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INVIERNO

(Instituto de Bienestar Campesino)

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The First Year

An Evaluation of AID Loan 524-T-031

Performed by:

Albert L. Brown, ATAC
Leonardo Green, MAG/DIPSA
David Bathrick, USAID/Nicaragua
Armando Gonzalez, USAID/Nicaragua
Gloria Mongalo, USAID/Nicaragua

Work Order No. 21 of AID/afr-C-1142

October 1976

A.I.D.
Reference Center
Room 1086 NS



AMERICAN TECHNICAL ASSISTANCE CORPORATION
7655 OLD SPRINGHOUSE ROAD
McLEAN, VIRGINIA 22101

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A Subsidiary of General Research Corporation

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GLOSSARY OF TERMS

ACRONYMS AND ABBREVIATIONS

- Agromoc:** INVIERNO job title. An agrónomo with additional training in communication and social sciences. Primary liaison with community and its population. Also primary transmitter of agricultural technology.
- Agrónomo:** Graduate of a three year high school level vocational agricultural training school (Perito Agrónomo), or a high school graduate who majored in agriculture (Técnico Agrónomo).
- BAVINIC:** Banco de la Vivienda de Nicaragua. Nicaraguan housing bank.
- BNN:** Banco Nacional de Nicaragua.
- GAP:** AID Capital Assistance Paper.
- CEDE:** Centro de Desarrollo. Corresponds to Regional Assistance Center (RAC) in CAP.
- CENCA:** Centro de Capacitación. Training Center for the Public Agricultural Sector, in Ministry of Agriculture.
- Client:** Any low income rural person who may be assisted by INVIERNO. Usually a small farmer or a rural worker and their families.
- Cordoba:** Nicaraguan unit of currency C\$7.00 = \$1.00
- Credomerc:** INVIERNO job title. Responsible for delivering inputs to farmer and assisting him in marketing his produce.
- DGP:** Dirección General de Presupuesto. GON budget office.
- DIPSA:** Dirección de Planificación del Sector Agropecuario. MAG planning, programming and budgeting arm.
- GON:** Government of Nicaragua.
- INCEI:** Instituto Nicaraguense de Comercialización Exterior e Interior. Semi-autonomous agency responsible for price stabilization and storage of agricultural products.
- INTA:** Instituto Nicaraguense de Tecnología Agropecuaria. Semi-autonomous agency to be established to absorb MAG research, extension and education activities.

- INVIERNO:** Instituto de Bienestar Campesino. Semi-autonomous agency responsible for the interface between the GON and the rural poor.
- IRENA:** Instituto de Recursos Naturales Renovables. Semi-autonomous agency to be established to absorb MAG forestry, water, fisheries and other natural resources activities.
- Locality:** Rural community. Corresponds to Regional Development Assistance Group (RDAG) in CAP.
- MAG:** Ministerio de Agricultura y Ganadería.
- MOC:** Motivación-Organización-Capacitación. The function of effective communication and training in community organization and development. Also an activity in the INVIERNO program.
- NAC:** National Agricultural Committee.
- PAS:** Public Agricultural Sector. Public sector agencies whose activities are directed at agricultural and rural development.
- Postrera:** Second, or summer planting season: July-August-September.
- Primera:** First, or spring planting season: April-May-June.
- Promotor Social:** INVIERNO job title: Primary community development/MOC professional. Usually a Licenciado en Ciencias Sociales.
- Socio:** A line of credit borrower from INVIERNO. Any line of credit borrower may or may not borrow for subsequent planting seasons. INVIERNO tends to use the term socio for those socios who have borrowed for a particular planting season. To avoid confusion we would prefer the term prestatario (borrower) for the specific season.
- Trabajador Social:** Promotor Social.
- UNASEC:** Unidad de Análisis del Sector Agropecuario. Sector analysis unit which performed the agricultural sector assessment, and whose members have become key personnel in DIPSA and INVIERNO.

PREFACE

This evaluation of the Nicaragua Rural Development Program was performed between September 20 and October 8, 1976 in compliance with Paragraph 5.08 of AID Loan 524-T-031.

The evaluation team was composed of Albert L. Brown, contracted by AID from American Technical Assistance Corporation to act as Team Leader; Leonardo Green, Encargado, Sección de Producción Macro, Departamento de Economía y Producción, Dirección de Planificación Sectorial Agropecuario, in representation of the Ministry of Agriculture; and David Bathrick, Assistant Agricultural Development Officer, Gloria Mongalo, Economist, and Armando Gonzalez, Asesor Agrícola, all of the Rural Development Division of USAID/Nicaragua. INVIERNO representatives assigned to work with the group were Hubert Rischman, Jefe, Sección de Estudios Económicos and Leonel Brautigam, Jefe, Sección de Finanzas, both of the Vice-Gerencia of Programación y Control. Three of the external group had some prior knowledge of INVIERNO. Brown participated in the preparation of the IRR and CAP and later recommended some of the project design and evaluation concepts now used by INVIERNO. Green served with the UNASEC group that prepared the sector assessment and strategy. Gonzalez participated in the preparation of the IRR and CAP.

The three week evaluation period was entirely too brief for the depth of penetration and analysis which would be desirable for such a complex program. Nevertheless, the Team feels that its report provides an accurate picture of INVIERNO's status, accomplishments and prospects. We had access to INVIERNO's personnel, offices and records in the Central Office, the Regional Office, and in four of the five CEDEs (San Ramón, Jinotega, La Trinidad and Condega). We received the fullest cooperation wherever we went, at all levels of the organization.

We wish to express our deepest appreciation to all INVIERNO, and particularly to Messrs. Rischman and Brautigam for their unflagging efforts to collect information, arrange interviews, and explain the finer points of INVIERNO and its programs.

I. SUMMARY

1. This first joint evaluation of the Nicaragua Rural Sector Program concentrated on INVIERNO, and more particularly on progress being made in Building the Institution, Agriculture Credit, and related Technical Assistance, Input Supply and Product Marketing activities.

The status of other parts of the INVIERNO program not yet in full operation (Motivation-Organization-Capacitation), or still pending initiation (Municipal Development, Access Roads, Campesino Industries, and Housing) was reviewed, as was that of parts of the PAS restructuring (DIPSA, CENCA and Regionalization), but none of these is yet sufficiently advanced for evaluation.

2. INVIERNO - the institution - is alive and well and serving close to 4500 socios through five CEDEs in Region V with a comprehensive program of credit, technical assistance, inputs and marketing assistance. Limited progress is also being made in MOC activities related to community programs, and several pilot activities (cooperatives, school construction, immunization) are underway. Contracts have been signed with INCEI (marketing), Ministry of Agriculture and Livestock (applied research), Ministry of Gobernación (municipal development), Instituto Agrario Nicaragüense (land sale guaranty), and Ministry of Public Works (access roads) for their cooperation in these efforts. Contracts are pending with Ministry of Public Health (health) and BAVINIC (housing).

3. INVIERNO met, exceeded, or came very close to meeting all important input targets and some output targets in its first year of operation. The Central Office, one Regional Office and five CEDEs (with one subCEDE) are established and functioning under the guidance of 31 administrative and organizational manuals and 45 program and operational manuals.

4. An estimated 4500 socios (line of credit borrowers) in 164 communities were attended by 49 Agromocs backstopped by 83 managerial/professional/subprofessional employees and 85 secretarial/clerical/support employees. This is a 13% reduction from anticipated personnel levels, and was achieved by more efficient working methods, e.g., the imaginative use of automatic data processing, increasing the CEDE operating radius by providing greater

mobility to Agromocs, using the managerial and support staff of one CEDE to handle a subCEDE.

5. Costs of operation were reduced by these maneuvers from a projected C\$16.9 million to an estimated C\$13.2 million. As a result, despite the small reduction in socios reached (4,500 vs. 5,000), the unit cost per socio was lowered from a projected C\$3,377 to C\$2,939, and the cost per authorized manzana was virtually the same (C\$767 to C\$773) with a slightly smaller acreage. The only unit cost which increased substantially was the cost per C\$1,000 lent which went from C\$402 to C\$774. This, in turn, reflects an average placement of only C\$3,800 per line of credit, less than one half of that projected (C\$8,400). Resources are evidently being directed to the rural poor target group. This is demonstrated by an average loan size of only C\$2,683 per cropping season, with only 3% of the loans above C\$10,000 (\$1,430).

