer or reform sector members.

Included among the interested commercial banks is a bank that has recently been sold by the GOC to the cooperative movement.<sup>1/</sup> Plans are to establish an agricultural production credit financing department that will be operative by the 1976 crop year. Also, the private cooperative bank, IFICOOP, is interested in providing agricultural production credit now that interest rates are becoming positive and because of a recent ruling by GOC monetary authorities that permits IFICOOP and other private development banks to operate in short term credit.<sup>2/</sup> These two banks alone possibly could absorb the relatively small amount of A. I. D. funds being proposed for channelling through the Central Bank given the extreme shortage of production credit in the agricultural sector. However, the Central Bank will allocate the resources made available under this Project component among all the interested banks that can provide subloan applications meeting eligibility criteria. A conservative estimate is that three banks in addition to the two already mentioned will participate in this program.

As discussed in the evaluation plan, the experience of lending through this channel will be carefully assessed together with GOC officials in order to determine whether this type of mechanism is reaching the small farmer in a meaningful manner, and if appropriate, how to improve and/or expand it. As with

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<sup>1/</sup> Subscribed ownership is 82 percent by agricultural cooperatives, 15 percent by urban cooperatives, and 3 percent by IFICOOP. No one cooperative can own more than 3 percent of the capital.

<sup>2/</sup> IFICOOP is currently implementing a FY 1975 \$15 million A. I. D. loan for cooperative agro-enterprises. See the Capital Assistance Paper for Loan 513-T-065 for details.

the INDAP credit activity, the availability of A.I.D. funds for developing a sound small farmer credit mechanism within the banking system will enable A.I.D. to influence the design and scope of this alternative channel. Failure to include this sub-component of the Loan might falsely signal to the GOC disagreement with its attempts to redress the lopsided imbalance between the State and the private sector.

The selection of the banking system as a channel also will permit linkages with the agricultural processors or marketers. For example, an agro-industry could sponsor a loan application of a cooperative or of an informal association of its small producer suppliers. It could assist in putting together the loan package and, by providing an assured market and some technical assistance, would facilitate a positive response from a participating bank.

## 2. Production Inputs

The most important items financed under short term production credit are fertilizers and pesticides. The small farmer survey indicated that approximately 90% of the farmers receiving production credit used at least part to buy fertilizers and/or pesticides. The majority of fertilizer has been distributed by BECH, most of it as credit in kind.

Average consumption of fertilizer between 1969 and 1974 has been approximately 170 thousand nutrient tons per year. At current prices of \$350 to \$500 per nutrient ton the total annual value of fertilizer consumed is between \$60 to \$85 million. Sales of pesticides have tended to average between \$8 to \$12 million per year. Thus, the production credit element of the A.I.D. Loan disbursed over a three year period would finance only a small fraction of the total fertilizer/pesticide requirements of the country.

While the BECH is still responsible for over 90% of fertilizer imports and sales, it does sell to customers with funds from other sources, such as INDAP credit clients. GOC policy is in fact to encourage greater competition in the import and distribution of fertilizer. Pesticide sales are mainly within the private and cooperative sectors.

Other productive inputs which could be financed from the production credits are labor, seeds, tools, and land improvements, all of which are locally available or will be available from imported sources. USAID does not foresee any major change in GOC policy which would in any way artificially restrict the supply of productive agricultural inputs over the course of this Loan disbursement period.

### 3. Environmental Impact

Over 85% of the loan amount will be for financing small farmer agricultural credits having an average loan size of between \$570 and \$800. It is clear that it would be difficult if not impossible to make or control the making of assessments of environmental impacts for each small subloan. Generally, it is known that the AID funds will assist small farmers to procure fertilizer and pesticides which in some cases have been shown to have an adverse effect on the environment if used in excess. However, there is no evidence that by permitting target group farmers access to these productive inputs they would cause any more harm to the environment than if the inputs were used by non-target group members either within or outside of Chile to produce the equivalent amount of food. On the contrary, because of the greater dispersion of users in the country and the smaller individual dosages, pollution overflow will be minimized. There also will be a number of either pollution neutral or environment positive inputs that this loan will be used to finance. These include seed, labor, or other inputs to improve soil and water management.

The balance of the AID loan funds will be used to improve the effectiveness of the GOC's agricultural credit programs, either through the analytical information to be generated by the PPIS or through technical assistance to INDAP. Their activities will have no adverse environmental impact. On the contrary, the information generated will enable the GOC to take action to end inefficient and wasteful revenue allocation concerning agricultural production.

## B. Financial Analysis

### 1. Financial Plans and Summary

The table on the following page shows the cost breakdown for the Project and the estimated disbursement flow. The estimated GOC contribution is 48.0 percent, comprised mainly of the proposed 50-50 cost sharing arrangement for the credit component. Were the farmers' own contributions included, the overall host country contribution would be even greater.

The proposed 50-50 cost sharing of the credit component will not occur on a pari-passu basis, but will be the final result at the end of the Project. Thus, A.I.D. would reimburse two-thirds of every credit the first year, one-half the second year and an appropriate percentage the third year, based on the level of disbursements during the first two years.

The need for the increased level of A.I.D. funding the first year is to reduce the inflationary impact of new credit releases into the economy resulting from the GOC contribution. This concern will be extremely important during 1976 as the GOC continues its restrictive monetary and fiscal policies. By 1978, the third year of the Project, the inflation is expected to have subsided enough so that the GOC will be able to finance the larger share of the credit component of the Project without difficulty. The Loan Agreement will contain covenants that Project funds will represent an increase to overall levels of agricultural credit.

The A.I.D. Loan will be largely for local costs. There will be some dollar costs involved in the PPIS component and for part of the technical assistance to INDAP, but these amounts cannot be precisely determined until decisions are made about the data processing configuration and the technical assistance utilization plan.

### 2. Banking System

Under the banking system component, the margin between the cost of money from the Central Bank and the lending rate of the participating banks will be established at a level great enough to

Cost Breakdown and Disbursement Projections

(\$000 or equivalent)

**Credit**

	<u>Year 1</u>		<u>Year 2</u>		<u>Year 3</u>		<u>Year 4</u>		<u>Total</u>	
	<u>A.I.D.</u>	<u>GOC</u>	<u>A.I.D.</u>	<u>GOC</u>	<u>A.I.D.</u>	<u>GOC</u>	<u>A.I.D.</u>	<u>GOC</u>	<u>A.I.D.</u>	<u>GOC</u>
<b>Credit Component:</b>										
-Banking System	2,000	1,000	1,500	1,500	1,000	2,000			4,500	4,500
-INDAP										
Credit	2,850	1,400	3,250	3,250	1,400	2,850			7,500	7,500
T.A.	100	-	300	-	100	-			500	-
PPIS Component:	790	750	385	33	240	33	85	34	1,500	850
<b>Total</b>	<b>5,740</b>	<b>3,150</b>	<b>5,435</b>	<b>4,783</b>	<b>2,740</b>	<b>4,883</b>	<b>85</b>	<b>34</b>	<b>14,000</b>	<b>12,250</b>

A.I.D. Funds

FZ      LC

**Credit Component:**

-Banking System	-	4,500
INDAP		
Credit	-	7,500
T.A.	231	216
PPIS Component	<u>927</u>	<u>553</u>
<b>TOTAL</b>	<b>1,231</b>	<b>12,769</b>

300

cover their costs of administering the credits. The Central Bank will finance the entire amount of the credits extended through the banking system.

Since almost all of the credits under this banking system lending activity will be through groups such as cooperatives, the size of each transaction should be great enough to permit an attractive spread to the banks while permitting a reasonable cost to the cooperative. Each cooperative will be permitted to determine the level of additional charges that it may add on to the final cost of credit charged to its individual members. The lending rate to participating banks and the limit on their charges will be included in lending regulations presented as a condition precedent document. The margins envisaged would be approximately the following:

	<u>Margin</u>	<u>Total</u>
A.I.D. Loan	-	2.0%
Central Bank	1.5	3.5%
Participating Banks	4.0	7.5%
Cooperatives	4.5	12.0%

The above illustration is in terms of annual cost of money in real terms. In practice, the banks will charge variable monthly interest rates reflecting changes in the inflation rate. Within the general guidance laid out above, the Central Bank will be permitted to apply its judgement on periodic adjustments in lending rates and margins.

### 3. INDAP Financial Appraisal

A review of past operations makes apparent that strong action is necessary to reverse the unsatisfactory historical record of INDAP in carrying out its credit operations. The GOC is committed to such strong action, and the June 1975 figures indicate that results already are positive. Annex B-1 presents a financial analysis of past operations of INDAP.

As explained elsewhere in this document, INDAP has been substantially reorganized and is in the process of carrying out a massive reduction in force. Its operating policies and procedures

have been, and are continuing to be, reviewed and reoriented. From a financial viability point of view, the significant elements of these changes are summarized below.

a. Interest rates charged on loans are set to reflect the rate of inflation and the market cost of money (presently 8-10 percent real annual interest), thereby assuring that funds allocated for credit are not decapitalized through subsidized interest rates (see following Table):

Interest Rates on Short Term Loans for 1975

<u>Month</u>	<u>Consumer Price Index</u>	<u>Monthly Interest</u>	<u>Effective Interest</u>
Jan	13.9	12.8	-1.1
Feb	16.5	12.8	-3.7
March	21.2	12.8	-8.4
April	20.8	12.8	-8.0
May	16.0	12.8	-3.2
June	19.8	12.8	-7.0
July	9.3	12.8	+3.5
Aug	8.9	12.8	+3.9
Sept	9.2	12.8	+3.6
Oct	8.4	8.5*	+0.1
Nov	8.2	8.5	+0.3
Dec	5.5**	8.5	+3.0

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\* Interest rates changed to 8.5% monthly October 15, 1975 to keep interest rates equal to that charged by BECH upon its adoption of variable interest policy in lieu of flat 200% annual rate.

\*\* Estimated.

b. Credit operations have been regionalized and the delivery system is being reoriented to rely more heavily on group methods of borrower selection, supervision, and collection in order to reduce to a minimum the one-to-one relationships required of INDAP field staff, thereby reducing the overhead costs for each

farmer attended. Farmer organizations will be encouraged to take the initiative in executing the credit retailing function, as well as technical advice and auxiliary economic services to target group farmers, with INDAP playing primarily a backstopping role.

This mode of operations is expected to permit a permanent reduction in INDAP staff to approximately 1/3 of its 1973 size, while continuing to have the capability to reach similar or greater numbers of small farmers than were being reached in 1973. The GOC views INDAP technical and related assistance personnel budget costs as social development costs, and it is committed to providing sufficient annual budget allocations to assure that adequate levels of these supporting services are maintained.

c. Lending criteria and bad debt management are critical elements of the new policy orientation for INDAP. The GOC is committed to the application of lending criteria and bad debt management policies which are designed to make loans available to small farmers only where their use of credit is profitable to the small farmer borrowers, thereby assuring that, in the absence of unusual climatic or economic circumstances, the farmer can repay principal and interest from increased earnings. Further, a loan collection and bad debt management policy is to be implemented which will assure that bad debt levels under normal circumstances are off-set by a part of the interest charged.

In the event that abnormal climatic or economic conditions result in higher than projected bad debt levels, the GOC will replace credit fund losses through special subsequent-year budget allocations to INDAP, thereby assuring the integrity of capital administered by INDAP for subloans to the target group.

d. Replication. In the past INDAP found that the same small farmers requested credit year after year because of subsidized interest rates and low-key collection policies. Now, with interest rates comparable to the agricultural and commercial sector lending rate, and a lending policy based on improved earning capacity of borrowers, farmer organizations should be able to move as groups from INDAP to other sources of agricultural credit financing for their members' needs. Thus, INDAP will be able to reach out to new credit clients on a continual basis.

The 1975 and 1976 INDAP budget is shown in Annex B-1. Funds available for lending totalled \$6,614,000 in 1975, with approximately \$5,589,000 for production credit and the balance of \$1,025,000 for investment credit. INDAP projects financing from existing sources for expansion in 1976 to a credit program of \$10,987,000.<sup>1/</sup> Disbursements from the IBRD agricultural credit loan signed in April 1975 together with matching Central Bank contribution will provide \$5,100,000 of this amount. The balance is expected from 1975 loan repayments and interest earnings. A majority of the loan recuperation amounts in the budget will not be collected until after mid-year (after the period of strongest credit demand from March to June) causing a cash flow problem for INDAP during the first half of 1976. Financing of this temporary deficit cash position of INDAP is to be accomplished through utilization of Central Bank funds and short term credits from the Banco del Estado. Since the IBRD/Central Bank allocation is on a one-time basis, i.e., INDAP can lend it out only one time and must repay this allocation as sub-loan collections are received, additional capital contributions to INDAP will therefore be required after 1976 to maintain its 1976 level of lending.

Comparison of INDAP projected current operating expenses and income for 1976 shows that expenses exceed income by approximately \$748,000. This shortfall is to be financed, to the extent possible, by interest income included in the recoveries (loan repayments) figure in the 1976 budget. The remainder of operating expenses not financed by interest income represents a deficit in current budget which must be financed by using INDAP capital unless additional GOC budget allocations are forthcoming. The loan Agreement will contain a covenant to protect the credit program financed by the AID Loan against such decapitalization by requiring an adequate budget contribution to INDAP for operational and administrative costs of the program.

A comparison between the INDAP budget submission for 1976 and the INDAP 1976 credit operations plan and goals shows a shortfall of approximately \$7,600,000 between the two (\$10,987,000 financed credit operations included in the 1976 budget and \$18,597,500 as the programmed credit operations budget for 1976). The planned level of credit operations is based on an installed capacity of personnel and support services included in the 1976 INDAP current operating budget submission and already identified opportunities to absorb credit by groups meeting INDAP eligibility criteria.

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<sup>1/</sup> Of the \$10,987,000 for loans in 1976, \$8,620,000 are to be used for production credit with the balance of \$2,367,000 used for investment credit.

USAID is of the opinion that the INDAP program goal for credit operations may be somewhat optimistic in terms of INDAP's installed capacity to execute, especially in view of possible lag in staffing vacant field positions requested for 1976. Therefore for project planning purposes the INDAP program goal for 1976 was reduced by approximately 15 percent, to \$15,250,000 for credit operations. This leaves a balance of about \$4,250,000 not yet financed in the 1976 INDAP budget submission. A.I.D. and GOC counterpart disbursements projections for 1976 to the INDAP credit fund are based on the above estimates.

Projections made for the utilization of A.I.D. and GOC counterpart funds allocated to the INDAP small farmer production credit fund assume approximately equal disbursements to the fund for the first and third years but with proportionately greater A.I.D. disbursements as compared to GOC counterpart during the first year. This arrangement will permit the GOC to sustain its current austerity fiscal policy and monetary policy. Disbursement projections are summarized as follows:

	(millions of dollars)			
	<u>Year</u> <u>One</u>	<u>Year</u> <u>Two</u>	<u>Year</u> <u>Three</u>	<u>3-Year</u> <u>Total</u>
A.I.D. Loan	2.85	3.25	1.40	7.5
GOC Counterpart	<u>1.40</u>	<u>3.25</u>	<u>2.85</u>	<u>7.5</u>
Total	4.25	6.5	4.25	15.0

#### 4. Detailed PPIS Budget

The total cost of the PPIS component of the Project including GOC counterpart costs, the \$40,000 of grant funding for evaluation work requested for early CY 1976, and the anticipated \$95,000 CONPAN contribution out of Loan 513-T-066 is \$2,485,000, distributed as follows:

(US\$000 or equivalent)

	<u>Total</u>	<u>A. I. D.</u>		<u>GOCI</u> <sup>1/</sup>
		<u>FX</u>	<u>LC</u>	
(1) Survey Sub-component	577.0	150.0	377.0	50.0
(2) Agricultural Census	1,308.7	488.7	70.0	750.0
(3) Institutional Information	424.3	332.3	42.0	50.0
(4) Agricultural Credit Evaluation	<u>175.0</u>	<u>41.0</u>	<u>134.0</u>	<u>-</u>
<b>Total</b>	<b>2,485.0</b>	<b>1,012.0</b>	<b>623.0</b>	<b>850.0</b>

<sup>1/</sup> It is not possible to separate the INE and ODEPA increased staff into sub-components as they will be working on both.

The above sub-component cost figures are based on illustrative data processing configurations for the INE and ODEPA installations. The illustrative configurations and detail of the A. I. D. financed portions of sub-components (1) through (3) are in Annex B. Cost details of the Agricultural Credit Evaluation sub-component are in Part 4, Section C. The cost estimates do not include the AID/W TDY service estimated to be necessary.

## C. Social Analysis

### 1. Farm Sector Profile

Essentially four groups of farmers can be classified and defined in Chile:

(a) Minifundista and family operated small farms. This group is often referred to as "traditional" small farmers to distinguish them from "new" farmers receiving land through agrarian reform. The minifundista farmer has a land parcel below six BIH<sup>1/</sup> often with marginal quality land and follows subsistence farming practices. The family operated small farms are generally considered to be up to twelve BIH.

The number of rural parcels of less than six BIH is approximately 220,000; of these approximately 120,000 are less than one BIH<sup>2/</sup>. The number of farm families is significantly smaller than the number of parcels since one farmer may own several; many parcels are rented; plots near cities may be little more than homesites; and some parcels are institutionally owned. Our best estimates at this time are that these groups could be composed of the following:

80,000 families with less than one BIH.

80,000 families with one to six BIH.

15,000 families with six to twelve BIH.

Many small farmers and minifundistas or members of their house-holds have other sources of income such as custom machinery services to other farmers, trucking, shopkeeping, other work for their own account, agricultural produce, work for other farmers, and full or part time jobs.

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1/ To facilitate land reform activities in Chile, a system of quantifying rural land in terms of "Basic Irrigated Hectares" (BIH) was developed as an "index" to place all farms on a comparative basis. The BIH index suffers certain imperfections, particularly when applied to small farms since its main function was to determine which of the large landholdings would be expropriated. Nevertheless, the system is superior to quantifying land only in terms of irrigated or rainfed physical size.

2/ Averaging less than one-third BIH.

(b) Reform sector farmers. The land reform that began in Chile in 1965 has been one of the most extensive and far reaching in Latin America. Over 60 percent of the irrigated farmland was expropriated. Some 5,300 farms representing approximately ten million hectares were expropriated. Most of this land was in the rich central agricultural zone, which is Chile's most prosperous and productive area. The beneficiaries of reform activities are some 63,000 farmers (heads and potential heads of families) who were formerly laborers on the large haciendas. Until 1974 most appropriated units had been farmed collectively as state administered asentamientos. While the expropriation phase of agrarian reform is essentially complete, the GOC is further committed to distributing titles to individual farmers and to improving their incomes and output capability.

In 1974, when the individual titling process began in earnest, the GOC estimated that six basic irrigated hectares was the appropriate farm size to provide an acceptable level of income (i. e., at or near the Chilean median) once these parcels were fully exploited. As of mid-1975, only about ten percent of the expropriated farms had gone through the individual titling process; the balance is programmed to be completed by the end of 1977. In the Small Farm Survey described below, the average was 7.7 BIH, the range being 5 to 12 BIH.

(c) Medium size farms - 12 BIH to 80 BIH. Medium size farms are mainly located in the prime farming areas of the central zone and in the south. These were originally acquired through traditional land grants, concessions, or sales during the colonial period, as well as through purchase by more recent immigrants from Europe. Included in this category are some 5,000 farms in the more recently created "reserve" sector, consisting of areas of up to 80 BIH exonerated from expropriation and left in the hands of the original hacienda owners. The medium size farm group is small in number of farms - probably about 20,000, or less than 10 percent of the total number of farms in the country; they account for approximately 30 percent of the farmland in terms of BIH. Medium farmers generally have more ready access to credit, markets, and technological inputs than other farming groups.

## 2. Selection of Target Groups

Credit eligibility under the Project includes farmers in the reform sector and those with substantially equal or less income or resource base in the traditional sector.

There is no easy way to establish a consistently accurate measure for determining those farmers who are equal to the land reform beneficiary. The use of BIH equivalents provides some approximation, but has limits since the overall average BIH of the individual parcels in the reform sector will not be known until after the titling process is complete.<sup>1/</sup>

Nevertheless, there must be some trade-off between what is practical and what is perfect. It is planned, therefore, to start the lending program for the non-reform group with a target group limit of up to and including six BIH as the maximum size, based on earlier GOC policy statements that indicated that this was the minimum individual parcel to be distributed in the reform sector. While it is somewhat below the probable average basic hectare allotment under land reform, there is a rough equivalence in that the reform farmer has little non-land capital relative to the traditional small farmer and, indeed, is indebted for the purchase price of his land.

Adjustment may be made in this equivalency criterion based on the availability of further information concerning relative incomes and on actual experience in loan implementation. In this regard, data generated under the PPIS and evaluation component will be valuable.

There will be no minimum size of farm eligibility for credit under the Project. However, many very small parcel-holders may have less practical interest in agricultural production credit since they are not primarily farmers. Improvements in their welfare must be attained through other types of programs, such as agro-industry and rural employment generation.

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<sup>1/</sup> Moreover, even in terms of BIH there will probably be a variation of as much as one-third between different regions in the amount of land the reform beneficiary will receive. This reflects such problems as a reluctance to move people among asentamientos to account for density differences.

The total target population to which the credit component of the A.I.D. Loan will be addressed can be summarized as follows:

<u>Category</u>	<u>Estimated N° of Farm Families</u>
<u>Minifundista</u> up to one BIH: of the 80,000, those with sufficient farm land and interest may approximate .....	25,000
<u>Minifundista</u> and family-operated small farms of 1 through 6 BIH .....	80,000
Reform Sector .....	<u>63,000</u>
Total Target Population .....	168,000

### 3. Qualification as Lowest Income Groups

The two groups that we have selected as targets for this program are obviously the two poorest farmer groups in Chile. They are poor relative to each other in different respects:

<u>Item</u>	<u>Reform Sector</u>	<u>Minifundista Sector</u>
Net capital (\$3000 average reform vs. \$6814 <u>minifundista</u> )	Lower	Higher
Total income (\$222 median per capita reform vs. \$146 <u>minifundista</u> ) <sup>1/</sup>	Higher	Lower
Non farm income (\$10 average per capita reform vs. \$45 <u>minifundista</u> )	Lower	Higher
Wage rate received in working on farms of others (\$1.33 average per day <u>minifundista</u> vs. \$.86 reform)	Lower	Higher

<sup>1/</sup> In major highest income central agricultural area only; other areas have considerably lower incomes.

Size of land holding	Higher	Lower
Educational level	Lower	Higher
Farm management experience	Lower	Higher
General social level	Lower	Higher

This seemingly contradictory pattern is the result of land reform which is giving to what was the lowest social class (agricultural labor) the opportunity to rise on the socio-economic scale.

Attempting to make fine distinctions between or within these two groups - i.e., which are more worthy program participants, is not realistic.

The purpose of land reform in Chile is to make all the land reform farmers more or less equal. To attempt to distinguish among them is like shelling peas and trying to separate them by eyeball judgments into different pots according to size. By what criterion is smallness or poverty measured? On the basis of land size we could probably select something like 7.5 hectares as a median point. However, there is no direct relation between land size and farm income. For example, one farmer with 11 hectares made only \$30 in 1974-1975 according to the Small Farmer Survey. Another who got only 4.5 hectares out of the agrarian reform earned \$3,730.

With respect to minifundistas those with very little land tend to be the poorest, though non-farm income (as reported below) can alter this dramatically. Let us suppose, however, that we concentrate a program very heavily at the level of the minifundista with 2.5 hectares and below. Any effective program at this level would presumably be based on intensifying the use of the land. However, the market for most intensive crops is already under a great deal of price pressure in Chile owing to heavy production. Principal exceptions such as sugar beets and tobacco are not eligible for A.I.D. financing. Further, the minifundistas of O'Higgins, for example, already have 70 percent of their cultivated land in vegetables, fruits and gardens.

Within both the reform and minifundista sectors there is considerable underemployment as the following survey figures show:

	<u>Percent of Workdays Employed<sup>1/</sup></u>	
	<u>On Own Farm</u>	<u>On Farms of Others</u>
<b>Minifundistas</b>		
Men 12-64	25%	4%
Women 12-64	5%	0.2%
<b>Reform Sector</b>		
Men 12-64	35%	3%
Women 12-64	5%	0%

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<sup>1/</sup> Based on 300 work days per year.

#### 4. The Reform Sector Farmer<sup>1/</sup>

The 63,000 reform sector farmers were, until recently, agricultural laborers on formerly large Chilean latifundios. Historically they have been at the bottom of the economic and social ladder in the country. Their illiteracy rate is half again as large as that of the minifundista. During recent years, since expropriation of land under agrarian reform, they have been farming communally under Government supervision. The communal organizations through which they have been working have never functioned very effectively. Production levels remain considerably lower than they were prior to land reform.

The GOC is currently conducting a massive program to assign individual titles to the participants in this program. While any

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<sup>1/</sup> This and the following section is based heavily on the Preliminary Findings, Small Farmer Sample Survey, Central Irrigated Agricultural Region of Chile, Contracted by ODEPA/A.I.D., 1975.

groups of farmers who desire to do so will be able to choose to continue farming communally, and some will probably make this election, almost all are expected to become individual entrepreneurs.

As the Small Farmer Survey shows, the reform sector farmer will receive a significant amount of land, usually not less than six BIH and only in rare cases as much as twelve. The average, according to the Small Farmer Survey, was 7.7 basic hectares (equal to 9 physical hectares).<sup>1/</sup> While the land being distributed includes a large part of the best agricultural land in Chile, some of it is dry land, much of which is situated in areas of very limited production and market opportunity. Moreover, even in the richest agricultural areas it should not be assumed that the reform farmer will purchase better land than the minifundistas now own. The results of the Small Farmer Survey show that the value per hectare of the minifundistas' land, often improved with vineyards and fruit trees, is on average a third higher than that of the reform farmer.

As they become new farm entrepreneurs the reform sector farmers are almost entirely devoid of capital. They may have a few farm animals of their own and there may be some communal assets to divide, though many have not been paid for and the legal ownership/credit picture is muddy.

Both the United States and Chile are committed to the principles of the Charter of Punta del Este, which states as one of its objectives the following:

"6. To encourage, in accordance with the characteristics of each country, programs of comprehensive agrarian reform leading to effective transformation, where required, of unjust structures and systems of land tenure and use, with a view to replacing latifundia and dwarf holdings by an equitable system of land tenure so that, with the help of timely and adequate credit (emphasis supplied), technical assistance and facilities for marketing and distribution of products, the land will become for the man who works it the basis of his economic stability, the formulation of his increasing welfare, and the guarantee of his freedom and dignity".

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<sup>1/</sup> In addition, a few reform sector farmers have rented some additional land so that the average farm size was 7.9 basic and 9.2 physical hectares.

It would be inconsistent with this objective of the Charter to disclaim interest in the timely provision of such follow-up support to reform beneficiaries in favor of a program of exclusive attention to minifundista or dwarf holdings.

Consider also the problem from the point of view of the agricultural worker: For generations he has had the least social, economic and educational opportunity. He has almost no capital. He has no experience as an independent agricultural entrepreneur. Overnight he is placed in possession of a farm as owner/manager/operator. He is obligated to pay for this farm at fair value. Thus he finds himself for the first time owing a substantial debt - in an approximate amount of \$5,000.

The present is the crucial point in the land reform process when the beneficiary needs support. If he does not receive such support in sufficient measure there is increased possibility that he will fail. If a substantial proportion of recipients fail, then the experience of land reform will fail.

#### 5. Small Farmer/Minifundista

The following highlights from the Small Farmer Survey are particularly useful in understanding the social and economic characteristics and the farming operations of the small farmers in the major irrigated farming region of the country.

(a) The average small farmer/minifundista family is smaller (5.6 individuals) than the average reform sector family (7 individuals) and is older in age. Younger people have a stronger tendency to leave home in the minifundista sector, presumably because the small farm units provide an inadequate economic base; and older population also obviously has fewer children at home.

(b) The minifundista/small farmer members, which constitute a traditional class of small entrepreneurs, are socially more advanced than the reformed sector, which consists of the former farm laborer class. Only 13.7 percent of small farmers/minifundistas are illiterate compared with 20.4 percent in the reform sector. Some 16.8 percent have studied at middle level compared with only 7.7 percent in the reform sector.