6. We concluded after careful review, that the projected targets represented a rigorous, if somewhat optimistic, view of what might be achieved. That is, these targets could only be achieved by a dedicated staff working in a tightly controlled management system which provided them with needed support. This is precisely what happened. The entire operational system, from personnel recruitment, through training to execution is one of the most effective we have seen. It is not yet completely functional, nor has it completed a total annual cycle. Still, we are confident that remaining work on the system will be accomplished, the necessary refinements will be made, and the system can be expanded to all of Region II and Region V by 1979.

Two major aspects of INVIERNO's current operating system are still untested. The capacity of Regional Offices to direct the work of their Regions with very limited participation by the Central Office will not be known until 1978, when both Regional Offices are functioning and the Central Office will be unable to supervise field operations as closely as at present. The ability of the Promotores Sociales, working with the Agromocs to organize communities and integrate the new programs is still unknown. Both of these aspects may require more staff and/or more supervision than currently contemplated.

7. RECOMMENDATIONS: In the body of the report we have made a number of observations and suggestions about possible improvements or refinements of the system, and we have commented in the program annexes on possible limitations in the incipient programs. We have four significant recommendations regarding the Instituto and its operating system:

(1) INVIERNO should resist both internal and external efforts to expand into new programs or new areas before it has reasoned confidence in its ability to do so. The Instituto has done a remarkably effective job of proving its planning and management capability. Current management is the best judge of the ability of the organization to take on additional work.

This is not an invitation to let down. On the contrary, the expansion into full operation in Regions II and V and the introduction of five more operating programs, each as complicated as the existing four, will strain the capacity even of an institution as capable as INVIERNO.

(2) A senior level credit committee should review all loan authorizations over \$10,000 and emit its opinion before disbursement. In some cases this may require additional information from the CEDEs. The responsibility is not onerous (80 loans in the primera and 110 in the postrera), but it will protect the good name and fiscal integrity of the Instituto. A sample of other loans from each planting season should be spot-checked to identify and correct any problems in the application processing/loan authorization system. We applaud the operational consistency checks now being prepared for monitoring loan execution, but these will not identify problems in loan authorization.

(3) INVIERNO should carefully analyze the implications and process of "graduation." We are not sure that mandatory limits on income should be the sole criteria. Other factors related to the ability of the client to maintain a given income level without INVIERNO support should be considered. The process of graduation might be facilitated by a ceiling on the amount of INVIERNO loans.

(4) INVIERNO should place a ceiling on the amount of a loan made to a farmer for a single cropping season. We suggest C\$20,000. The objectives of such a ceiling are (a) to encourage farmers who need large amounts of credit to seek the additional requirement from "unprotective" sources,

thus creating a natural progression to graduation; and (b) to protect the image of INVIERNO as a small farm lender.

II. INTRODUCTION

The Rural Development Sector Program of the Government of Nicaragua is a major attempt to restructure Public Agricultural Sector institutions and policies so that these will be more responsive to the needs of the people as described in the Government of Nicaragua's statement of Policy and Strategy for Development in the Rural Sector, and more effective in executing programs in support of the goals outlined in that statement.

The major elements of the restructuration are the following:

(1) The Ministry of Agriculture will be relieved of direct operating functions, and will become the leader and coordinator of the public agricultural sector.

(2) Operating functions of the Ministry of Agriculture will be distributed among existing semi-autonomous institutions and among the following new institutions:

- (a) The Instituto de Bienestar Campesino (INVIERNO)
- (b) The Instituto Nacional de Tecnología Agropecuaria (INTA)
- (c) The Instituto Nacional de Recursos Naturales Renovables (IRENA)

(3) To support its leadership role, the Ministry will be provided with a larger, more sophisticated sector planning, program budgeting and evaluation capability in the form of the Dirección de Planificación del Sector Agropecuario (DIPSA). It will also develop a Centro Nacional de Capacitación (CENCA) and retain principal regulatory functions in a Dirección de Regulaciones y Control Agropecuario..

(4) To facilitate coordination among PAS institutions at the national level, a Consejo Nacional de Desarrollo Rural Agropecuario has been created, composed of the heads of each of the PAS institutions, the President of the Central Bank and the Ministers of Hacienda and Economy, and chaired by the Minister of Agriculture.

(5) To facilitate coordination among PAS institutions in the rural areas, PAS institutions will become regionalized i.e., their

decentralized functions will be organized within eight geographic areas, each of which is to be coordinated by a representative of the Minister of Agriculture.

This restructuration will be accompanied by additional programs, increased resources and reprogramming of some existing resources, all directed at accomplishing the objectives of the rural policy and strategy statement.

AID Loan 524-T-031, dated September 25, 1975, provides up to \$14,000,000 to support the Rural Development Sector Program and more specifically the creation of INVIERNO, DIPSA, CENCA and regionalization. It is contemplated that approximately \$12 million of the \$14 million total will go to support the creation of INVIERNO and the financing of its programs (Table 1).

Section 5.08 of that agreement requires an annual review of the program, to be undertaken jointly by the Ministry of Agriculture, INVIERNO, and AID. This evaluation is intended to satisfy that requirement.

At this time, DIPSA is staffed and functional but has not operated long enough at adequate staffing levels to demonstrate its capability. CENCA has been authorized, and its new Director is preparing detailed plans and programs for execution in 1977. Regionalization will probably not be implemented before 1978. These programs are not yet proper subjects for institutional evaluation, but a commentary is provided in Chapter V on their status and plans.

This annual joint evaluation, therefore, concentrated almost exclusively on the creation of INVIERNO and on its execution of the first programs to go into operation. At this stage of development, the evaluation necessarily concentrated on the input and output levels of the institution building process. No program executed by the institution had been in operation long enough to yield a full cycle of outputs. Consequently, programs in execution were evaluated at the input level, with an analysis of the system being used to generate anticipated outputs. Plans and progress of incipient programs were reviewed for content and to estimate future accomplishments for planning purposes.

Tabla #1. DESGLOSE DEL PROGRAMA DE INVIERNO
(Del Acuerdo de Préstamo)

	<u>USG</u> (US\$ 000)	<u>GON</u> (US\$ 000)
1. Creación del Instituto		
a. Organización y Establecimiento del Instituto	\$1,200	\$4,400
b. Entrenamiento	1,000	300
c. Investigación Aplicada y Tecnología para los Pequeños Campesinos	800	200
Subtotal	3,000	4,900
2. Desarrollo Agropecuario Integrado		
a. Centros de Asistencia Rural y Regional	350	2,300
b. Programa de Crédito Agropecuario	3,200	3,750
c. Programa de Huertos y Nutrición	400	400
d. Programa Garantido de Venta de Tierras	550	550
e. Programa de Desarrollo Cooperativo (Insumos y Mercadeo)	1,300	3,800
Subtotal	5,800	10,800
3. Programa para el Mejoramiento de Caminos de Acceso	1,300	1,000
4. Programa para el Desarrollo Municipal	900	650
5. Programa para el Desarrollo de las Pequeñas Empresas Rurales	1,000	1,000
6. Desarrollo de Actividades Seleccionadas dentro del Sector Rural Comunitario	-0-	250
TOTAL	12,000	18,600

In conducting this evaluation we were guided by the Ley Creadora de INVIERNO, the Loan Agreement, the Capital Assistance Paper, the Logical Frameworks, the Plan de Implementación, and the various program plans and manuals submitted by INVIERNO in compliance with loan conditions. This is an exceptionally voluminous mass of information which we have interpreted for intent and objectives rather than for form and detail. INVIERNO is a totally new institution whose organizational characteristics and operating mechanisms were still being debated when the Capital Assistance Paper was prepared. Refinements in program plans and operating experience over the last 1 1/2 years have altered organizational structure, operating methods, and targets. Our primary criteria throughout has been our judgment on the suitability of these emerging institutional forms, management practices, and operating systems to establish the capacity of this developing institution to achieve its unique mission of contributing significantly to the wellbeing of the rural poor.

Because this is a new institution, created for a specific purpose, with a number of unique approaches directed at achieving that purpose, we have used the report of the evaluation to describe, in summary form, the principal concepts and processes involved. More detailed information is included in extensive manuals and program plans, most of which have already been presented to AID for information or to satisfy conditions of the Loan Agreement.

III. INVIERNO: BUILDING THE INSTITUTION

A. DESCRIPTION

1. Objective

INVIERNO is a semiautonomous institution in the public agricultural sector, a bank, and a multipurpose service organization which deals with a clientele of selected small farmers. Its fundamental objective is "to promote the social and economic progress of the rural sector, allowing its population a sustained and continuous integrated improvement, with the aim of attaining a more effective participation of this population in the economic, social, cultural and political life of the nation."¹

"The purpose of INVIERNO is to develop in the individual lower income rural farmer the capability and means, which will enable him to have access, directly or jointly, or in coordination with other agencies, to the opportunities and services which he needs for his development, with the purpose of promoting a sustained increase in his standard of living."²

2. Clientele

INVIERNO's mission is to serve the lower income farmer. The upper limit has been set at the average national per capita income which was C\$4,011 (\$570) in 1974 and C\$4,126 (\$590) in 1975. No practical method was found for accurately and rapidly determining net farm income of farmers who don't keep books. INVIERNO uses a 99 manzana (150 acres) farm size limit as an income surrogate for initial screening of clients, and other screening devices are used for further screening in the Agricultural Credit Program (see IV.A). As a practical matter, the fact that INVIERNO focuses its efforts in small farm communities with a maximum size of 300 families results in a clientele whose income is far below this arbitrary limit.

¹Ley Creadora del Instituto de Bienestar Campesino.

²Instituto de Bienestar Campesino: INVIERNO. Philosophy, Policies and Programs. Managua, September 1976.

3. Strategy

INVIERNO acts as an interface between its clientele and the programs and services provided by all PAS institutions. Depending on the service or programs, and the effectiveness of its delivery to rural residents, INVIERNO may undertake to provide the services itself, act as the local agent in the delivery of a service provided by other agencies, assist in the motivation and organization of groups and the scheduling of services delivered by others, or not intervene in any way. In doing any of these things, it may use its own resources or contract with other agencies for the use of theirs. It currently does all of these things.

The intent of INVIERNO action is to assure that those services which may be necessary to the improvement of the wellbeing of the rural resident may arrive at a time, and in a form, quantity, and juxtaposition which will facilitate the rural resident's own self-help efforts. Services may include those which directly improve the individual welfare (credit, technical assistance) or those which promote the welfare by contributing to the improvement of the community (access roads, potable water). Services are provided in a rational progression, scaled to individual and community needs, to progressively move individual and community over time to successively higher levels of wellbeing.

INVIERNO does not operate a welfare program - it gives nothing away. Its lending program will be self-sustaining. Subsidized services such as technical assistance or community organization require a corresponding self-help effort by community or individual. Farmers pay full cost for inputs delivered to them or the transportation costs of their produce which may be moved by INVIERNO.

4. Organizational Structure

a. The CEDE

INVIERNO provides its services through a local office called Centro de Desarrollo (CEDE). This office is located in a market town selected through a careful regional analysis. It is headed by a Manager with at least five years banking experience, who directs a staff of two Technical Assistance Supervisors (Ing. Agrónomos), two Promotores Sociales (Lic. Estudios Sociales), two Credomercs, two Cashiers, and

support staff. Also under his direction and supported by this staff are seven to fourteen Agromocs (Agrónomos) who are each responsible for INVIERNO operations in an average of 3 local communities. Currently, five CEDEs, with a total staff of 121 people, reaching 164 communities are in operation.

b. The Regional Office

A Regional Office provides direct supervision, coordination and guidance to all CEDEs in its jurisdiction. This office, which is located centrally in the region, is headed by a Regional Manager. His technical backstopping staff includes two agricultural specialists, two sociologists, a credit specialist, and a marketing specialist, together with any other program specialist required on a regular basis in the region. He also directs a support staff and an auditor. A single Regional Officer with fifteen employees, located in San Ramón, is responsible for Region V.

c. The Central Office

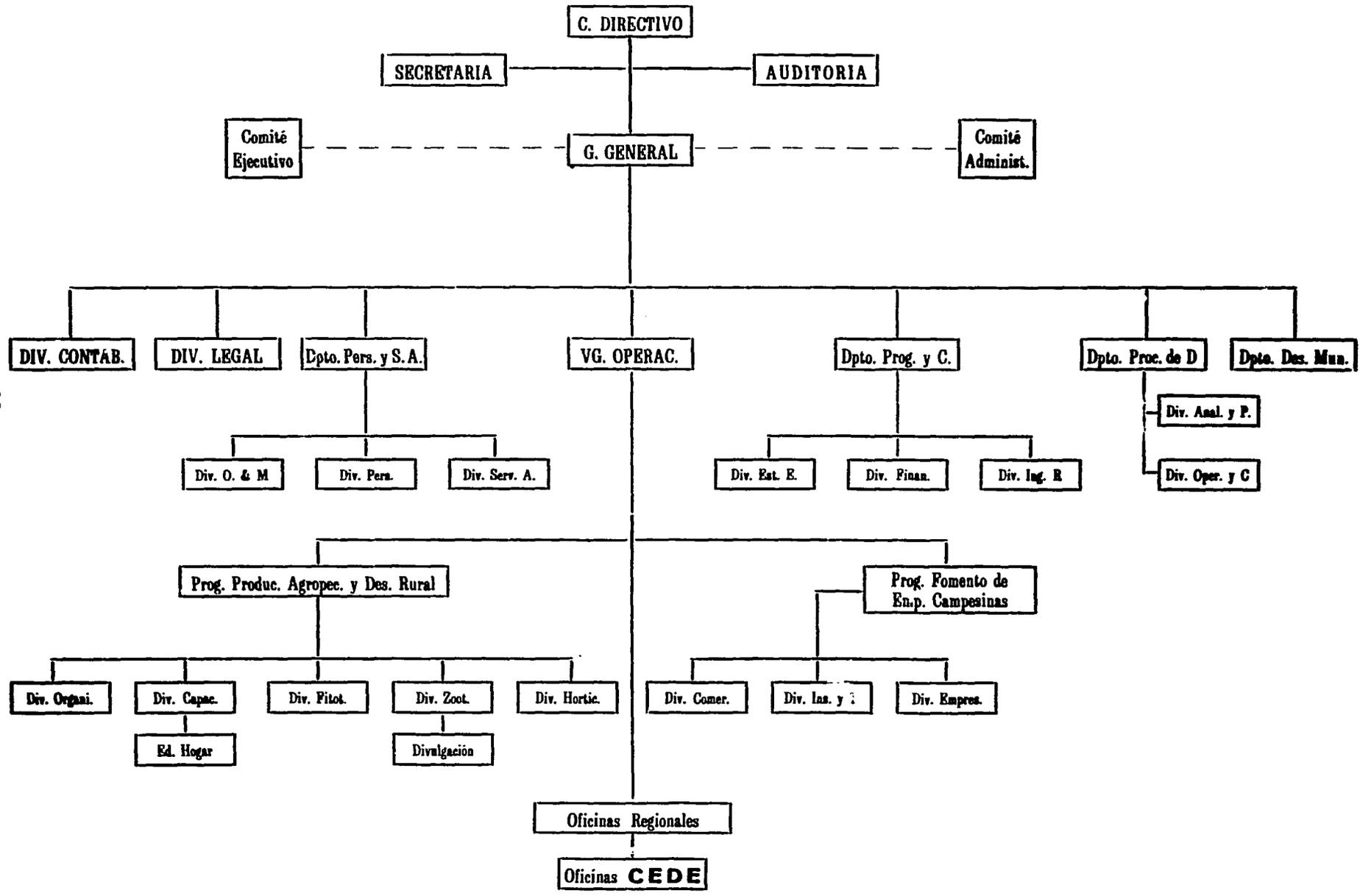
The Central Office, located in Managua, is staffed with 81 people organized in three major program departments and five management departments or divisions (Figure 1). The Central Office establishes policy, designs and coordinates programs, designs and implements management systems, provides administrative services, and directs, coordinates, supervises and controls INVIERNO operations.

5. Functional Relationships

a. With Client

The Agromoc is exclusively responsible for INVIERNO operations in the localities under his jurisdiction and for scheduling contact with INVIERNO's clients. He is an agrónomo who has received additional training in the social sciences and in communication arts (motivation, organization and capacitation). His function is to know all farm families in his localities, organize them as necessary to the performance of his work, identify their needs, provide technical assistance in agricultural pursuits, and schedule and assist in the delivery of all other program services.

FIGURE 1
INSTITUTO DE BIENESTAR CAMPESINO
ORGANIGRAMA



12

b. Guidance and Support

The CEDE and the Regional Office provide the guidance and program support which is needed by the Agromoc in the performance of his duties. Besides the normal managerial and administrative services and technical backstopping, this includes assisting in surveys of need in the localities, the provision of program services, the coordination and consolidation of reports and resource requirements of all Agromocs, and the solution of specific problems presented by the Agromoc in representation of his clients. Personnel of the CEDE also arrange for services provided by other GON agencies in the zone and may assist the Agromoc in special organizational requirements associated with delivery of these services.

c. Coordination

The Vice-Manager for Operations is responsible for coordinating all program operations. In this capacity, he supervises the Regional Offices and through them, the CEDE. He is also responsible for supervision of two major program offices and for managing the delivery of their technical and material inputs to the CEDEs.

d. Policy, Strategy and Control

The General Manager is responsible for the execution of the overall policies approved by the Board of Directors, for enunciation of operating policy and procedures, and for supervision and control of all INVIERNO personnel and programs. To assist him in this, he has a Vice-Gerencia of Programming and Control, a Vice-Gerencia of Automatic Data Processing, and the usual Accounting, Legal, and Personnel and Administrative Service units.