(c) The small farmer/minifundistas earn nearly 20 percent of their incomes off their farms, partly in farm work for others but mainly in other occupations. Some also have pensions. In contrast, the reform farmers earn less than 5 percent off their farms.<sup>1/</sup>

(d) Because of "other income" the smallest minifundistas do not necessarily have lower incomes than those with somewhat larger tracts of lands. Total incomes for farmers in various ranges of physical farm size for small farms are as follows (in thousands of escudos of May 15, 1975):

	<u>Total Income</u>	<u>Farm Income*</u>	<u>Other Income</u>
1 hectare and less **	2,796	384	2,412
1.1 to 2 hectares	2,314	1,646	668
2.1 to 3 hectares	2,591	2,245	346
3.1 to 5 hectares	3,928	3,415	513

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\* Including return on family labor and on invested capital.

\*\* Not fully representative inasmuch as the sample included only farmers with one or more basic hectares, which gives a bias in favor of Aconcagua, the province in which a basic hectare is most often considered to be less than one physical hectare.

(e) The farm income of small farmers/minifundistas rises with increased landholdings and they do as well or better than reform farmers when their landholdings approach the six basic hectare level of the agrarian reform program.

(f) Indeed, the small farmers minifundistas in Curicó/Talca, with average landholdings of 5.8 physical hectares, achieved a modestly higher income per capita from all sources than the

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<sup>1/</sup> Some small farmers/minifundistas probably also receive remittances from family members in the cities, but these data were not collected.

reform sector farmers. The small farmers/minifundistas in Aconcagua and O'Higgins, with 2.2 and 3.8 hectares, respectively, did worse:

Average income per capita  
(thousands escudos of 5/15/75)

Minifundistas

Aconcagua .....	541.9
O'Higgins .....	754.5
Curicó/Talca .....	1059.7
<u>Reform Sector</u> .....	1001.7

(g) The small farmers/minifundistas produce just as much net income per hectare as the reform sector farmers but they do not (as observed in some other countries) produce more per hectare despite the facts that:

- the average value of their land and permanent improvements is one-third higher than the reform sector chiefly because of permanent crop improvement.
- they utilize more family labor per hectare (value not deducted as an expense in the net income per hectare calculation).
- they engage in more intensive farming (fruits and vegetables).

(h) Minifundistas earn less return per day on their family farm labor than reform families. Major reasons for this are:

- generally lower yields, especially in cereals.
- market pressure on the prices of many fruits and vegetables in which minifundista production is heavy.
- very modest supplementary income from livestock.<sup>1/</sup>

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<sup>1/</sup> In part a reflection of lack of economies of scale and necessity to purchase a larger proportion of feeds. Note also, however, that in other countries farmers with livestock would usually in a farm survey get some advantage from the rising value of their inventory owing to inflation. In Chile the use of a constant Escudo eliminated any such gain.

- fewer economies of scale.

- possible lack of interest on the part of some farmers who have other incomes and may be in semi-retirement.

The fact that many minifundistas do not use modern inputs (107 of 299 do not use chemical fertilizer) cannot be added to the list because on a per cultivated hectare basis the use of fertilizer is the same between reform and traditional farmers and the use of insecticides and pesticides by the latter is over twice as great per hectare.

Outside the central agricultural area of Chile where the survey was conducted, less detailed information is available. There are zones of extreme rural poverty in various sectors of the country, chiefly in the south, where conditions approximate those found in the poorest regions of Central America. In between these extremes is the southern dry farming area of the Central Valley in which intermediary conditions can be found. In any case, generalization would be extremely hazardous as the geography of the country extends over many degrees of latitude, and with significant changes even within each latitudinal zone depending upon the locations and characteristics of valleys, rivers, and transport facilities.

In conceiving any program to work with minifundistas, they probably should be considered as consisting of three sub-groups with the following general characteristics:

a) Those with other income sources and very little land whose interest in farming may not be particularly responsive to farm programs and who can probably self-finance modest inputs from other sources.

b) Those who are or want to be serious farmers but whose most critical need is an adequate land base to achieve a fair return on family labor under agricultural conditions in Chile.

c) Those whose landholdings, though below the level of agrarian reform, are adequate to make a fair living.

Minifundistas, although they have more capital and less land than the reform farmer, wanted more credit: \$2,047 for the 1975-1976 agricultural year compared with \$1,684 for the reformed. The difference is more than fully explained by the fact that 31% of minifundistas interviewed want credit for land.

6. Role of Women

Women play a substantial role in the minifundista sector as heads of family/farm managers. Approximately 7% of all farmers in this sector, according to the Small Farmer Survey, are women. In the reform sector women numbered only 1% of farmers surveyed. Over time, however, this sector can be expected to approximate the minifundista.

Women in Chile do not work in the fields as this is believed more suitable for males. In consequence, in both reform and traditional sectors, only 5% of the average farm family's female labor supply (12 to 64 years) is utilized in farming operations compared with about 30% of the male. Female labor is used primarily for care of animals and some work in the family garden.

Young rural women in Chile seeking work are attracted to cities, to an even greater extent than young males. In consequence, rural families have a disproportionate number of male to female adults:

	<u>Minifundista</u>	<u>Reform Sector</u>
Women age 12 and over	2.0	2.1
Men age 12 and over	2.3	2.7

Under the Project, women will be given exactly the same privileges as males in all respects, including particularly access to loans for the improvement of their farms and for the financing of annual inputs.

This Project contains one element which may have a significant impact on the options available to Chilean rural women. The credit under this project unlike other credit in Chile will provide for the funding of both family and hired labor during the crop year. To the extent that women are now working off of the farm to bring in needed cash, there will be new opportunities created for their on-farm employment. On the other hand, to the extent that women now employed on the farm have aspirations to dedicate their time to other activities, the credit provided may make possible the employment of hired labor to substitute for their services.

Women play a very important role in Chile as professional and sub-professional personnel with Government and the banking system. Accordingly they will participate very actively in administration of the program. The PPIS system, in particular, should make heavy use of females as a large proportion of statisticians and other professional and skilled personnel of the National Institute of Statistics and other governmental organizations are female.

D. Economic Analysis.

1. Returns to Credit

The critical question addressed here is the degree to which small farmer production credit components can be expected to achieve the goal of increasing small farmer incomes and production, and with what efficiency. The task of estimating costs and returns to small farmers resulting from the use of credit for the purchase of inputs must take into account unique Chilean conditions that may not exist to the same degree in other countries:

(a) Wide variations in production conditions. Agricultural production in Chile takes place under widely differing (1) climatic conditions that range from completely arid to extremely high rainfall with subtropical to frigid temperatures; (2) soils from high to very poor quality and from flatland to steeply sloping lands, and (3) land use intensity that varies from intensive irrigated crops to extensive unimproved pasture. These conditions often are found in quite different combinations in small microclimates only short distances apart.

(b) Highly unstable prices for inputs and output. Price data for inputs and output are very difficult to compare and even more difficult to match into some kind of "normal" cost/price relationship due to hyperinflation, abrupt policy changes on price controls and taxation, pricing policies by public agencies which control the movement of most or major portions of production inputs, and the rapidly changing world price structure for many of Chile's agricultural imports (inputs and products) and exports.

(c) Lack of farm level data. There is a paucity of farm level data on costs and returns for individual crops raised by major segments of the target group, especially for dry land small farmers and reform sector farmers, the latter of whom only began farming on an individual basis in 1973/1974. Using costs and returns data that are available, there is little possibility of distinguishing between different technology levels to permit estimates of returns to increased levels of inputs purchased with credit.

(d) Small farmer production technology data. The lack of small farmer oriented production technology data in general, and dry land small farmer oriented data in particular, also is a serious constraint to analysis. Most production technology information is oriented toward larger farms (haciendas and asentamientos) and irrigated land. Little data appear to be available for dry land small farm conditions. Thus, comparative costs and returns information for different technologies is not available even from experimental data.

The Small Farmer Survey does provide some useful information for determining costs and returns for reform sub-sector irrigated farmers in the Central Valley, comparing relative returns of those who had credit with those who did not have credit. Also, general comparisons can be made between reform and other irrigated small farmers in terms of relative levels of production costs and concomitant levels of returns. The results of the above comparisons generally demonstrate the profitability of credit used for applying increasing levels of cash inputs. However, there is considerable variation in degrees of profitability between areas and crops, and therefore such conclusions as are drawn are at best tentative.

In the case of dry land (rainfed) small farmer agriculture, reliance on observational data from INDAP and recommended production technologies from IICA/Chile has been necessary. The limited analyses possible to date from the Small Farmer Survey data for irrigated land and from the INDAP and IICA information for rainfed agriculture show that credit can be used quite profitably by both types of farmers. These analyses are summarized in greater detail below.

(a) Profitability of credit use in the central irrigated region. The Small Farmer Survey, which contains data for the 1974/1975 agricultural year in the central irrigated region of Chile, indicates that a very strong, almost dramatic, association exists between credit use and higher incomes.

The following are some of the highlights:

Item	Farmers with Credit	Farmers Without Credit Who Say They: Need Credit	Don't Need Credit
	(Yield in Kilos Per Physical Hectare)		
Wheat	2489	179	2495
Maize	3356	2419	1747
Potatoes	8994	5585	5574
Beans	1477	1311	1140
Grapes	8008 <sup>1/</sup>	3865	5772 <sup>1/</sup>
Apples	6828 <sup>1/</sup>	3703 <sup>1/</sup>	--
(Value in 000's of Escudos of 5/15/75)			
Crop production per physical hectare of cultivated land	1891.8	1567.2	1335.0
Total net income per physical ha.	689.3	341.0	454.8
Total family income	7255.0	3299.0	3876.0

While these broad aggregates appear to make a solid case for credit, it is less easy to establish the exact linkages between credit and income for all crops. With respect to three basic crops studied, the following findings are relevant (on a per physical hectare basis):

(i) Vegetables. The credit farmers have the highest value of production, the highest level of input use, and the highest gross margin.

(ii) Fruits. Farmers who do not have credit but who do not regard it as important have the highest gross profit margins, the highest level of input use, and the largest gross margins.

(iii) Other crops (cereals, sugar beets, tobacco, potatoes, etc.) Credit farmers have the highest value of production, the highest level of direct inputs use, and the highest gross margin.

<sup>1/</sup> Between four and nine observations; all others have 11 observations or more.

Considerably more analysis of the data would be required to reach more comprehensive conclusions with respect to the impact of credit. However, at this writing the following statements appear the most relevant and supportable:

(i) Institutional credit appears to be associated with higher incomes in all size groups as shown in the following chart:

Net Income Per Hectare In 000's of E* of May 15, 1975 <sup>1/</sup>					
Size of Farm (Hectares)	All Farmers	Borrowers from			
		INDAP	BECH	Coops	All Lenders
0 - 2.5	877.4 (123)	669.9 (3)	1535.8(3)	2167.1(4)	1528.6(10)
2.5 - 5.0	848.2 (115)	612.8 (5)	1482.2(19)	496.8(6)	1140.2(30)
Over 5.0	819.4 (165)	446.3(16)	989.3(71)	818.1(22)	875.0(109)
All Sizes	845.2 (403)	508.9(24)	1107.6(93)	926.5(32)	972.3(149)

NOTE: Figures in parentheses are number of observations.

(ii) The profitability of farm investments and credit is very closely inter-related with the market prices of specific products and GOC policies with respect thereto. The larger wheat farmers, most with credit, did very well with a GOC supported price of wheat. Small maize farmers, most without credit, did poorly, particularly as the GOC left the price constant for an extended period despite acute general price inflation.

(iii) While many farmers lost money or did poorly, many others were fortunate in enjoying good market prices and substantial annual income. This is true within the minifundista sector as well as the reform sector. The potential for mobilizing rural savings through the banking sector component as a long-term possible alternative for meeting the sector's credit demand is most encouraging. The critical problem is to give farmers confidence that the purchasing power of money saved at harvest time will be preserved.

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<sup>1/</sup> Before deducting 6 percent return on capital.

(iv) There is a close association between farmers with credit and the purchase of chemical fertilizer:

	<u>Purchase per hectare in 000's E*/15/75</u>	
	<u>Chemical Fertilizer</u>	<u>Natural Fertilizer</u>
Farmers with credit	223.3	10.3
No credit - but need	130.0	11.2
No credit; don't need	103.3	6.6

There also is a close association between use of chemical fertilizers and farm profits:

	<u>Net Profit per Hectare</u> <u>(000's of E*)</u>
Farmers who use chemical fertilizers	568.7
Farmers who do not use chemical fertilizers	370.4

(v) Credit farmers were found to do better in all groups except possibly in the Province of O'Higgins (note small sample size).

	<u>Net Income Per Hectare</u>			
	<u>Credit Farmers</u>		<u>Non-Credit Farmers</u>	
	<u>No.</u>	<u>Aver.</u> <u>(000 E*)</u>	<u>No.</u>	<u>Aver.</u> <u>(000 E*)</u>
Aconcagua	20	546.0	79	170.8
O'Higgins	17	63.9	83	407.8
Curicó/Talca	41	684.2	59	586.6
<b>Total Minifundista Sector</b>	<b>78</b>	<b>513.6</b>	<b>221</b>	<b>362.9</b>

On the basis of the available analysis to date, it can be concluded that not only do most farmers on irrigated land use credit profitably, but also that gross output is significantly increased thereby. Thus, provision of credit to most small farmers on irrigated land should not only increase their incomes considerably, but also should result in significant increases in aggregate production of foodstuffs for both national consumption and for export.

The Small Farmer Survey provides some indications of present unsatisfied demand for credit by small farmers in the irrigated central region. Eighty percent of the farmers surveyed who did not have credit said they needed credit; 49 percent said they needed credit for annual inputs. Of those farmers who said they needed credit for annual inputs, reform sector farmers said they needed an average of \$682 for annual inputs for their farm (including financing for hired labor and family expenses during the growing season), and traditional small farmers (1 to 6 BIH) said they needed \$569. As these farmers improve their production efficiency, their need for credit can be expected to increase by 20 percent to 40 percent to an estimated average of \$750 to \$850 per farmer.