6. Operations

INVIERNO operations are identified with programs which are the basis for planning and accounting and together delimit the nature of INVIERNO action. INVIERNO programs are segregated as banking programs (Agricultural Credit) and non-banking programs (Motivation-Organization-Capacitation, Technical Assistance, Marketing, Access Roads, Municipal Development, Small Industry, Transportation and Inputs, Land Sale Guaranty, etc.), each of which is described in Chapter IV.

7. Important Variations

INVIERNO was still in the preplanning stage when the CAP was prepared. In actual establishment of the organization, modifications of the original concepts were required for practical economic and managerial reasons. We have examined these modifications and find them desirable per se or rational in light of the stage of development of both the institution and its clients. None diminish or alter the intent of INVIERNO's mission, most represent greater efficiency, and some are matters of priority in initiating the first year's operation. All were undertaken after careful consideration of alternatives and consequences.

a. Organizational Structure. The Central Office program staff structure was reorganized to achieve a goal orientation rather than a method orientation. In the process, the Motivation-Organization-Capacitation program structure was redistributed within an Agricultural Production and Rural Development Department and the marketing, input delivery and industry programs were centralized in a Department of Campesino Enterprise.

The concept of a team approach to individual and community development was retained but with a more efficient format. The Agromoc, as an agrónomo with training in communication skills, organization and social sciences, is the direct and constant contact with the community. The Credomerc (who handles delivery of inputs and purchase of products), the Cashier (who delivers and receives money), and the Promotor Social (who is the primary community and family development worker), all schedule their respective activities with a particular community through the Agromoc at weekly planning sessions in the CEDE. Under this construct, coordination is assured, work is scheduled to conform to the community's production cycle, and staff numbers can be adjusted more effectively to the varied needs of individual communities in the zone.

The CAP also mentioned paid guías or local leaders to help the Agromoc. The Agromoc uses Voluntary Collaborators who are local leaders, but these are not paid. They receive training and are an essential part of the system.

b. Work Orientation. The operational approach reflects the goal orientation of management. The initial concentration on production processes through credit, technical assistance, inputs and marketing provides farmers with concrete evidence of INVIERNO's intent, with an immediate start on improving individual family wellbeing in the most direct sense. It takes longer to identify community needs, obtain community support and get results, but this process has also begun.

Stress was given in the earlier descriptions to the process of motivation, organization and capacitation, almost as an end in itself. The importance of MOC has not diminished, and indeed, permeates virtually everything INVIERNO does. However, with better specification of objectives, MOC tends to follow identification of need in individual communities and programs, instead of being an end in itself.

c. Cooperatives for Supply and Marketing. The CAP gave considerable emphasis to the organization of cooperatives for the distribution of inputs and the marketing of farm produce. This interest in cooperative organization continues, but it is apparent to the evaluators that widespread organization of cooperatives may not advance sufficiently in the next two or three years to relieve INVIERNO of direct intervention in input supply and marketing. Inputs are essential to the agricultural production program, as is a secure outlet for the resulting product. The very limited prior experience with or traditions of community organization among INVIERNO's clients will limit the pace with which cooperatives can be established to provide these services with volunteer labor.

It may be possible to speed the process of cooperative development by establishing central cooperatives in the CEDE headquarters town. Such a cooperative, operating with paid staff, could assume delivery of inputs and product purchase in exactly the same fashion as these services are now performed by the Credomerc. INVIERNO could continue to serve as a bulk purchasing agent for these central cooperatives until this function could be performed by a federation of central cooperatives. This approach conforms to the Instituto's plans for cooperative development.

The cost of inputs sold through a cooperative may well exceed the price at which these are offered by INVIERNO. The cooperative

may operate less efficiently, and will certainly have to build a capital reserve from operating margins to protect it from loss and permit it to expand. INVIERNO should begin to raise its prices now to establish a margin at which a central cooperative can achieve economic integrity. Since INVIERNO is unable to sell above cost, it can place the margin in an escrow account to provide the central cooperative with a reserve as soon as it opens.

d. Automatic Data Processing. The use of automatic data processing to handle a massive number of small loans (and which was hardly mentioned in the CAP) has permitted extensive operations with a very small processing staff, and has become a hallmark of INVIERNO operations. The efficiency of this system also relieves the Agromoc and Credomerc of many computation chores, and will be increasingly valuable in refining concepts and operating processes.

B. HISTORY

1. Origin of Strategy

In early 1972 (Table 2) the National Agricultural Committee (President of the Republic, President of the Central Bank, Ministers of Hacienda, Economy and Agriculture, private sector representative) was established to define a strategy for rural/agricultural development. The NAC, in turn, recognizing the complexity of its task, created the Unidad de Analisis Sectorial (UNASEC) to perform an assessment of conditions, problems and opportunities in the sector. In the succeeding year UNASEC accumulated a vast amount of material, including the results of original surveys and analysis. This information was consolidated into a sector assessment and a draft statement of a strategy to deal with the problems encountered.

In the early months of 1974, this accumulated information was submitted to NAC for review, discussion, and decision. Questions were raised, additional studies were commissioned and specific position papers were drafted. In August, 1975 the statement of Policy and Strategy for Rural Sector was issued by NAC.

One of the principle organizational elements which emerged from this study was the requirement for establishing an institution whose

TABLE 2

CALENDAR OF MAJOR EVENTS IN INVIERNO HISTORY

1972	National Agricultural Committee established.
1972	NAC creates the Unidad de Análisis Sectorial (UNASEC) to conduct a detailed assessment of rural/agricultural sector.
August 1974	NAC emits a statement of Policy and Strategy for the Rural Sector.
January 1975	Members of UNASEC staff detailed to prepare draft law, organizational framework and preliminary plans for establishing INVIERNO. AID staff and consultants begin preparation of Capital Assistance Paper.
May 5, 1975	Ley Creadora of INVIERNO published.
June 2, 1975	INVIERNO Central Office inaugurated.
June 1975 through January 1975	Recruiting staff, structuring the organization, preparing administrative and operating manuals and putting them into operation, preparing program implementation plans and budgets. This process continues.
August 12, 1975	Ley Organizativa del Sector Público Agropecuario published.
September 27, 1975	AID loan signed (see separate calendar, Annex A). Reforms and Additions to Ley Creadora published.
November 21, 1975	AID loan agreement ratification published.
December 1975	Census of clients for spring planting.
January/March 1976	Staff training in preparation of opening of field offices.
February 1976	Recensus of clients for spring planting
March 1, 1976	Regional Office and five CEDEs inaugurated.
March 27, 1976	First loans authorized.
April 2, 1976	First loan disbursement to farmers.
June/July 1976 July, 1976	Census of clients for postrera (second planting season). First loan repayment received.

sole responsibility and orientation would be to stimulate the development of the small farmer by making effective at the local level the services which the Government was prepared to provide. This institution was destined to become the Instituto de Bienestar Campesino-INVIERNO.

2. Pre-Planning

In January, 1975, a few members of UNASEC staff and some of its advisors initiated the detailed conceptualization and planning which would be required to establish this new organization. Among other things, the group drafted a law and began the process of securing resources for the program. AID became interested in the potential of this type of program for improving the lot of the rural poor, and initiated its own studies and analyses, securing for this purposes a large number of AID personnel and private consultants. The interaction of AID and UNASEC planners helped to define INVIERNO's organizational structure and programs and provided the basis for estimating resource requirements. The AID loan paper went to Washington in April, the INVIERNO law was published in May, and INVIERNO was officially inaugurated in its current location on June 2, 1975.

3. Creation

In the six months between June and the end of 1975, the Central Office was organized and staffed and administrative manuals governing the organization and its operating procedures were drafted. The manuals for operating the initial programs of credit, inputs and marketing were prepared. Materials for the spring planting were ordered and financial resources were secured. Personnel to staff the CEDEs and Regional Office were recruited, and a preliminary census of the zones was completed. In short, the organizational basis for beginning actual field operations for the spring planting was almost complete.

The first three months of 1976 were devoted to training personnel, completing preparation for initiation of operations in the field, and repeating the census (the process by which clients apply for credit). The field offices were opened officially on March 1, the first loans were authorized on March 27, and the first loan disbursements to farmers began on April 2. Loans were made to 2,882 farmers.