In order to estimate credit productivity for small farmers on irrigated land, the difference in average cost of annual inputs of no-credit (who say they need credit) farmers and credit farmers was compared to the average gross value of production per hectare of these two groups. This comparison indicates that an additional 105,000 E\* of annual inputs produces an additional 335,000 E\* of output. On this basis, each dollar of additional credit can be expected to result in added production of \$3.19. <sup>1/</sup>

(b) Profitability of credit use in a rainfed agriculture region. Since many mirifundistas and traditional small farmers live in rainfed areas and have only a small portion or none of their land irrigated, it is necessary to make some determination of the economic feasibility of a credit program for this large segment of the INDAP target group. Since there is such wide variation from area to area in Chile in terms of climatic conditions, relative farm size, soil quality, rainfall, temperature, etc., a decision was made to base such analysis on one region (Region VIII) that has largely rainfed agriculture and for which some data are available. The analytical results presented below are considered to be illustrative of mixed dryland-irrigated farming in that area. <sup>2/</sup>

The approximately 58,000 farms in Region VIII that have less than five basic irrigated hectares show the following average distribution of

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- <sup>1/</sup> It should be noted that when direct costs and returns are disaggregated to crop groups of vegetables, fruits, and other crops (grains, etc.) this productivity level appears to be attributable almost entirely to the latter crop group.
- <sup>2/</sup> A USAID Mission Economist prepared the analysis, based on INDAP survey data and information available from IICA: "Análisis Económico del Impacto de Crédito a Nivel del Productor-Region VIII" available in the USAID bulk file.

land per farm, in physical hectares, according to INDAP:

Irrigated	0.5
Arable rainfed	3.5
Non-arable rainfed	<u>7.6</u>
Total	11.6

INDAP study results show that this average composite farm typically has a use pattern as follows:

Irrigated land	0.5 ha. in potatoes
Arable rainfed	3.0 ha. in wheat
	0.5 ha. in fallow
Non-arable rainfed	0.4 ha. in vineyards
	7.2 ha. in unimproved pasture for sheep

On the above "typical" farm, annual gross production amounts to \$1,195, with a cash expenditure of \$483 for seed, pesticide, and fertilizer, providing a net return to land, labor, owned capital, management, and profit (net family income) of \$622 annually (\$175 of which is attributable to labor calculated on the basis of a daily wage rate of \$1.39). Using an estimated average family size of six persons, this is an annual per capita income of slightly more than \$100.

The relationship between net family income and credit for this typical operation, assuming credit only for all cash expenditures for seed, pesticide, and fertilizer, as well as for 50 percent of the labor utilized, is \$1.09 per \$1.00 of credit. The credit to value of production ratio is one to 2.09.

Since budget estimates were not available for a farm that does not use purchased inputs shown in the "typical" farm above, the available data do not permit the estimating of a benefit/cost ratio for purchased inputs of this "typical" farm budget. However, the INDAP report includes an "improved" farm budget based on INDAP estimates of potential for an improved farm operation with the same cropping pattern as the average "typical" farm. Some marginal costs and returns conclusions can be drawn by comparing these two budgets.

The INDAP "improved" farm plan requires cash inputs of \$201 as compared to the "actual" farm level of \$483. The value of production on this "improved" farm increases to \$1,830 as compared to \$1,195 from the "actual", and disposable family income increases to \$910 as compared to \$622 actual. The additional credit requirement for the "improved" farm is \$110, and additional output is \$635, a return of \$5.77 for each additional dollar invested. In terms of the relationship between family income and credit required, the ratio is 1.34 to one as compared to 1.09 to one for the "typical" farm.

A third farm budget was constructed for the Region VIII average small farm, based on IICA recommendations for changes in cropping patterns and other improvements. This budget calls for the following farm production plan:

Irrigated land	0.25 ha. in potatoes 0.25 ha. in corn
Arable rainfed	1.40 ha. in wheat 1.40 ha. in lentils .70 ha. in fallow
Non-arable rainfed	0.40 ha. in vineyards (unchanged) 7.20 ha. in improved pasture (deep-rooting clover) for improved sheep.

It should be noted that recommended shifts in cropping patterns do not appear to present demand problems because Chile is at present exporting lentils, and corn is primarily used as a feed grain.

This new enterprise combination results in a total value of production of \$1,987, and a net family income of \$1,336, more than double that of the "typical" farm, and nearly 50 percent more than the "improved" farm. Credit requirements increase to \$714, with marginal gross return to each additional dollar of credit (as compared to the "typical" farm) being \$5.50.

The aggregate increase in gross value of production for the 58,000 traditional small farmers in Region VIII, if they were to change from the present average production level to the most improved new enterprise combination explained above, would be \$45,936,000 annually, involving an additional credit demand of \$8,352,000 over that required by the present

average level of operation. If traditional minifundistas and small farmers in other areas of the country were to achieve a similar level of advance in their farm operations, the estimated 150,000 minifundistas and small farmers in the country with up to six basic irrigated hectares equivalent would need a total of \$27,792,000 additional cash to produce an additional \$152 million of annual output.

(c) Estimated Impact of Credit Component of the Project. If the analysis above related to irrigated small farmer credit needs is used as a proxy for the banking system credit sub-component, and that related to rainfed small farmers as a proxy for the INDAP sub-component, the lending levels and output impacts during the third year of the Project would be as follows:

(i) With an average size loan of slightly more than \$800, the \$ 9 million channelled through the banking system would supply annual credit needs of approximately 11,250 reform sector and other small farmers, resulting in added total output of agricultural production estimated at \$29 million.

(ii) With an average size loan of \$570, the \$15 million in the INDAP small farmer production credit fund would supply annual production credit needs of approximately 26,250 small farmers/minifundistas, resulting in added total output of agricultural production of \$31 million.

Thus, during the third year of the Project, the total \$24 million credit component can be expected to supply annual production credit needs of 37,500 small farmers, resulting in additional agricultural production of \$60 million.

## 2. Cost-effectiveness of the PPIS

One of the major reasons that little is known about the rural poor is the difficulty and costs of studying them. Two related problems account for most of the lack of available information:

(a) The groups are geographically dispersed and not easily sampled. Only expensive area frame sampling techniques are adequate to obtain statistically significant information.

(b) The principal problems of the poor (income, employment, health, and nutrition) are extremely complex and require a depth and detail of data and analysis far beyond the resources of individual institutions dealing with only a part of the problem.

The information pattern which naturally emerges under these conditions is sporadic and is characterized by either in-depth case studies of a particular problem, which are of limited usefulness for policy making or project formulation because of the narrow statistical confidence in their conclusions, or by statistically significant but insufficiently detailed information which fails to deal with the problems themselves in enough depth to suggest any specific policy or project directions. Numerous examples of each of these two study types are available in Chile. The principal characteristic which distinguishes PPIS is that it combines national level probability samples with in-depth content.

An obvious implication of combining the element of content depth and statistical coverage is elevated cost. Moreover, the costliest elements of the system are always related to the poor segments of the populations covered. For example, in the agricultural marketing segment, it is relatively inexpensive to gather information on the principal wholesale and retail establishments. Their central geographic location and small number mean that sampling from inexpensive list frame methods will be cheap and rapid. To gather information on the status and potential of the thousands of rural, village, and urban small vendors whose livelihood comes from some small link in the food marketing chain is a complicated and relatively expensive task. In addition to the elevated costs of sampling and logistical expenses related to the poor populations, the costs and related difficulty in achieving the necessary depth of content in the information obtained is much higher. When the cost implications of these two combined factors are tallied, it is no surprise that project planners and policy makers find such information unavailable. No university department, or even individual public sector institution concerned with only a part of the problem could muster the necessary resources for such an effort.

USAID and the GOC have examined one alternative to the farm survey element of the PPIS, the establishment of a system of farm records. Although a farm records system might have some clear

advantages in terms of data "hardness" (i. e., less reliance on recall), the option was discarded for the purposes at hand for the following reasons:

(a) In general, small farmers in Chile keep no formal records; a technical assistance component to assist them would therefore be needed.

(b) Because participation in the program would have to be voluntary, farmers participating in such an activity would self-select and randomness would be lost.

The foregoing does not mean that the establishment of a farm records program as a part of a larger farm management undertaking is not, in and of itself, a worthwhile activity, - in fact, USAID is considering such an activity as a part of its possible ICIRA Project. It does mean, however, that USAID and the GOC have concluded that given the choice of one system or another, for PPIS purposes in Chile, farm level surveys are a more cost-effective approach. To the extent farm record data are generated by future possible projects, they will provide useful comparisons with the survey data.

**PART 4.                    Implementation Arrangements**

**(A) Analysis of Administrative Arrangements**

**1. General**

The Loan Agreement will be signed with the GOC, represented by the Ministry of Finance, together with the Ministry of Agriculture and the Central Bank in view of their operational responsibilities. The Ministry of Finance will bear the overall responsibility of repayment to A. I. D. The Central Bank will administrate the credit activities under the A. I. D. Loan and will request disbursements directly from USAID. ODEPA will be responsible for the overall administration of the non-credit elements of the Project and will enter into agreements with INE and with INDAP concerning their respective participation.

ODEPA will have the overall responsibility for negotiating the Loan Agreement, arranging for its signature, and seeing that all conditions precedent are fulfilled - for the credit as well as the non-credit components. ODEPA will direct the evaluation of the Project.

**2. INDAP Organization**

(a) History: INDAP was founded in 1963 as part of a reorganization of the Ministry of Agriculture under legislation establishing Chile's agrarian reform program. Among its specific tasks were:

(i) Provide technical assistance and credit to small and medium farmers, including minifundistas and Indians, and to their cooperatives; and provide assistance to handicraft enterprises and other small industries in rural areas, especially those that complement agriculture.

(ii) Provide credit and other assistance to minifundistas so as to facilitate the purchasing and legal titling of land in cases of inheritance, purchasing of adjoining land to make an uneconomic minifundia a viable economic unit, and other such situations.

(iii) Develop means by which land can be farmed in common and make other development arrangements in cases in which the land cannot be productively utilized in individual small plots.

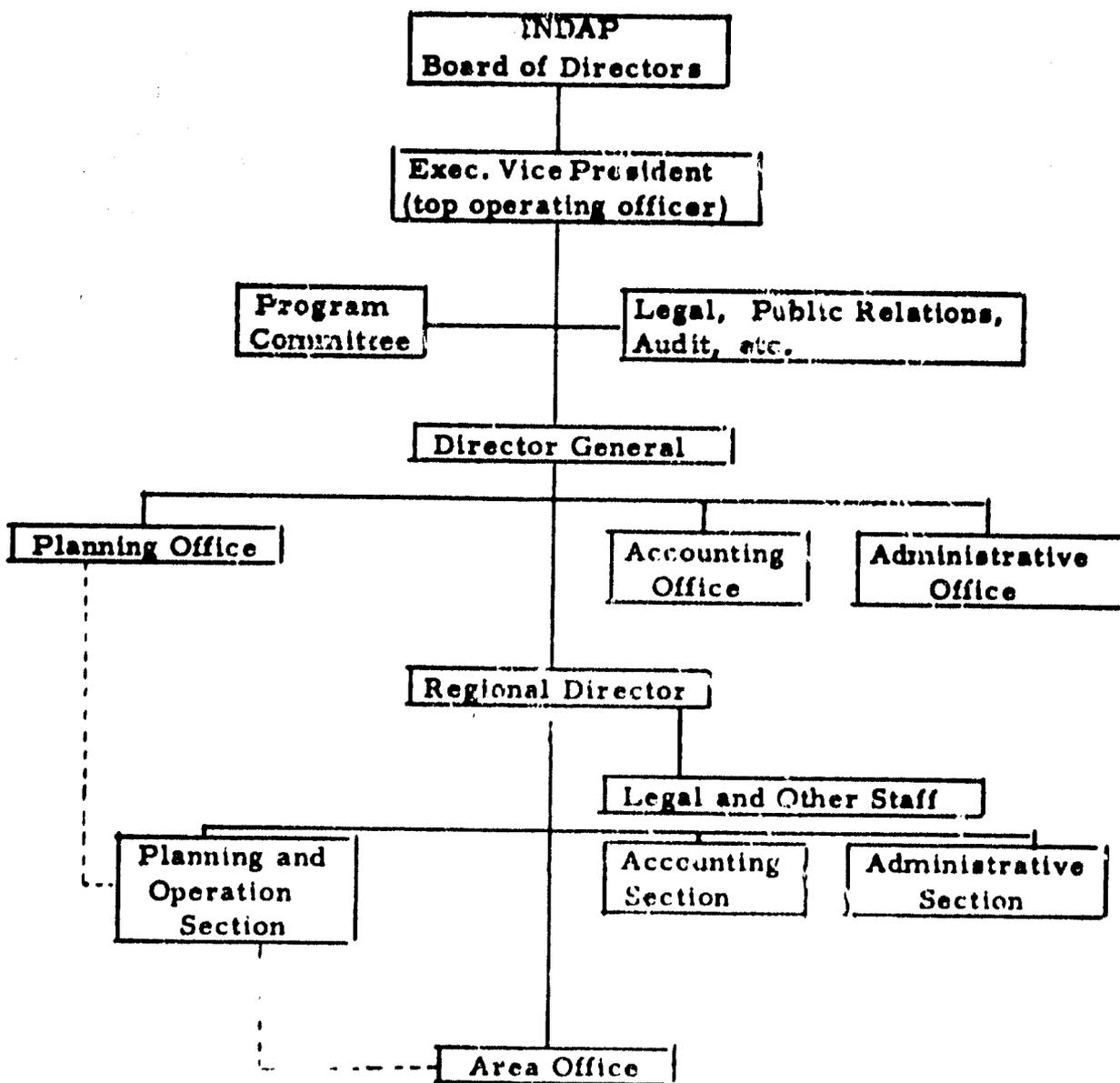
(iv) Promote the organization of cooperatives and assist those cooperative activities which relate to the production and marketing of food, animal, forest, and fish products and to the betterment of rural life in general.

(v) Promote productive investments in the rural sector, including storage facilities, slaughterhouses, and other agro-industrial enterprises.

INDAP grew at first in a fairly rational manner and by about 1967 had a staff considered professional and effective. It subsequently became heavily politicized both as to staff and clientele, and adopted questionable procedures. Its staff grew from approximately 900 in 1963 to 3,400 at the end of 1970 and to 5,700 in 1973, over half of whom were non-professional promotores, whose tasks were involved with political indoctrination. Its operating budget tripled in real terms from 1970 to 1973.

(b) Organization: INDAP's original centralized organizational structure led to two problems. One was that individuals in the regional offices had dual loyalties. They officially were part of a national office (i. e., Office of Credit) while in fact being part of a regional office. Consequently, it became difficult for a regional office to direct itself as a unit toward defined regional objectives. Secondly, there were two distinct types of extension agents who worked quite independently: those who provided credit and those who provided other technical services. Since rural development work requires close coordination between credit and other technical services, this division of responsibility proved unsatisfactory.