Technical assistance activities continued throughout the first cropping period, culminating in harvest and sale of early crops with corresponding payments to INVIERNO. A bad drought destroyed some crop acreage and reduced yields severely on additional acreage. Some crops from the first season are still maturing.

The census of clients for the second cropping period of 1976 took place in June and July and additional Agromocs were employed to handle the larger number of borrowers (3,494).

4. Development

Although the entire cycle of operations is far from complete, the successful processing of large numbers of loans through two crop cycles indicates that INVIERNO is now an operating institution. From now on, the development of the institution will consist of adding more Regions and CEDEs, more personnel and more programs while continuing to refine and improve operations on the basis of experience.

The major questionable area is the capacity of the Regional Offices to perform their role in supervision, coordination and development of the CEDEs under their jurisdiction. Work during 1976 was concentrated in a single region, permitting a great deal more Central Office involvement in problem solving and supervision than can be expected in the future. As more regions are added, the Central Office must concentrate increasingly on maintaining the overall system and incorporating additional programs, relying on the Regional Offices for detailed supervision and guidance.

C. INSTITUTIONAL STATUS

1. Legal Base

a. Laws. INVIERNO's legal basis is the Ley Creadora del Instituto de Bienestar Campesino, published May 5, 1975. The Ley Creadora reflects the objectives of the Instituto and provides a framework for its operations to assist the campesino to reach more advanced levels of development. The organization of INVIERNO, its execution and administration conform to that law. Stated in another way, the objectives and procedures established in the Ley Creadora reflect the ideals of the actual organization.

The Ley Creadora foresaw the necessity for INVIERNO to sign contracts with other organizations to achieve needed collaboration in the

performance of its duties. Under this authority, the following contracts have been signed, or are being negotiated:

<u>Agreement With</u>	<u>Affected Projects or Activity</u>	<u>Status</u>
Ministerio de Agricultura y Ganadería	Applied research and seed production	Signed
Instituto Nicaraguense de Comercialización Exterior y Interior	Marketing	Signed
Ministerio de Obras Públicas	Public Health Services	Negotiation
Instituto Agrario Nicaraguense	Land Sale Guaranty Program	Signed
Ministerio de Obras Públicas	Access Road Program	Signed
Ministerio de Gobernación	Municipal Development	Signed
Banco de la Vivienda de Nicaragua (BAVINIC)	Rural Housing	Negotiation

Although the Ley Creadora anticipated many of the unique aspects of the Instituto, it did not cover the problems associated with line of credit financing, use of electronic data processing and printing equipment, and a series of interpretations of the legality of various documents required by the program to deal effectively with massive numbers of small loans in isolated areas. To remedy this situation, Decree No 563 (Reformas y Adiciones al Decreto Legislativo No. 20 de 25 Abril de 1975 Relativo al Instituto de Bienestar Campesino (INVIERNO) was published on September 27, 1975.

INVIERNO has a one man Legal Division which, among other functions, continues to review the Ley Creadora and suggest reforms which may improve the Instituto's capacity to serve the campesino Nicaraguense.

b. Loan Agreement. The Loan Agreement covering AID Loan 524-T-31 is an exceptionally complex document, reflecting a complex program. It includes an extraordinary number of conditions precedent and other controls, both in reference to the many separate programs and to compensate for the fact that many of these programs were to be carried out by an institution with no experience whatsoever and which was being created from concepts never before placed in practice.

Annex A summarizes the progress to date in satisfying these conditions. There have been a number of delays in this process requiring filing extensions, occasioned primarily by optimistic estimates about the time required to prepare plans and uncertainty about precisely what was required. Despite these formal delays, in our opinion, the progress to date has been outstanding. The work prepared by INVIERNO is generally of extraordinary quality, and this high quality is reflected in the excellence of the institution as presently operating.

The Loan Agreement is a reflection of the Capital Assistance Paper, and both the CAP and the Agreement contain groupings of activities which are unsuited for evaluation.¹ INVIERNO uses for its own programming and management purposes the revised organization suggested by Brown, but continues to report to AID on the basis of that contained in the Loan Agreement. We believe that the reporting requirement of the Loan Agreement should be interpreted to coincide with the INVIERNO organization. (NOTE: This may already have occurred.)

2. Financial and Material Resources

a. Sources. INVIERNO receives funds from three sources. The GON budget, AID Loan 524-T-031, and interest from loans or deposits.

(1) GON Budget. From June through December 1975, INVIERNO received C\$7,143,200 for Ordinary Expenses and C\$1,220,800 for Capitalization (Table 3). In 1976, INVIERNO has only received C\$342,726 for Ordinary Expenses, corresponding to the balance of its 1975 budget, but has an authorized budget of C\$14,314,000. It has received C\$37,779,200 for Capitalization, including the C\$18,779,200 balance from its 1975 and C\$20 million authorized in 1976. The Institute is authorized to borrow from the Central Bank up to the amount of its approved budget for one year.

INVIERNO has requested C\$31,345,000 from GON as a 1977 budget. This amount includes C\$10,954,000 as reimbursement for 1976 expenses, C\$19,848,000 for expected costs of non-banking programs, plus C\$543,000 disbursement from AID Loan 524-T-031. The Instituto projects the expenditure of C\$27,154,000 as follows:

¹Evaluation of the INVIERNO Component of the Agricultural Sector Program. Memorandum Report by Albert L. Brown, ATAC, to Richard Hughes, USAID, for Gustavo Gomez C., INVIERNO, December 2, 1975.

TABLE 3

CONTRIBUTIONS OF GOVERNMENT OF NICARAGUA TO INVIERNO

<u>1975</u>	<u>Subvencion para Gastos Corrientes</u>	<u>Aporte de Capital</u>
June	1,220,800	
July	1,085,600	
August	1,127,600	
October	1,501,800	
November	2,207,400	
December	-	1,220,800
Total 1975	7,143,200	1,220,800
<u>1976</u>		
January	346,726 (1)	18,779,200 (2)
March		10,000,000
April		5,000,000
May		5,000,000
Total 1976 to date	346,726	38,779,200

(1) Remainder of 1975 budget for Gastos Corrientes

(2) Remainder of 1975 budget for Aporte de Capital

Source: INVIERNO Sección de Finanzas Programación y Control

	<u>Non-Banking</u>	<u>Banking</u>	<u>Total</u>
Personnel	12,790	4,821	17,611
Administration Costs	5,224	2,351	7,575
Depreciation	<u>1,834</u>	<u>134</u>	<u>1,968</u>
Total	19,848	7,306	27,154

(2) Loan Disbursements. Loan disbursements to date have been very light because of the need to satisfy various conditions precedent prior to disbursement, and the inevitable delay in accumulating expenditure data and requesting payment. To date, disbursements have occurred as follows:

<u>DISBURSEMENTS</u>			
<u>Date</u>	<u>Activity</u>	<u>Agency</u>	<u>Amount</u>
29 June	Participants	DIPSA	\$ 5,825
16 September	Equipment (40 pickups)	INVIERNO	175,070
21 September	Land Tenure Survey Local Technical Assistance Personnel Service Contract	DIPSA	29,404
24 September	Participants	INVIERNO	<u>5,850</u>
		TOTAL	\$216,149

(3) Interest. Interest is generated by loans to campesinos and by bank deposits of remaining financial resources. On August 31, accumulated interest amounted to almost C\$600,000, about 70 percent from time deposits.

b. Expenses. INVIERNO's costs have risen fairly steadily since the Instituto was inaugurated in June 1975. Table 4 shows the average monthly costs for a four month period May-August, inclusive, the period for which experience under the cost segregation program is available.

A quick review of these figures demonstrates that fringe benefits amount to approximately 26 percent of total personnel costs, which is a reasonable figure. Personnel costs amount to about 66 percent of total costs of non-banking programs, a very desirable ratio for such a field-oriented program, and about 74 percent of total costs of banking programs. The latter figure reflects the concentration of credit

Table 4.