INDAP's current organization resolves these problems. It also puts greater emphasis on planning and on the linkages between planning and operations.



The Board of Directors currently consists of six persons: The Minister of Agriculture, as chairman, the Subsecretary of Agriculture, the Executive Vice President of INDAP, the Executive Vice President of the land reform agency (CORA), the Executive Director of the Agricultural Extension Service (SAG), and the President of the Banco del Estado de Chile (BECII). The Board meets every two weeks, and each

individual sends a high level representative when not able to attend personally. In addition, the Controller General's office sends a non-voting representative to each meeting. Provision is made in the legislation affecting INDAP to have up to 15 persons on the Board, and from time to time in the past other persons have been included.

The Program Committee is an internal body which advises the Executive Vice President on such policy issues as use of the budget, credit policies, sources of capital, and needed studies.

At the national level, the Planning Office is the focus of INDAP's operations. It has the responsibility for making national policies, designing methodologies, setting priorities, assessing the feasibility of investment projects, coordinating budget development with operating needs, evaluating regional programs in relation to national objectives, and maintaining systems of information and control between the regional offices and the national office. The Planning Office is divided into seven sections:

(i) Diagnosis and Study - to understand the realities of the rural sector and to set action priorities to solve the bottlenecks impeding development of the small farmer.

(ii) Project Appraisal - to set criteria for Project design, appraisal, and evaluation, including criteria for investment of funds.

(iii) Operations - to supervise and set norms for the field operations, particularly in the area of credit.

(iv) Technical Supervision - to formulate technical advice which will assist the field workers in making sure that the technical assistance given is appropriate.

(v) Social Development - to develop and supervise the programs that INDAP carries out in integrated rural development.

(vi) Supply - to coordinate the supply and disbursement of agricultural inputs.

(vii) Coordination and Control - a staff group and "think tank" which coordinates the other six sections, prepares an annual program, and prepares the budget.

The Planning Office will establish a small unit, attached to the office director, that will be responsible for coordinating and managing the use of Loan funds allocated to INDAP.

All day to day operating decisions are now made in INDAP's 13 regional offices. Each office has a planning and operations section in addition to normal staff sections such as administration, financial and legal. This section does all the studies, analyses, planning, technical supervision, and control of the field work. It contains both administrative and technical personnel.

The actual field work is carried out from the 99 area offices with support from the technical personnel at the regional offices. These area offices contain both professionals (veterinarians, agronomists with university degrees, university trained business administrators, etc.) and technicians (extension agents with less than university training).

(c) Personnel: In 1963, INDAP had 900 employees, many of them skilled professionals trained by A. I. D. This level built up over the following five years to about 1,600, as INDAP increased its coverage and services. During the charged political atmosphere of 1969-1970, INDAP increased its staff to 3,400, the entire increase being made up of political promoters and their back-up support at the central level. The promoters were like social workers, the men visiting cooperatives and the women visiting women's clubs or individual households to train the people in political precepts. Because of their sheer numbers, they had great influence on who received credit and technical services. Most of the promoters were unskilled people from the local communities. After the election of 1971, most of the individuals holding the promoters positions changed, but their numbers continued to grow, with INDAP's total staff reaching a peak of 5,700 in 1973.

Since the change in Government some 3,100 persons left INDAP through individual firings, voluntary resignations, and retirements, leaving about 2,600 employees by mid-1975. INDAP considers that both its central staff and its non-technical field staff (the legacy of the days of the promoters) are still too big and is reducing personnel through four reductions in force, each of about 323 persons, taking place every three months starting August 16, 1975. Of the over 1,200 persons being released, only 55 have any professional title, and these are mainly in non-priority professions like journalism; the remainder are unskilled

clerks or technicians. About two-thirds of the reduction is taking place in the Santiago central offices.

Two of the four reductions have taken place leaving INDAP with some 1,950 employees as of late November 1975. INDAP recognizes that its professional and trained technical field staff must be increased to carry out increased credit and extension activities. Therefore, INDAP has formally requested to the GOC that it be allowed to hire some 420 professionals and technicians mainly for field positions; its total staff would number 1,724 by the end of the CY 76. INDAP, looking at GOC budget realities, more realistically estimates its minimum needs for new field staff as between 200 to 300. USAID concurs with INDAP's analysis of its needs and as a condition precedent to first disbursement is requiring INDAP to show a well defined and GOC-approved plan for hiring the additional personnel it needs.

### 3. Operating Criteria for INDAP Credit Component

(a) Introduction: As described above, INDAP in the past operated what can be characterized as a highly subsidized supervised credit program. It currently is involved in implementing new basic policies designed to make its operation efficient, effective, and well targeted. The more important criteria related to new INDAP policies and administrative arrangements to be implemented beginning in 1976 are summarized below. Most of the elements described still are in the formulation stage in terms of operating detail, although decisions on general policy guidelines already have been made. New INDAP operating and administrative regulations will spell out the relevant implementation arrangements in detail. Approval of appropriate regulations will be a condition precedent to disbursement for credit.

(b) Administrative Arrangements: INDAP will establish a segregated permanent Small Farmer Agricultural Credit Fund ("Fund") for receiving A. I. D. and GOC counterpart disbursements from the Central Bank, as well as rollovers and interest payments from subloans made therefrom. The movement of monies of this Fund will be accounted for separately from other funds under INDAP control.

The Fund will begin operations with an initial advance from the Central Bank, and thereafter receive reimbursements for eligible subloans based on agreed documentation submitted by INDAP to the Central Bank. INDAP will not be required to repay either the A. I. D. or GOC counterpart component received into the Fund nor will it pay any interest charges.

INDAP management will allocate Fund resources for on-farm agricultural production credit of a short and medium term nature for qualified target group minifundista farmers, first to satisfy requirements within integrated area development programs (described below), and thereafter to area offices within regions that INDAP certifies will apply the A. I. D. approved operating regulations and procedures required as a condition precedent to disbursements for INDAP credit, as well as A. I. D. approved reporting requirements, loan collection and bad debt management criteria and procedures.

Before a regional or area office can be certified for utilization of resources of the Fund, INDAP management must satisfy A. I. D. that staffing levels, capability and orientation are adequate to reasonably assure application of Fund resources in accordance with the intent and purpose of the Project, as articulated in the approved operating procedures and regulations. Procedures will be described in Implementation Letters.

The special unit within the Planning Office of INDAP will maintain a close liaison with A. I. D. for the purpose of reviewing financial reports and evaluation information to agree upon advisable course corrections and adjustments throughout the Project period. As overall INDAP operations reach a satisfactory level of performance in terms of the purpose of this Project, A. I. D., if requested by INDAP either during or after the Project period, may agree that INDAP merge Fund resources with other INDAP resources.

The GOC will assure through the annual budget assignment to INDAP the financing required for all INDAP personnel expenses, including those related to the credit activities financed by the Fund. The GOC annual budget assignment to INDAP also will provide any funds required to replace any decapitalization of the Fund.

Utilization of the resources of the Fund by INDAP will in all other respects follow the normal procedures as other INDAP credit resources for production credit. The Fund and related field operations will be subject to periodic A. I. D. and external audits.

(c) Interest Rate and Loan Collection Criteria: The GOC already has made the decision that interest rates charged by INDAP should reflect the actual market interest rate for internally generated funds. INDAP presently charges the same rate of interest as that charged by BECH (8.5 percent per month on short term production loans, and 8 percent per annum plus readjustment of principal for CPI changes for longer term loans). These rates will shortly reflect the cost of money given that the rate of inflation is decreasing month by month. In the future, INDAP will maintain its rate equivalent to BECH in order that INDAP clientele who achieve a satisfactory performance record can pass to the BECH (or to the private banking system) loan portfolio, thereby freeing INDAP resources for use among other members of its target group. Closely related to the new policy on interest rates is a new policy on loan collection. In the past many loans were made under doubtful conditions in terms of profitability to the farmer, and collection often was not enforced. Present policy calls for credit based on a farm plan that reflects sufficient returns to the farmer to assure repayment capacity from increased earnings. Further, collection procedures are being reoriented so that the farmer has a clear understanding at the outset that he must repay, and that INDAP will take whatever steps are necessary to collect. Various alternatives will be tested to determine the best method of assuring repayment, including co-signing by borrowers, peer group loan supervision committees, group collection responsibility, etc.

(d) Credit Use and Supporting Services: INDAP policy guidelines recognize the inappropriateness of providing credit to small farmers that does not serve to improve earning capacity of the farmer in the use of the resources he has in his farm enterprise. The ability to improve earning capacity may require adjustments in production technology and/or basic changes in the structure of the farm enterprise, i. e., shifts from existing crop or animal production activities to different ones, or different combinations. Further, the small farmer's

well-being depends upon his entire family economic situation, not just one of the crops he grows, or one activity he carries out. Thus, the INDAP approach will be to assure technical assistance that assists the farmer to look at his total family business to see how he can best organize his land, labor and capital resources, in combination with any outside credit resources that may be required, to achieve their most efficient and productive use in terms of sustained family income. In order to support this "whole farm" approach, Project funds will be available for credit for all costs of a short-term production nature, as well as for medium term on-farm investments in permanent crops, land improvements, on-farm irrigation investments, animal production and crop storage facilities. An important policy change proposed by INDAP for inclusion in the revised credit regulations is to permit the costs of hired labor, as well as a portion of family labor where justified, to be included for credit financing.

(e) Delivery System: INDAP is in the process of developing its operating methods for delivering the credit and support services required to achieve self-sustaining improvement in the income earning capacity of its clientele. The basic principle being applied is for INDAP personnel to function to the maximum extent possible through organized groups comprised of target group members. To the extent that farmer organizations already exist in areas that have significant numbers of minifundistas, INDAP will seek to establish working relationships with such organizations in order that credit and services reach the target farmer through his organization. Where no appropriate farmer organization exists to serve as a vehicle for providing individual minifundista access to INDAP credit and services, INDAP will assist farmers in organizing either formal or informal group organizations to serve as the delivery vehicle.

Many of the existing farmer organizations will require substantial guidance and assistance from INDAP before they can take on full responsibility of credit delivery and collection, input supply and assuring markets to members for their production. Nevertheless, INDAP operating philosophy will be to turn over operating initiative to the farmer organization, with INDAP personnel providing more or less guidance and supervision, as the occasion demands.

It must be kept in mind that the operating criteria described above reflect a model toward which INDAP is working. Given the fact that it has inherited, in various stages of disarray, on-going operations based on an altogether different model (that of INDAP as the patrón of minifundistas on an individualized as well as group, basis), a part of its operations temporarily will continue to function in the more conventional individualized manner, with major changes being only in interest rate charged and more dynamic loan collection procedures. As INDAP field staff become more proficient at applying group methods and in implanting the concepts of cooperation and self-sustaining income earning changes among the leaders of farmer organizations and rank and file farmers, the "new" model eventually will expand to the total INDAP effort.

(f) Integrated Area Development Programs : In 1975 INDAP began carrying out studies designed to serve as the basis for planning and implementing integrated area development programs.

The purpose is to provide an objective basis for allocating INDAP resources among different rural areas in accordance with relative needs in terms of poverty levels and incidence. Further, within a given area, such studies (and resulting plans) improve INDAP's ability to direct its resources to activities that tap inherent advantages due to market location, human skills, climatic conditions, resource base, etc. Additionally, important needs for integrated development other than those that involve INDAP responsibilities directly are identified. Such information can be made available to relevant public and private institutions for appropriate action complementary to INDAP efforts.

As studies and resulting plans are completed for initially selected areas, studies for additional areas will be undertaken. The first plan recently was completed and implementation initiated. Another seven plans are expected to be completed during 1976 and implementation begun. Six to eight new area plans are projected to be completed each year during 1977 and 1978 and implementation initiated. Thus, a total of 20 to 24 plans will be completed and implementation underway by the end of 1978. A portion of the INDAP technical assistance component of the A. I. D. Loan will assist the INDAP planning office in improving capability in carrying out the relevant studies and developing integrated area development plans. Farmers in areas where such plans are being implemented will be assigned highest priority by INDAP in programming use of production credit funds from this Project.

#### 4. Operating Criteria for Banking System Component

The Central Bank together with the Ministry of Agriculture will develop the operating regulations that establish procedures and lending criteria for obtaining access to Project funds by the banking system. The regulations will be a condition precedent to first disbursement under this component.

The lending criteria to be applied will be broader than the present crédito por pauta crop specific discount lines, in that all crop and livestock enterprises in the farmer operations can be financed. Additionally, the financing of labor will be permitted and any limitation on the level of inputs to be financed per hectare or animal unit will reflect a realistic relationship to technically acceptable practices. Credit will be limited to short term production purposes. Efforts will be made to keep lending criteria as broad and simple as possible in order not to discourage private bank participation so long as the appropriate target group members are being reached and purposes achieved.

The definitions spelled out elsewhere in this Paper regarding farm size limits (Part 3-C) and cooperative membership composition (Part 2-B) will be reflected in the lending criteria. Verification of compliance with size limits will be based on property tax statements which all farmers can make available to their banks or cooperatives. These tax statements include all information required to calculate the BIH equivalent owned by the farmer. If the farmer is a renter, he must present his rental contract. He also will be required in his Loan application to certify that he neither owns or operates farmland other than that which he has disclosed.

USAID will have a right to veto subloans to cooperatives or other groups involving more than \$200,000 of A. I. D. loan funds. This limit will be subject to revision as participating banks and the Central Bank demonstrate their ability to make choices appropriate to goals of the Project.

The Central Bank will be responsible for establishing safeguards to assure compliance with the operating regulations by participating banks. Although the PPIS component eventually may be able to provide the necessary information to monitor compliance, it will not be developed sufficiently to do so for most if not all of the implementation period. If necessary

the Central Bank will use part of the funds that accrue from interest margins to contract out the work of post-check for compliance on a sample basis. The final decision will depend on the adequacy of the safeguards established in the operating regulations (e. g., level of fines, degree of inspection by Superintendent of Banks, etc.) and some initial experience in applying these safeguards.

The Central Bank and the Ministry of Agriculture will allocate Project funds under this component using the following procedure:

(a) An explanation of program objectives together with operating rules will be issued to all potential participating banks.