AVERAGE MONTHLY OPERATING COSTS BY PROGRAM
 (May - August, 1976)
 (In C\$000)

	<u>CENTRAL OFFICE</u>	<u>REGIONAL OFFICE</u>	<u>CEDES</u>	<u>TOTAL</u>	<u>AVERAGE</u>
<u>Programas Bancarios</u>					
Sueldos	462.4	36.5	273.3	772.2	193.05
Prestaciones	<u>191.0</u>	<u>9.3</u>	<u>82.2</u>	<u>282.6</u>	<u>70.65</u>
Subtotal	653.4	45.8	355.5	1054.8	263.70
Gastos Admin.	205.9	19.5	106.1	331.5	82.87
Depreciacion	<u>20.9</u>	<u>1.5</u>	<u>10.7</u>	<u>33.1</u>	<u>8.28</u>
Subtotal	<u>226.8</u>	<u>21.0</u>	<u>116.8</u>	<u>364.6</u>	<u>91.15</u>
Total	880.2	66.8	472.3	1419.4	354.85
Average	220.05	16.70	118.08	354.85	
<u>Programas No Bancarios</u>					
			704.2	1538.8	384.70
Prestaciones	<u>303.0</u>	<u>31.0</u>	<u>199.9</u>	<u>534.7</u>	<u>133.68</u>
Subtotal	1022.4	147.0	904.1	2073.5	518.38
Gastos Admin.	368.2	60.3	406.7	835.2	208.8
Depreciacion	<u>61.6</u>	<u>16.4</u>	<u>172.0</u>	<u>250.0</u>	<u>62.5</u>
Subtotal	<u>429.8</u>	<u>76.7</u>	<u>579.7</u>	<u>1085.2</u>	<u>271.30</u>
Total	1452.2	223.7	1483.8	3158.7	789.68
Average	363.05	55.92	370.95	789.68	

Source: INVIERNO Accounting Department

management costs in the Central Office, which is also reasonable.

Field costs (region and CEDEs) account for 54 percent of total costs. This low ratio reflects the fact that a Central Office had to be established in order to support any field operations. The field to center ratio should increase significantly as more regions and more CEDEs are added as projected, while the Central Office staff grows very slowly.

c. Budget and Accounting Systems. Budgets for operating expenses and for portfolio operations* are prepared in the finance section of the Vice-Gerencia of Programming and Control and processed through normal GON procedures. Accounting for both loan portfolio and non-credit programs is the responsibility of the Accounting Division. Both systems appear to be in good hands and were adequate to the needs of this evaluation.

The accounting system is computer-assisted. It generates a series of monthly reports which summarize the financial status of the institution, the balance at closing, the results of the most recent month and the year to date, and a comparison of the most recent two months (Table 5).

Two elements of INVIERNO's accounting system are unique to the organization: (1) The distribution of costs between banking and non-banking programs and (2) the depreciation/amortization account.

(1) Distribution of Costs. INVIERNO is a relatively simple institution managing a complex program. The same personnel, equipment and operating budget are applied to a variety of banking and non-banking activities. The banking operation is intended to be self-sustaining, but the costs of other programs are to be covered by the national budget. Good management requires a rational means for distributing costs among these various programs. The solution chosen was the following:

(a) Cost centers were designated as Central Office, Regional Office and Centros de Desarrollo.

(b) A percentage of the salaries in each administrative and program unit in each cost center was designated as applying to banking or to non-banking programs. This is necessarily somewhat arbitrary but follows a rational pattern. (Annex B).

* Banking operations are not yet being budgeted. Bank budgeting will start in 1977.

TABLE 5
INSTITUTO DE BIENESTAR CAMPESINO

"INVIERNO"

LISTAS DE INFORMES QUE SE ELABORAN AL FIN DE CADA MES

1.) Balanza de Situación:

1-1	Anexo (A-1)	Efectivo y Banco
1-1-1	Anexo (1-1)	Efectivo en Caja
1-1-2	Anexo (1-2)	Caja Chica
1-1-3	Anexo (1-3)	Banco de América
1-1-4	Anexo (1-4)	Banco Nacional de Nic.
1-2	Anexo (A-2)	Préstamos Agrícolas
1-3	Anexo (A-3)	Deudores Diversos
1-3-1	Anexo (3-1)	Administración Central
1-3-2	Anexo (3-2)	Cede San Ramón
1-3-3	Anexo (3-3)	Cede Matiguás
1-3-4	Anexo (3-4)	Cede Jinotega
1-3-5	Anexo (3-5)	Cede Condega
1-4-6	Anexo (3-6)	Cede La Trinidad
1-4	Anexo (A-4)	Otros Valores Financieros
1-5	Anexo (A-5)	Valores Diversos
1-6	Anexo (A-6)	Gastos Pagados por Anticipados
1-7	Anexo (A-7)	Otros Gastos Acumulados
1-8	Anexo (A-8)	Acreedores Diversos
1-9	Anexo (A-9)	Retenciones por Pagar

2.) Estado de Resultado

2-1	Anexo (1-PB)	Intereses sobre Préstamos Agrícolas
2-2	Anexo (2-PB)	Intereses sobre Depósitos
2-3	Anexo (3-PB)	Otros Ingresos

TABLE 5

2-4	Anexo (4-PB)	Gastos de Personal
2-5	Anexo (5-PB)	Gastos Administrativos
2-6	Anexo (6-PB)	Depreciación y Amortización
2-7	Anexo (7-PB)	Pérdida en Activo Fijo
2-8	Resumén Anexos	Gastos Programa Bancario
2-9	Anexo (1-PMDS)	Otros Programas no Bancarios
	2-9-1	Anexo (1-1) Ventas y Costo de Ventas
	2-8-2	Anexo (1-2) Detalle de Ventas de Insumos
2-10	Anexo (2-PMDS)	Gastos de Personal
2-11	Anexo (3-PMDS)	Gastos Administrativos
2-12	Anexo (4-PMDS)	Depreciación y Amortización
2-13	Anexo (5-PMDS)	Otros Gastos de Transportes
2-14	Resumén Anexo	Gastos Programas no Bancarios.

3.) Hoja de trabajo para cuadro de Origen y Aplicación de recursos del mes corriente, con el mes inmediato pasado.

4.) Hoja de trabajo para cuadro de Origen y Aplicación de recursos del mes corriente, comperado con los saldos del último mes del año --- pasado.-

(c) For each cost center, the relationship between that center's salary costs, distributed between banking and non-banking programs, is calculated as a ratio which is then used as the basis for distributing other costs between these two major accounts.

(d) The salaries of each of those program units clearly identified in Step 2 as 100% non-banking are then calculated as a percentage of total non-banking salaries.

(e) The percentage calculated in Step 4 is then used to distribute other costs among the non-banking program accounts. This distribution has not yet been put into effect.

This program was introduced in the May 1975 accounts and appears to be working effectively. It can be revised as necessary to reflect actual operating experience. The first such revision was made in September.

(2) Depreciation/Amortization. All equipment with a value above C\$400 is capitalized and depreciated by the straight line method over 5 years.* This amount is carried as a cost item in both banking and non-banking accounts. This is an entirely rational process which prevents decapitalization.

Traditionally, the GON (as most governments) does not recognize depreciation/amortization as a current operating cost. The normal budget process treats replacement of capital items as a cost in the year of replacement. The effect, in years of budget stringency, is to delay replacement, resulting in decapitalization and operating inefficiencies. This potential problem should not hurt INVIERNO too much over the next few years of rapid expansion with new equipment. However, it is highly desirable that the principle of regular reimbursement of this cost by government be established and it is essential for the self-sustaining credit programs. Since INVIERNO's equipment serves both banking and non-banking programs the same treatment should apply to both.

d. The Budget Process begins with a request in early July from the Ministry of Hacienda's Dirección General de Presupuesto (DGP) for a

* Five years is perhaps one to two years too long a period to depreciate vehicles assigned to Agromocs, given the state of the roads over which they operate.

projected budget to be submitted no later than 31 August. The Gerente General instructs the Vice Gerente of Operations to provide detailed information on requirements for the following year. This information is turned over to the head of the División Financiera of the Vice Gerencia of Programación y Control for costing on DGP budget forms.

After the budget has been reviewed and approved by the Gerente General it is sent to DGP where it is analyzed, and clarified, if necessary. In November, the President reviews budget documents of the Executive Branch. Final changes are made, and the DGP prepares the final budget project which is sent to Congress on 1 December.

Congress approves the budget prior to 1 January, usually in the amounts finally approved by the Executive for semiautonomous agencies. The amount to be transferred to INVIERNO appears in the MAG budget. Calendar year and fiscal year are identical.

Funds are retired by trimesters in a process which involves INVIERNO, MAG, and the Tesorería General de la República. The check is retired on orders of the Department of Crédito Público of the Ministry of Hacienda. If the check is exceptionally large and GON liquidity is limited, a lesser amount may be authorized until resources permit payment of the balance.

d. Equipment

Through September 30, 1976, INVIERNO had spent C\$4,866,140 to equip its Central Office, Regional Office and CEDEs (Table 6). The greatest investment category, accounting for three-fourths of the equipment inventory, was the acquisition of 61 pickup trucks and 30 other vehicles (jeeps, personnel carriers and four automobiles).