(b) Banks that are interested will be requested to advise the Central Bank in writing and to provide supporting information on their expected loan volume.

(c) The Central Bank and the Ministry of Agriculture will make tentative allocations of Project funds planned for release during the agricultural year among different interested banks based on information received and the bank's past performance in agriculture.

(d) These allocations will be divided into periodic allotments, perhaps quarterly. If an individual bank does not use its allotment during the period, downward adjustments will be made and the funds reallocated among other banks.

In sum, the process for channelling credits under this component will be as follows:

(a) Central Bank publishes announcement of availability of financing, indicating the objectives of the program and estimated lending levels for crop year.

(b) Potential participating banks discuss possible credits with cooperatives and other farmer organizations that may qualify and request levels of financing from Central Bank.

(c) Central Bank and Ministry of Agriculture determine preliminary allocations among interested banks;

(d) Banks receiving allotments finalizing their credit programs based on applying A. I. D. eligibility criteria and normal banking judgement. Bank's review for eligibility will include checking of compliance with A. I. D. target group specifications (i. e. reform sector or not more than six BIH owned or rented) and consistency with credit norms set forth in Central Bank lending regulations. <sup>1/</sup>

(e) Central Bank reviews documentation presented by lending banks and transfers credit disbursements to their accounts if all required documentation and certifications are in order. Central Bank then proceeds to request USAID for reimbursement for groups of such transactions.

(f) Post check for compliance take place through: field audits; regular inspections by staff of Superintendent of Banks PPIS; and possibly special sample surveys and inspections (PPIS will help provide cross check information. ).

##### 5. Policy Planning and Information System (PPIS)

The PPIS project component will be implemented jointly by ODEPA and INE, with overall responsibility residing in ODEPA. Both entities participated in the feasibility appraisal of this component, are aware of the nature of the work involved in Project execution, and are looking forward to having a functioning PPIS in place.

ODEPA will use Loan funds to contract with a qualified professional to act as full time resident manager/advisor for this component. This contract will include travel funds to assure that he will be able to take advantage of experience gained in other countries involved in similar work and consult with AID/W Sector Analysis personnel and other U.S. based professionals. He will assist and advise INE and ODEPA

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<sup>1/</sup> If credit exceeds \$200,000 banks would obtain prior clearance from Central Bank, which in turn would inform USAID of proposed use of funds and ask approval.

in planning and carrying out all phases of this component, including the selection of and arrangements for short term advisors. In the process, he will provide on the job training to the ODEPA professionals who will eventually form a permanent unit within ODEPA to continue the PPIS. ODEPA has capable systems analysts and data processors that can be trained to handle the institutional information aspects. Eventually, it will have to add two or three trained economists to its staff for the additional analytical work that will be necessary as a result of the information generated by the surveys.

As a condition precedent to first disbursement ODEPA will present a subsidiary agreement signed with INE spelling out in detail the responsibilities of each institution in implementing the PPIS, including the release of Loan funds and the use of the counterpart contribution for the first year. Updated plans will be submitted annually thereafter for USAID review and approval prior to making a further commitment of Loan funds. INE will have the responsibility for carrying out and processing the three planned continuing surveys, including a sample design, training interviewers, field work, data coding, data input, data processing and the publication of "raw" data. (If the GOC's Nutrition Planning Council, CONPAN, makes a contribution to this portion of the PPIS, as is expected, initiation of this activity prior to first Loan disbursement early in CY 1976 will be possible. If the planned CONPAN contribution is not forthcoming, this sub-component will not begin to function until the middle of CY 1976 and it will not be possible to begin the farm level survey fieldwork until May or June of 1977.)

All segments of the PPIS have data processing elements. Two data processing facilities are contemplated, one in INE and the other in ODEPA. For timely processing of the agricultural census, a data processing capability should exist in INE by the 4th quarter of CY 1976. Two options appear viable: (1) a mini-computer installation for INE, compatible with that planned for ODEPA, or (2) a Remote Job Entry (RJE) arrangement with the National Computer Center (ECOM).

Accordingly, USAID is requesting AID/W assistance in arranging for the TDY advisory services of a specialist in data processing equipment during January 1976 to help USAID and the GOC decide on the best alternative.

## 6. A. I. D. Monitoring

Within USAID, the day to day monitoring responsibilities for the Project will be within its Project Group I. The special unit within INDAP and the resident advisor within ODEPA will promote more efficient use of USAID's Project monitoring resources. However, very close working relationships nevertheless will have to be maintained just to keep the Project moving on schedule.

Depending on the workload requirements of other possible FY 1976 and FY 1977 projects, home leave schedules, and other factors that will have to be considered during early CY 1976, USAID may augment its monitoring capacity for the credit component by contracting a Chilean credit specialist for the first year of the Project to help set up the necessary procedures. USAID must rely on backstopping from AID/W for assistance in monitoring the PPIS component. In particular, the knowledge and manpower resources available within the L.A. DR Sector Analysis Division must be available to the USAID and ODEPA to help resolve substantive questions that may appear during Project implementation as well as to provide periodic appraisal of the PPIS achievements and suggest future directions. In addition, AID/W backstopping for finding short-term advisors will be requested.

**B. Implementation Plan**

**1. Implementation Timetable**

Assuming Loan authorization by December 31, 1975, the target date for Loan Agreement signature is March 31, 1976. This requires that a draft Loan Agreement be provided to the GOC by mid-January so that, together with the basic instructions of Implementation Letter One, it would be fully negotiated by the end of February. At least three weeks will be needed to obtain the Foreign Ministry's approval of the Spanish translation, the clearance of the GOC's Inter-agency Consulting Commission on External Assistance, and the Presidential decree authorizing signature.

The tight scheduling for signature reflects the intention of USAID and the Ministry of Agriculture to have A, I. D. Loan funds available for the beginning of the 1976-77 crop year <sup>1/</sup> and to dovetail as closely as possible the PPIS component with the 1976 agricultural census completion.

The estimated timetable for accomplishing certain key activities of the Loan Project components (excluding the elements of loan negotiation and signature) are shown in the chronological listing on the following page. Greatest detail is provided for the first year of the Project. Slippage undoubtedly will occur, depending particularly on what happens during the first six months of 1976. Any reprogramming will be reflected in first year plans for credit utilization and for the PPIS, to be submitted as condition precedent documents.

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<sup>1/</sup> Depending on location, the crop year in Chile begins with planting in May through July of winter wheat, rice, some oil seeds, pasture, and fruit, and planting in August through October of corn, lentils, beans, potatoes, tomatoes, melons, spring wheat, etc. Harvest begins in January and runs through May.

Illustrative Timetable of Implementation Events

<u>Date</u>	<u>Activity</u>	
	<u>Credit</u>	<u>FPIS</u>
12/31/75	Loan Authorized	Loan Authorized
2/29/76	-	Data processing configuration and specification finalized
3/31/76	Loan Agreement Signed	Loan Agreement Signed.
5/15/76	-	Field work initiated for evaluation of target penetration.
6/30/76	CP's met	CP's met.
8/15/76	First A. I. D. reimbursement to Central Bank processed.	
9/30/76	Agreed upon plan for use of technical assistance funds for INDAP.	
10/31/76	-	Data processing capability in place, installed and/or rented.
11/30/76	1st. INDAP technical assistance contract signed.	
12/31/76	-	Begin processing of census field data. Target group penetration evaluation completed.
3/31/77	2nd. year credit distribution plan completed.	
6/30/77	-	2nd. year implementation plan completed

Illustrative Timetable of Implementation Events (Cont.,)

<u>Activity</u>		
<u>Date</u>	<u>Credit</u>	<u>PPIS</u>
2/28/78	-	Credit effectiveness evaluation completed.
3/31/78	3rd. year credit distribution plan completed.	-
6/30/78	-	3rd. year implementation plan completed.
6/30/79	Final disbursement for Credit	-
12/31/79	-	Loan evaluation report completed. Final disbursement for PPIS.

**2. Disbursement Procedures**

**(a) Credit Activities**

As explained previously, the Central Bank will administer the credit activities under the A. I. D. Loan. It will receive documentation from INDAP and from the participating banks evidencing that eligible subloans have been made. The Central Bank will transfer the corresponding local currency deposits to the accounts of INDAP and the participating banks. The Central Bank will summarize the transactions and request A. I. D. reimbursement for the agreed upon portions and charge the Loan. Reimbursement will be in dollars, calculated at the highest legal prevailing rate consistent with normal loan agreement requirements.

Disbursement will be made as frequently as necessary but probably not more than once each month.

A. I. D. funds will not be attributed to any individual subloan or to a particular element of subloans. This will minimize the end use documentation requirements for payment. (Actual end use checks will still be possible through field level audits at the local INDAP offices, the participating banks, and the cooperatives.) When credits are made to a cooperative or other group instead of to individual farmers, the loan will not be eligible for reimbursement if more than 50 percent of the credit is used to finance production of crops excluded by A. I. D. manual orders.

(b) PPIS

Efforts will be made to contract the resident advisor to ODEPA for this component through a personal services contract with a Chilean, U.S., or third country professional. Payments will be processed directly by USAID to the individual, based on monthly requests from ODEPA. If the selected individual is located outside of Chile, moving expenses could be reimbursed. Short term advisors will be contracted from the private sector, universities, and PASA arrangements as may be appropriate for the specific needs of the Project. Normal contract procedures will be followed. Dollar and local currency costs will be paid directly by A. I. D. based on ODEPA requests.

Disbursement procedures for data processing will depend on whether purchase or rental is involved. Imported equipment will be paid for through the A. I. D. Letter of Commitment procedure. Local rental costs will be paid directly by A. I. D., based on ODEPA requests.

Costs involved in survey work will be largely in local currency. The annual implementation plans presented for USAID approval will detail the use of A. I. D. Loan funds during each year. There are two alternatives for making disbursement for these costs. One is to finance an agreed upon percentage of the costs, with periodic disbursement based on evidence that INE has performed in accordance with the plan. The other is to identify those items most appropriate for A. I. D. financing up to the annual A. I. D. contribution amount and disburse in accordance with the documentation appropriate for each item involved (e. g., printing of questionnaires, supplies and materials, gasoline and vehicle maintenance, and local per diem). USAID would prefer to make this decision jointly with the GOC once the first annual plan is available. Imported equipment for this activity will be paid for through the Letter of Commitment procedure.

**C. Evaluation Plan**

**1. Principal Evaluation Questions**

Among the most important questions to be answered in the course of the Project's evaluation are:

- (1) Is the Project's definition of the target group an appropriate one? If not, how should it be reformulated?
- (2) Are the Project's eligibility criteria structured so as to maximize the probability of reaching the poorer 50% of Chile's agricultural landholders?
- (3) Is a significant share of the Project's resources reaching the poorest members of the Project's target group?
- (4) If in the course of Project implementation the target group is found not to be adequately served, how can the eligibility criteria best be reformulated?
- (5) Are the recipients of the Project's resources utilizing them in a productive manner (i.e., are their net incomes being affected favorably by the Project)?
- (6) Are the Project's resources contributing to a better utilization of family labor, hired labor, land, and other resources?
- (7) Is more food being produced by credit recipients than formerly?
- (8) What relationship, if any, exists between the recipients' incomes and/or wealth and their loan repayment records?
- (9) What relationship, if any, exists between the differing technologies employed and the recipients' incomes? Does the presence or lack of T.A. have a bearing on recipient success?

(10) Do differing outreach mechanisms employed in the Project have a bearing on the recipients' ability to utilize credit productively or on loan repayments (e.g., INDAP recipients versus banking system recipients or multirrecoops versus campesino cooperatives)?

(11) Have the nutritional levels of the credit recipients improved?

(12) Are data systems such as the PPIS a worthwhile development assistance investment?

The Project's planned evaluations will attempt to answer the above questions as well as similar ones which may arise in the course of the Project's implementation. USAID does not think that answering the above questions definitively will be easy given that other GOC resources and programs will be aimed at the same group of recipients; no doubt the effects of other factors such as changes in crop prices also will be difficult to isolate. In spite of the foregoing reservations, a careful attempt will be made to assess the Project's impact both during its implementation and at its end.

## 2. Evaluation Methodology

The Policy Planning Information System (PPIS) described in Part 2 and in Annex B contains components that will provide both the instruments and the control data needed for the contemplated in-depth evaluation of the Project. The principal instruments to supply data for the evaluation will be the PPIS annual farm level micro-economic survey and its annual rural budget survey. The farm level micro-economic survey, built on the format, methodology, and experience developed by the Latin American Bureau Sector Analysis Group in Colombia, Guatemala, and the Dominican Republic, will provide the necessary data base for studying the evaluation questions related to farm level profitability, income, employment, wealth, changes in factor utilization, etc. The rural budget survey will provide the necessary data base for answering questions about possible induced changes in consumption patterns and nutritional levels. These two surveys will be administered to randomly selected samples of credit applicants and to randomly selected samples of the rural population at large through the normal PPIS interviews.

What is contemplated is the administration of the two PPIS questionnaires to the credit applicants about the crop year prior to entering the program and on a yearly basis thereafter. Thus the surveys would provide baseline and year-by-year data for both credit program participants and unsuccessful applicants. In order to compensate for changes other than the availability of credit, the beneficiaries of the Project can be compared with non-beneficiaries of the Project who have been interviewed in the PPIS component of the Project (the control group). For the purposes of the evaluation, the program applicants who by chance would be included in the normal PPIS sample would be lumped together with the credit applicant group. Similarly, every intent will be made to normalize for extraneous factors such as regional variations and price changes to assure maximum comparability between groups and sub-groups of the samples. Total normalization will of course not be possible.

In order to minimize distortions in the answers by credit applicants, the interview process will not be associated with the credit application procedure. The sample frame for the credit evaluation will include all applicants for credit under the program. A sample of both successful and unsuccessful credit applicants will be followed, thus permitting comparisons between the successful and unsuccessful applicants and providing one important basis for the ongoing evaluation of lending criteria. Interviews of credit applicants will be carried out in conjunction with the regular interviews under the PPIS but will not form part of the regular PPIS stratified random sample.

### 3. Evaluation Schedule

Special evaluations are scheduled for 8 months after the first Loan disbursement. Because its principal purpose will be to determine whether changes are needed in the Project's eligibility criteria and lending mechanisms, the scope of the first evaluation will focus on addressing principal evaluation questions 1-4, which relate to the Project's direct beneficiaries, its target group, and to the lending eligibility criteria.