Average unit costs, based on experience to date, are as follows:

	<u>C\$</u>	<u>\$</u>
Equipment for Regional Office	375,020	53,575
Equipment for CEDE	631,480	90,210
Average cost of vehicle	39,810	5,685
Average cost of typewriter	4,590	655
Average cost of desk	1,385	200
Average cost of other equipment for CEDE	56,810	8,115
Average cost of other equipment for Regional Office	37,779	5,395

Tabla 6

NUMERO Y VALOR* DEL EQUIPO DE INVIERNO

Sept. 30, 1976

	<u>V e h í c u l o s</u>			<u>Máquinas de Escribi:</u>		<u>Escritorios</u>		<u>Otros Equipos</u>		TOTAL VALOR
	Camionetas	Otros	Valor	Valor		Valor		Valor		
	#	#	Adquisición	#	Adquisición	#	Adquisición	Adquisición		
Oficina Central	1	12	531,837.36	24	153,881.70	90	125,705.52	522,314.96	1,333,739.54	
Oficina Regional	4	4	319,560.12	3	6,463.80	8	11,215.26	37,779.16	375,018.34	
Cede San Ramón	12	1	505,35.24	3	6,463.80	9	12,545.82	59,380.85	583,665.71	
Cede Matiguas	6	3	352,830.60	3	6,463.80	9	12,545.82	68,485.02	440,325.24	
3 Cede Jinotega	11	4	589,867.92	3	6,463.80	11	15,397.02	50,891.40	662,620.14	
Cede La Trinidad	15	2	673,834.68	3	6,463.80	10	13,025.82	54,102.20	947,426.50	
Cede Condega	12	4	649,437.48	3	6,463.80	12	16,178.67	51,264.81	723,344.76	
	61	30	3,622,703.40	42	192,664.50	149	206,613.93	844,158.40	4,866,140.23	

*Costo de adquisición

3. Personnel

a. Policies, Procedures, and Quality. It was contemplated in the creation of INVIERNO that its personnel should be of the highest quality, both in education and competence. To assure this quality, INVIERNO's salary and benefit program would have to be competitive and the system for selecting and managing personnel equitable and effective.

(1) Quality of Personnel. All positions are described with their responsibilities and authorities, and the minimum qualifications required of the incumbent. A review of the record of those who occupy posts at various levels reveals that the incumbents generally exceed these minimum requirements by an ample measure. The Vice Gerentes all have a minimum educational level of Master degree and more than five years experience, while those who head the Divisions and Departments comply with the requisite degrees of Ingeniero or Licenciado with the experience required for the post.

At the CEDE level, five of the six CEDE managers hold degrees of Licenciado in Economics or Business Management, and the other is an Ingeniero Agrónomo. All have more than five years of experience in the administration of banking programs. Technical Assistance Supervisors are Ingeniero Agrónomos with more than three years experience. Nearly all Promotores Sociales are Licenciados in Social Work (some are Agrónomos with experience in group motivation or agrarian reform). All Agromocs are Perito Agrónomos or Técnico Agrónomos with previous agricultural experience.

One is instantly impressed with the evident intelligence and personal dedication of INVIERNO employees at all organizational levels. This personal excellence is even more apparent at managerial levels. It is evident that INVIERNO has selected carefully in recruitment and oriented its people thoroughly in the aims of the organization and the norms of performance which are expected.

(2) Quality of Personnel System. The system contemplates careful screening of applicants for work, promotion from within by preference if qualifications are met, equity in compensation, a trial period for new employees, and conformity to labor laws. It covers questions of promotion, salary increases, personnel ratings, dismissals, resignations

and transfers. Benefits include group life insurance, group health insurance, and salary maintenance during periods of incapacity (partially reimbursed by the Instituto Nicaraguense de Seguridad Social). There is also a savings plan in which personnel with monthly salaries above C\$1500 may save 5% of this and have it matched by 3% from the Instituto; those with less than C\$1500 save 3%, which is matched at 5%. INVIERNO also provides the aguinaldo of 75% of monthly salary to all who have worked throughout the year.

The system appears to be adequate to the needs of the institution and capably administered.

b. Current Staffing. INVIERNO's structure during the period of AID Loan activity calls for establishment of a Central Office with responsibility for overall supervisory, administrative and program planning coordination, and two Regional Offices for supervision and backstopping of up to nineteen Centros de Desarrollo. Each CEDE has a supervisory and support staff of eight (manager, two secretaries, warehouseman, two cashiers, janitor, guard, and sometimes a driver). Program personnel consist of two Supervisores de Asistencia Técnica (Ing. Agrónomos), two Promotores Sociales (Lic. Trabajos Sociales), two Credomercs, one Administrador Rural (agrónomo) and from seven to twelve Agromoc^s (agrónomos), depending on case load.

INVIERNO has existed for only sixteen months, since its inauguration on June 2, 1975. Its personnel growth and current staffing reflect the need to establish the superstructure before the field program staff (Table 7).

c. Personnel Movements. Internal movement of personnel is normal. Between December 1975 and August 1976, 25 persons were reassigned to other positions, other locations, or both. Fourteen geographic changes were made, of which seven were from the Central Office to the field and six were relocations among field offices. Salaries of twenty-four persons were increased, with twelve of these raises associated with promotion to another position. A merit promotion, effective in October, will affect 51 persons with raises of 10% of salary.

There were 56 terminations from July 1975 to the present (38 clerical and support and 18 technical) with 35 dismissals and 21

Table 7

PERSONNEL DISTRIBUTION

	<u>Mgmt</u>	<u>Professional</u>	<u>Sub Professional</u>	<u>Sec/ Clerical</u>	<u>Support</u>	<u>Total</u>	<u>Monthly Salaries</u>
A. Location							
Oficina Central	8	17	9	35	12	81	227,760
Centro Regional	1	6	3	2	3	15	39,200
CEDES	<u>5</u>	<u>17</u>	<u>66</u>	<u>22</u>	<u>11</u>	<u>121</u>	<u>290,200</u>
TOTAL	14	40	78	59	26	217	607,160
B. Program							
Management & administration	11	18	12	48	26	116	310,810
Desarrollo Municipal	1	1	0	3	0	5	21,900
Produccion Agropecuaria	1	21	54	6	0	81	203,900
Empresas Campesinas	<u>1</u>	<u>--</u>	<u>12</u>	<u>2</u>	<u>--</u>	<u>15</u>	<u>39,550</u>
TOTAL	14	40	78	59	26	217	576,160
C. Period - As of:							
June 1975	5	19	0	31	20	75	
December 1975	9	37	39	34	16	135	
June 1976	14	40	77	59	27	217	
September 1956	19	39	77	60	29	224	

Functional categories group INVIERNO positions by principal function based primarily on salary and title.

Source: All but time series taken from Lista de Personal de INVIERNO. June 1976. Time Series taken from table prepared by Office of Personnel and Administrative Services. September 1976.

resignations. Resignations were heavily concentrated in the professional specialists category. Such persons have many opportunities for alternative employment and those who left may have found their role in INVIERNO professionally less satisfactory than these alternatives.

d. Growth Trends and Projections. The principal forces affecting staff growth are the number of regions served, the number of Centros de Desarrollo opened, the number of locations each serves and the number of socios served.

Each Agromoc is expected to serve 80 to 100 socios when operating at optimum efficiency. Current case load (second crop) average 65 socios per Agromoc, with a range of 10 to 120 (Table 8). The number of localities and potential socios which can be served depends on the natural distribution of people in a radius which can be effectively reached by an Agromoc and this in turn depends on his mobility and the state of roads. INVIERNO has found that an Agromoc with a vehicle can operate up to 25kms from a CEDE instead of the 15kms used in initial plans. This implies fewer CEDEs, and consequently fewer supervisory and support staff than originally planned for.

INVIERNO has used this experience to project staff requirements for 1977 (Table 9). The Central Office is expected to grow at a very low rate in the future. A second regional office partially staffed with an Assistant Manager, three TA Supervisors and an Agromoc, a cooperatives specialist, a Credomerc, a Statistician and support staff will be added in 1977. Sixteen Agromoc's will be added to existing CEDEs and 58 will be added to 7 new CEDEs or subCEDEs.

The additional staff requirements are built up from the number of socios to be attended, in accordance with the ratios shown in Table 10.

4. Programming and Control

a. Program Planning. INVIERNO's Department of Programación y Control was recently elevated to the status of a Vice Gerencia in recognition of its singular importance to the entire operation. During the last year this office, more than any other, has had to bear the burden of preparation and/or review of the seventy-odd administrative and procedural manuals, and to calculate and estimate the general and detailed projections over the four year loan period. It is responsible for all program planning and for control of the reports which make up the management information system.