The second evaluation, scheduled to take place 12 months after the first, would address the more difficult questions about the Project's impact on the incomes and lives of the Project beneficiaries (e.g., principal evaluation questions 5-11). The final evaluation is scheduled for the end of Project. In addition to covering similar ground to that covered in the first two evaluations, it would add as an additional focus the evaluation of the PPIS and of the evaluation system itself.

#### 4. Evaluation of the PPIS

The evaluation questions associated with the PPIS deserve further attention. To attempt to answer the larger question of whether or not information systems like the PPIS are a worthwhile activity for external assistance (principal evaluation question 12), the following points need to be examined:

- (1) Is the system providing baseline measurements of the income, resources, and specific economic potential of the Chilean poor?
- (2) Is the PPIS an ongoing mechanism in place for the evaluation of the impact of projects, programs, and policies aimed at altering the welfare of Chile's poorer groups?
- (3) Has the PPIS system been of use in the evaluation of the agricultural credit component of the Project?
- (4) Has the PPIS system been useful for the formulation or evaluation of other development projects in the food and nutrition area; has it contributed to focusing those projects on the needs of the poor?
- (5) Is PPIS generated information being employed by others beside ODEPA; is it readily available to them?
- (6) Is the PPIS a relatively cost-effective means for gathering, analyzing and disseminating reliable and statistically significant information needed for the formulation and evaluation of development projects?

(7) Assuming that the PPIS is found to be an activity worth continuing, how could it be improved?

The focus of this Evaluation Plan on special evaluation questions does not mean that more routine evaluation questions will not be dealt with by USAID.

5. Evaluation System Implementation

An estimated 16 mm of technical assistance will be needed for the design of the evaluation system and for the performance of the periodic evaluation analyses. The technicians involved could be Chilean, third country nationals, or from the United States. However, approximately seven mm of evaluation T.A. should be from sources familiar with A.I.D. evaluation needs and procedures; these technicians probably will come from the U.S.

6. Evaluation Costs

The evaluation costs are summarized in the following budgets:

Evaluation Technical Assistance Budget  
(US\$000)

		<u>A. I. D.</u>	
		<u>LC</u>	<u>FX</u>
<u>Grant Funded</u>			
Evaluation System Design	2 mm	2.0	5.0
Design of Credit Applicant Sample	2 mm	2.0	5.0
Total Grant Funded	<u>4 mm</u>	<u>4.0</u>	<u>10.0</u>
<u>Loan Funded</u>			
First Evaluation Analysis	2 mm	2.0	6.0
Second Evaluation Analysis	4 mm	4.0	10.0
Final Evaluation Analysis	<u>6 mm</u>	<u>6.0</u>	<u>15.0</u>
Total Loan Funded	12 mm	12.0	31.0

Evaluation Survey Budget

	A, I, D,	
	<u>LC</u>	<u>FX</u>
<u>Grant Funded</u>		
First Year Field Work & Coding	<u>26.0</u>	-
Total Grant Funded	26.0	-
<u>Loan Funded</u>		
Second Year Field Work & Coding	39.0	-
Third Year Field Work & Coding	<u>53.0</u>	-
Total Loan Funded	92.0	-

Total Evaluation Cost Summary  
(US\$000)

	A. I. D.				
	<u>CY 76</u>	<u>CY 77</u>	<u>CY 78</u>	<u>CY 79</u>	<u>CY76-79</u>
<u>Grant Funded</u>					
Technical Assistance	14.0	---	---	---	14.0
Survey Costs	<u>26.0</u>	---	---	---	<u>26.0</u>
Grant Funded	40.0	---	---	---	40.0
<u>Loan Funded</u>					
Technical Assistance	---	8.0	14.0	21.0	43.0
Survey Costs	---	<u>39.0</u>	<u>53.0</u>	---	<u>92.0</u>
Loan Funded	---	47.0	67.0	21.0	135.0
<b>Total Evaluation Costs</b>	<b>40.0</b>	<b>47.0</b>	<b>67.0</b>	<b>21.0</b>	<b>175.0</b>

These budgets do not include two mm of AID/W assistance requested by USAID for the review of the system and of the sample design and for participation in the review of the evaluation analyses. Similarly, the costs of data processing are covered under the PPIS component of the Project. The above budgets assume that during the first year 1,000 credit applicants will be interviewed, during the second year 1,500, and during the third year 2,000. Note that these figures must be refined in the course of the credit applicant sample. Should the amounts budgeted for the credit applicant sample be either too large or too small, Loan funds could be shifted as needed between the survey component of the PPIS and the survey costs of evaluation.

#### 7. Issue

As pointed out in Part 4-A and Annex B-2 of this Paper, CONPAN will likely provide \$95,000 from the proceeds of A.I.D. Loan 513-T-066, Nutritional Development, to bear the start up costs of the PPIS survey component; these funds will be available prior to the disbursement of Loan funds from this Project. Although expenditures for the PPIS fall within the scope of the CONPAN Loan, the supplementary survey of credit applicants, the design of the credit applicant sample frame, and the final design of the evaluation system are clearly outside of the scope of the CONPAN loan.

The AID/W Interim Report Cable (State 272223) instructs USAID that the "PP should provide for the collection of data on farmers at an early juncture in Loan implementation (i.e., within six to nine months). This data would provide the basis for a detailed evaluation within the first year of the Project...." The timely gathering of proper baseline data on credit applicants prior to their use of Loan provided credit funds will require that the final design of the evaluation system be completed and the first credit applicant survey be in process during the third quarter of CY 76; at that time Loan disbursements will only be beginning, even though it is expected that GOC counterpart disbursements will have begun.

USAID concurs with AID/W on the importance of timely and meaningful baseline data on credit applicants for the first evaluation. At the same time, USAID cannot overstress the urgency of having Loan provided disbursements flowing for the 1976-1977 crop year.

USAID suggests the following solution for DAEC consideration: that \$40,000 in grant funds be made available concurrent with Loan authorization to finance the design of the evaluation system and to provide for the proper and timely gathering of baseline data on credit applicants. The grant would provide \$14,000 for four mm of evaluation system design and credit applicant sample and questionnaire design, and \$26,000 for questionnaire printing and administration. Data processing of the information would be financed using Loan funds. ODEPA would be expected to contract U.S. and Chilean T.A. for the activity and contract with INE for questionnaire printing and administration.

**D. Conditions Precedent and Covenants**

The development of detailed operating plans and criteria will be crucial to efficient and effective implementation of the Loan. INDAP will be required to modify its regulations and lending criteria applicable to the Project, to present plans for allocating credit (especially with respect to the first year of operation), to identify required professional and technical field personnel needs in the first year together with evidence of authority to hire and maintain such staff, and to provide evidence of budget assurances for administrative support and, of course, counterpart capitalization.

The banking system component will require detailed plans also but less in the way of institution building. Operating policy and regulations defining the relationship of the Central Bank with lending banks, lending criteria and sub-borrower selection criteria and evidence of capitalization availabilities will be required.

The conditions precedent to commitments or disbursements for the Loan or components of the Loan (in addition to the "standard conditions") will be as follows:

Except as A. I. D. may otherwise agree in writing

1. Prior to any disbursement for agricultural production credit by INDAP, Borrower shall present in form and substance satisfactory to A. I. D. :
  - a) A detailed implementation plan including INDAP's lending regulations and criteria, first year plan for allocation of credit, analysis of professional and technical field personnel needs and plans for meeting these needs through additional staff and, as necessary, technical assistance;
  - b) Evidence of the availability of required counterpart funds as capitalization of the credit program.
  - c) Evidence that INDAP has established a separate account for credits to be financed under the Loan.

2. **Prior to any disbursements for studies, consulting services, training and other costs of assistance to INDAP, Borrower shall present in form and substance satisfactory to A. I. D. a plan for the utilization of Loan funds for this purpose.**
3. **Prior to any disbursement for agricultural production credit by the banking system, Borrower shall present in form and substance satisfactory to A. I. D. :**
  - a) **A detailed implementation plan including lending and operating regulations governing transactions between the Central Bank and participating banks, sub-borrower selection and lending criteria and a first year credit allocation plan.**
  - b) **Evidence of the availability of required counterpart funds as capitalization for the credit program.**
4. **Prior to any disbursement for the PPIS activity Borrower shall present a detailed plan in form and substance satisfactory to A. I. D. for the first year's operation including:**
  - a) **A technical determination of the most appropriate configuration for all data processing elements of this activity,**
  - b) **A signed agreement between ODEPA and INE describing their respective roles, and**
  - c) **A revised cost breakdown showing the plan for first year use of funds.**
5. **Prior to any commitment of Loan funds for the credit or PPIS activities, after the first year from initial disbursement under the Loan and after the second year, the Borrower shall present, in form and substance satisfactory to A. I. D., detailed plans regarding the use of Loan funds for the second and third years, respectively, of the Project and such related information as A. I. D. may prescribe.**

**In addition to the above listed conditions precedent and to "standard" covenants, the Borrower will covenant as follows:**

- 1. Consistent with current GOC policy, all agricultural production credit financed under this Project shall bear positive interest rates reflecting the market value of money in Chile, and shall represent a net addition to the agricultural credit available in Chile.**
- 2. In addition to the contribution for credit counterpart, GOC will assure budget contributions to INDAP sufficient to administer and operate the credit program which is part of this Project and will provide any additional budget contribution necessary to avoid decapitalization of INDAP funds available for lending.**

**The GOC and the concerned institutions are aware of the nature of the conditions precedent in terms of institutional upgrading and the amount of planning which will be required before disbursement. INDAP is especially aware of the preparation which will be involved. The Central Bank has accepted the role of administrator and is aware that a substantial outlay of funding will be required. While the specific requirements of the conditions and covenants have not been negotiated, the role to be played and the effort levels involved are generally understood by the Chilean institutions involved.**

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Institutional Information and Survey Data Analysis and Divulgateion  
Sub-component (ODEPA) - ESTIMATED PPIS BUDGET.  
(in US\$1,000's)

<u>Description</u>	<u>Estimated Cost</u>
<u>Mini-computer and Peripherals</u>	
Basic 64K Configuration	43.6
Nine Track Tape Drive	15.0
Decktape Tape Transport (Typeset)	10.5
Four Floppy Discs	11.0
Eight Terminals	16.0
High Speed Printer-Plotter (500 LPM)	12.5
Flatbed Plotter	5.5
16K Dec Data System 310	13.0
Card Reader	5.1
Airfreight and Other Costs	19.6
<u>Data Input</u>	
Supplies	12.0
<u>Software (Cost shared with INE)</u>	
Languages (Fortran IV, COBOL, Basic)	
Publication (Typeset and Picture Book)	
Statistical Analysis Packages	
Timesharing RSTS/E, SORT 11, Disc and Tape File	
Maintenance (1/2 of \$35,000)	17.5
<u>Service and Maintenance Contract</u>	24.0
<u>Publication</u>	
Phototypeset	15.0
Press (11 x 17)	14.0
Collator and Binder	11.0
Camera /Platemaker	12.0
Publication Supplies	5.0
<u>T. A. and Training</u>	
Data Processing	
Resident, 6 MM (Shared with INE)	25.0
Short Term, 3 MM	18.0
Data Analysis	
Resident, 24 MM	40.0
Short Term, 3 MM (Market Information)	18.0
Training Costs	<u>11.0</u>
Sub-component Total	374.3

NOTE: Budget is illustrative only; definitive configuration will need the input of advisor requested.

Agricultural Census Processing and Publication Sub-Components (INE),  
ESTIMATED PPIS BUDGET - (in US\$1,000's and equivalent)

<u>Description</u>	<u>Estimated Cost</u>
<u>Mini-computer and Peripherals</u>	
Basic 128 K Configuration	58.6
Four 9-Track Tape Drives	48.0
Decktape Transport (Typeset)	10.5
Two Floppy Discs	5.5
Four Terminals	8.0
Two High Speed Printer-Plotters (500 LPM)	30.0
Flatbed Plotter	5.5
Card Reader	5.1
Airfreight and Other Costs	30.0
<u>Data Input</u>	
Two Station Key to Diskette (8 mo Rental, 6/Purchase, 4) Converter	50.0
Supplies	19.0
	20.0
<u>Software (Costs Shared with ODEPA)</u>	
Languages (Fortran IV, Basic, COBOL) Publication (Typeset and Picture Book) Statistical Analysis Package Timesharing RSTS/E, SORT 11, Disc and Tape Elle Maintenance (1/2 of \$35,000)	17.5
<u>Service and Maintenance Contract</u>	35.0
<u>Publication</u>	
Phototypeset	15.0
Press (11 x 17)	14.0
Collator and Binder	11.0
Camera/Platemaker	12.0
Publications Supplies	27.0
<u>T, A, and Training</u>	
<u>Data Processing</u>	
Resident, 12 MM (Shared with ODEPA)	50.0
Short Term, 12 MM	72.0
Training Costs	15.0
Sub-component Total	558.7

NOTE: Budget is illustrative only; definitive configuration will need the input of advisory services requested.

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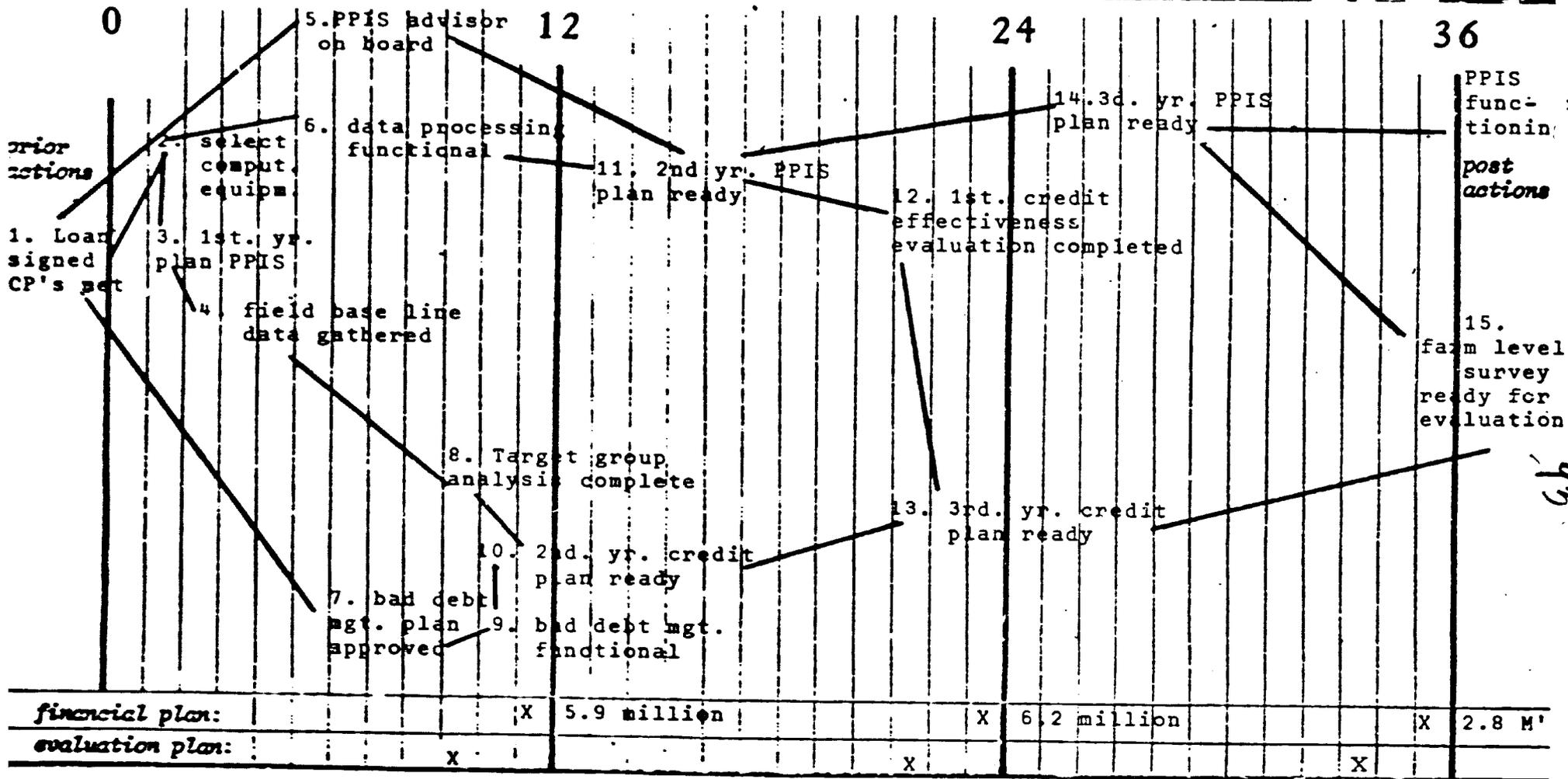
**SUB-COMPONENT (ODEPA/INE) - ESTIMATED PPIS BUDGET**  
(in US\$1,000's and equivalent)

<u>Description</u>	<u>Farm Level Survey</u>	<u>Household Budget Survey</u>	<u>Marketing &amp; Processing Survey</u>
<b><u>Technical Assistance</u></b>			
Data Processing			
Resident (Same as Other Components)	8.0 2MM	8.0 2MM	8.0 2MM
Short Term	30.0 5MM	18.0 3MM	12.0 2MM
Short Term Sampling	24.0 4MM	12.0 2MM	6.0 1MM
Data Analysis			
Short Term	50.0 9MM	44.0 8MM	24.0 4MM
<b><u>Data Gathering</u></b>			
Transportation (vehicles)	25.0		
Local Survey Costs	<u>175.0</u>	<u>75.0</u>	<u>8.0</u>
<b>Sub-component Total</b>	<b>312.0</b>	<b>157.0</b>	<b>58.0</b>

**(Total Cost All Surveys \$527.0)**

country: Chile	project no: 513 0294	project title: Agricultural Credit Production Loan	date: Dec. 2, 1975	/ / original / / revision#	PPT appr
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or FY: CY 1976	CY 1977												CY 1978												CY 1979			
month: Jul	Aug	Oct	Nov	Jan	Feb	Apr	May	Jul	Aug	Oct	Nov	Jan	Feb	Apr	May	Jul	Aug	Oct	Nov	Jan	Feb	Apr	May	Jun				



PROJECT PERFORMANCE NETWORK

country: Chile	project no: 513-0294	project title: Agricultural Production Credit Loan	date: Dec. 2, 1975	/ / original / / revision #	approved:
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CPI NARRATIVE

- |     |          |  |     |         |   |
|-----|----------|--|-----|---------|---|
| 1.  | 6/30/76  | Loan signed and conditions precedent expected to be met.   | 13. | 5/31/78 | Third year credit allocation plan ready.                      |
| 2.  | 8/31/76  | All computer equipment for ODEPA & INE selected  | 14. | 8/31/78 | Plan for third year of PPIS ready                             |
| 3.  | 8/31/76  | First year plan for info. System (PPIS) drawn up; INE and ODEPA sign inter-institutional agreement re: responsibilities and funding for PPIS activities. | 15. | 9/31/78 | Farm level survey complete in time for final loan evaluation. |
| 4.  | 9/30/76  | Complete field work for gathering base-line for evaluation.  |     |         |   |
| 5.  | 12/31/76 | Loan funded PPIS advisor on board  |     |         |   |
| 6.  | 12/31/76 | Data processing capability available for PPIS; all computer equipment installed  |     |         |   |
| 7.  | 1/31/77  | Agreement from INDAP on use of technical assist. funds to improve bad debt management.   |     |         |   |
| 8.  | 4/30/77  | Complete target group penetration analysis.  |     |         |   |
| 9.  | 5/31/77  | Bad debt management plan fully functional  |     |         |   |
| 10. | 5/31/77  | Second year credit allocation plan ready.  |     |         |   |
| 11. | 8/31/77  | Plan for second year of PPIS ready.  |     |         |   |
| 12. | 4/30/78  | First credit effectiveness evaluation completed.   |     |         |   |

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**ANNEX E**

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

I, Stuart H. Van Dyke, the principal officer of the Agency for International Development in Chile, having taken into account, among other factors, the maintenance and utilization of projects in Chile previously financed or assisted by the United States, do hereby certify that in my judgment Chile has both the financial capability and the human resources capability to utilize and maintain effectively the capital assistance project proposed for financing under the Agricultural Production Credit Loan.

  
Stuart H. Van Dyke  
Director, USAID/Chile

December 5, 1975  
Date

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2.

para el sector de pequeños productores a través de INDAP es una preocupación del Gobierno que está siendo materializada en los programas de crédito agrícola futuros. Creemos que la política de otorgamiento de préstamos de AID es coincidente con la de INDAP y este organismo está en condiciones de recibir recursos para realizar proyectos y a la vez mejorar su capacidad de ejecución y de generación de nuevos proyectos de desarrollo.

- 6.- Por otra parte, al Gobierno le interesa la canalización de recursos de crédito a través del sistema bancario para atender directamente y a través de las cooperativas u otras formas de organización a los pequeños productores agrícolas. Es nuestro deseo el impulsar la capacidad de los pequeños productores como las organizaciones, de utilizar el mercado financiero corriente como una manera de lograr una real y efectiva incorporación de éstos en la utilización de las estructuras disponibles y así hacer su desarrollo más permanente. De hecho, a través del crédito bancario se está canalizando parte importante de los recursos a este sector, a través de líneas especiales de crédito para capital de trabajo. El Gobierno está estudiando un perfeccionamiento de estos sistemas que permitan una atención eficiente del sector que nos preocupa y especialmente a través de sus organizaciones, sistema que quedará definido para operar para cuando este préstamo entre en funcionamiento.
- 7.- El proyecto incluye el financiamiento para el Plan de Informática del Sector Agrícola, cuyo objetivo es el mejoramiento de los sistemas de recolección y procesamiento de información agrícola para la toma de decisiones en política económica. La falta de datos buenos y oportunos restringe actualmente la precisión necesaria para definir aspectos como la demanda de recursos de crédito a la agricultura, su forma, estacionalidad y fines. El propósito es contar con un sistema permanente de información de los aspectos socio-económicos más relevantes de la agricultura.
- 8.- En este sentido, el préstamo de AID está concebido para crear la capacidad interna de un sistema de información eficiente. El proyecto incluye un componente para lograr obtener con prontitud antecedentes del censo que se realizará durante 1976, antecedentes que aportarán criterios básicos para la buena marcha del Plan de Informática. Debo señalar que en estos aspectos se ha contado con la valiosa colaboración de profesionales de AID y del Bureau of Census de Estados Unidos de Norteamérica.
- 9.- Deseo reiterar a Ud. la importancia que reviste para nuestro país el acelerado desarrollo de la agricultura. El Gobierno está poniendo especial énfasis en lograr el buen éxito de proyectos como éste, para el cual asegurará los recursos que sean necesarios para su buen desarrollo.
- 10.- Las permanentes conversaciones de funcionarios del Ministerio con miembros de AID han adelantado en buena forma los diferentes aspectos necesarios para precisar este proyecto que viene a complementar los esfuerzos del Gobierno de Chile en el desarrollo de su agricultura.

/...

ANT. : No hay

MAT. : Solicita préstamo por  
US\$ 15 millones para financiar  
Proyecto de Crédito Agrícola a  
Pequeños Agricultores.

SANTIAGO, 14 DIC 1975

DE : SEÑOR MINISTRO DE AGRICULTURA

A : SEÑOR DIRECTOR DE LA MISIÓN ECONÓMICA DE LOS ESTADOS UNIDOS EN CHILE

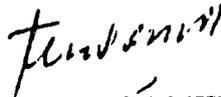
- 1.- En relación con las conversaciones sostenidas desde algún tiempo sobre el otorgamiento de un préstamo de AID para financiar un proyecto de crédito agrícola a pequeños agricultores, vengo por la presente en solicitar formalmente un préstamo por US\$ 15 millones en las condiciones más favorables, para ser destinado a los fines de este proyecto en un período de tres años.
- 2.- El préstamo será destinado al financiamiento, a través del sistema bancario y el Instituto de Desarrollo Agropecuario, de programas de crédito de producción de corto y largo plazo para pequeños agricultores, preferentemente a través de cooperativas y otras formas de organización. Parte del préstamo será utilizado en financiar un proyecto de mejoramiento de los sistemas de información del Ministerio de Agricultura con fines de decisiones sobre política económica y en mejorar la capacidad para la generación de nuevos proyectos y de su operación. El Gobierno adoptará las medidas necesarias para que los fondos del proyecto sean administrados y utilizados eficientemente desde el punto de vista económico y financiero.
- 3.- El sector agrícola de Chile ha sufrido un proceso de cambios intensos en los últimos años, cuya principal característica es la transformación de la estructura de la propiedad de la tierra. El área reformada de la agricultura ocupa hoy más del 60% de las tierras regadas del país. El número de pequeños productores individuales y organizados es superior a 300.000 en la actualidad.
- 4.- La asignación en propiedad individual de la tierra expropiada ha sido política fundamental del Gobierno y su realización ha estado acompañada de la puesta en marcha de programas de apoyo a ese sector en las áreas de transferencia de tecnología, asistencia técnica y asistencia crediticia, capacitación y organización.
- 5.- El Instituto de Desarrollo Agropecuario, INIDAP, organismo que atiende al sector de pequeños agricultores, ha organizado su esquema de operación para atender al sector de minifundistas con hasta 5 hectáreas de riego básico. INIDAP está poniendo énfasis en el desarrollo de proyectos regionales bien concebidos y estudiados y en un sistema de operación descentralizado para llevarlos a cabo. Durante 1974 y 1975, la disponibilidad de recursos del Instituto ha sido escasa en relación a los proyectos que puede ejecutar. La necesidad de aumentar recursos

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REPUBLICA DE CHILE  
MINISTERIO DE AGRICULTURA  
GABINETE DEL MINISTRO  
...

3.

En la seguridad de que AID considerará  
favorablemente nuestra solicitud, saluda muy atentamente a Ud.,



TUCAPEL VALLEJOS REGINATO  
General de Carabineros  
Ministro de Agricultura

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DRAFT LOAN AUTHORIZATION

Provided Under: FAA, Section 103  
Country: Chile  
Loan Amount : US\$15,000,000

Pursuant to the authority vested in the Administrator, Agency for International Development, by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the establishment of a loan ("Loan"), pursuant to Part I, Chapter 2, Title VI and Section 103 (Food and Nutrition) of said Act, to the Government of Chile ("Borrower") of not to exceed fifteen million United States Dollars (\$15,000,000) to assist in financing the foreign exchange and local currency costs of a project to improve the delivery system in Chile for providing agricultural production credit to the small scale farmer and to improve the information systems available in Chile for solving problems in the agricultural sector. The Loan shall be subject to the following terms and conditions:

1. Interest and Terms of Repayment

Borrower shall repay the Loan to A. I. D. in United States Dollars within forty (40) years from the date of the first disbursement under the Loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to A. I. D. in United States Dollars on the disbursed balance and upon any due and unpaid interest of the Loan interest at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

2. Other Terms and Conditions

(a) Except for ocean shipping, goods and services financed under the Loan shall have their source and origin in Chile and countries included in A. I. D. Geographic Code 941, provided that marine insurance of such source and origin may be financed under the Loan only if it is obtained on a competitive basis and any claims thereunder are payable in convertible currencies. Ocean shipping financed under the Loan shall be procured in any country included in A. I. D. Geographic Code 941.

**(b) United States Dollars utilized under the Loan to finance local currency costs shall be made available pursuant to procedures satisfactory to A. I. D.**

**(c) Borrower shall agree that except as A. I. D. may otherwise agree in writing:**

- (1) Prior to any disbursement for agricultural production credit by INDAP, Borrower shall present in form and substance satisfactory to A. I. D. :**
  - i) A detailed implementation plan including INDAP's lending regulations and criteria, first year plan for allocation of credit, analysis of professional and technical field personnel needs and evidence of the ability to fill them;**
  - ii) Evidence of the availability of required counterpart funds as capitalization of the credit program;**
  - iii) Evidence that INDAP has established a separate account for credits to be financed under the Loan.**
- (2) Prior to any disbursements for studies, consulting services, training and other costs of assistance to INDAP, Borrower shall present in form and substance satisfactory to A. I. D. a plan for the utilization of Loan funds for this purpose.**
- (3) Prior to any disbursement for agricultural production credit by the banking system, Borrower shall present in form and substance satisfactory to A. I. D. :**
  - i) A detailed implementation plan including lending and operating regulations governing transactions between the Central Bank and participating banks, sub-borrower selection and lending criteria and a first year credit allocation plan.**