TABLE 8

LOCALITIES, SOCIOS, AND AGROMOCS

	<u>Primera</u>	<u>Postrera</u>
Localities	136	164
Socios	2,882	3,494
Agromocs	38 [*]	54 ^{**}
Localities/Agromoc	3.6	3.0
Socios/Agromoc	75.9	64.7
Socios/Locality	21.2	21.3

* December 1975

** September 1976

Table 9

PROYECCIÓN PARA 1977 DE
PERSONAL CEDE Y OFICINAS REGIONALES

	R E G I O N V												R E G I O N II			T O T A L		
	San Ramón 01	Mati- guas 02	Jinotega 03			La Trinidad 04			Con- dega 05	Esqui- pulas	Wasa- ka	Oficinas Regiona- les	Sub Total 05	Masatepe			Oficinas Regiona- les	Sub Total 02
			J.	P.	SAN.	L.T.	E.	D.						M.	T.			
Gerente	1	1	1	-	-	1	-	-	1	1	1	1	8	1	-	-	1	9
Asistente Gerente	-	-	1	-	-	1	-	-	1	-	-	1	4	1	-	1	2	6
Trabajador Social	2	2	2	1	1	2	1	1	3	2	2	4	23	4	1	3	8	31
Supervisor At.	2	2	2	1	1	3	1	1	3	2	2	4	24	4	1	1	6	30
Agromoc	10	7	12	6	6	14	5	5	16	8	8	-	97	20	6	-	26	123
Admor	1	1	1	1	1	1	1	1	2	1	1	-	12	3	1	-	4	16
Credomer	2	1	2	1	1	2	1	1	2	1	1	2	17	4	1	1	6	23
Cajero Cede	1	1	1	-	-	1	-	-	1	1	1	-	7	2	-	-	2	9
Cajero Ambulante	2	2	2	1	1	2	1	1	2	1	1	-	16	4	1	-	5	21
Bodeguero	1	1	1	1	1	1	1	1	1	1	1	-	11	2	-	-	2	13
Secretaria	1	1	1	-	-	1	-	-	1	1	1	1	8	1	-	1	2	10
Mecánografa	1	1	1	1	1	1	1	1	1	1	1	2	13	3	1	-	4	17
Chofer	1	1	1	-	-	1	-	-	1	1	1	1	8	1	-	-	1	9
Doméstica	1	1	1	-	-	1	-	-	1	1	1	1	8	1	-	-	1	9
Celador	2	1	1	1	1	1	1	1	1	1	1	-	12	1	1	-	2	14
Cooperativista	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	2
Estadígrafo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
	28	23	30	14	14	33	13	13	37	23	23	18	269	52	13	9	74	343

TABLE 10

Table of Organizational Requirements

PERSONNEL

- 1 Asistente del Gerente para 100 o más socios
- 1 Trabajador Social por 500 o menos socios
- 1 Credomerc por 500 o menos socios
- 1 Agrónomo por 60 o menos socios
- 1 Supervisor A.T. por 4 o 5 Agromoc
- 1 Administrador por 600 socios (salvo cuando hay 2 subCEDE)

EQUIPO

- 1 Escritorio Ejecutivo + silla por Gerente, Asistente, Auditor.
- 1 Escritorio corriente + silla por Supervisor A.T., Trabajador social, cooperativista, Administrador, Credomerc, Cajero, Contador, Estadígrafo.
- 1 Mesa común para los Agromocs ($1.5 \text{ m}^2/\text{Agromoc}$). Más sillas.
- 1 Escritorio + mesa para máquina + papelera de escritorio por secretaria.
- 1 Mesa + silla por Bodeguero.

VEHICULOS

- 1 Jeep por Gerente, por Supervisor de Asistencia Técnica.
- 1 Jeep para los Promotores sociales.
- 1 Pick-up por Agromoc.

INVIERNO's planning approach is goal oriented, built from requirements, and informed by studies. The basic program planning structure follows the AID approach of input-output-purpose, and the staff uses this method better than most AID personnel. Inputs are calculated on the basis of need, e.g., an estimate is made of number of socios to be reached, which determines the number of Agromocs, which leads to levels of support in terms of equipment, backstopping, operating costs, etc. The planning unit (and to a high degree the rest of INVIERNO) is remarkably free from preconceptions. Its motto appears to be "Let's see what the numbers say." Both operations research studies and economic analyses precede significant decisions.

Despite its prominence, the planning staff has declined in numbers over the last few months, as the heavy initial programming effort diminishes and the unit seeks a more permanent equilibrium. It can do this only because of the extremely high quality and dedication of its remaining staff. We suspect that additional staff will be needed to assist in the detailed planning of new programs just coming on stream and in controlling the performance of these operations.

b. Management Systems. INVIERNO is perhaps the most tautly organized and exquisitely controlled organization known to members of the evaluation team. This organization and control, combined with the careful planning discussed above, account for a level and quality of performance considerably beyond what might have been expected. The elements of the management system which may be singled out as particularly valuable (beyond selection of personnel and excellent leadership at key points in the organization) are the following: (1) the creative use of automatic data processing; (2) the extensive system of manuals; (3) the effective use of individual plans, combined with the reporting system; (4) the weekly planning meetings; and (5) the Executive Committee.

(1) Automatic Data Processing. Automatic data processing permits the economical and efficient handling of a large volume of small loans. More important, it is the essential element in dealing with the complexities of line-of-credit lending and repayments adjusted to the cash flow of small farmers. These factors alone warrant the care which has gone into development of the system and the importance assigned to the system (it is classified as Vice-Gerencia, along with the Vice-Gerencias of Program Planning and Control and Operations). However, the discipline which it enforces on system design and its utility in permitting the use of program data for operations research

and economic studies make it an outstanding management tool.

The effectiveness of a computer program depends upon the thought which goes into the related operating program. The small farmer lending program described in Chapter IV.A. is an exquisitely detailed attempt to identify and measure the elements of creditworthiness, the economic cropping models and related financing levels and anticipated returns, the maintenance requirements of farm families, and models to determine repayment capability, along with algorithms for calculating disbursements, interest rates and payments based on cropping patterns and sales rather than on time. These things would have had to be estimated whether the program was computerized or manual. However, the discipline of the computer forced the planners to detail assumptions and describe processes that might never have been faced in designing a manual program.

The credit program is necessarily based on a number of assumptions, e.g., about the importance of various factors to small farmer credit worthiness, or about the applicability of various factors to small logical patterns on different sites. Data which is being generated by the operating program is readily available in the computer data bank for economic and operational studies, the results of which can be used to refine these programs and INVIERNO's operating concepts.

The Automatic Data Processing system operation appears to be relatively secure. One set of storage tapes and disks is maintained in locked air conditioned storage in INVIERNO and will later be transferred to the Central Bank. The other working set is in an INVIERNO controlled room in the Banco Popular, whose computer is used to process the data. Two other computer configurations almost identical to that of Banco Popular are available in Managua. The ADP Analysis and Programming staff attempts to document all new programs and modifications to those in use.

(ii) Operating Manuals. Operating manuals have been prepared or are in various stages of preparation for all key management units, operating programs, and classes of personnel (Table 11). These manuals are the subject of special training courses and are available at all levels at which they are required. Information in these manuals is reviewed and updated as required. Before each important stage in the program operations cycle, e.g., before the census or before delivery of loan resources, the manual is reviewed and program personnel simulate the process for which they will be responsible.

(iii) Plans and Reports. All personnel maintain a three month daily personal schedule. Each month a report of the prior month's

Table 11

INVIERNO: PROCEDIMIENTOS ADMINISTRATIVOS Y MANUALES OPERATIVOS DE LOS PROGRAMAS

PROCEDIMIENTOS	MANUALES
-Manual de Organización Interna. (Feb. 1976).	-Boleta de Censo de Primera y su Instructivo. (Dic.75)
-Manual de Control Interno. (Feb. ").	-Plan de Implementación General de las Oficinas Regionales y CEDE. (Ene.76)
-Manual de Entrega de Financiamiento. (Mayo ").	-Manual para la Incorporación de Nuevas Localidades y Censo para Postrera. (Jun.76)
-Reglamento de Excepciones. (Marzo ").	-Instructivo para la Creación del Grupo de Consulta para Referencia de Socios. (Jun.76)
-Procedimiento para el Manejo de Fondos. (Abril ").	-Uso de Formas para Parcelas Demostrativas. (Jun.76)
-Procedimiento de Control de Caja. - -	-Forma de Boleta de Encuesta Social Censal. (Jun. ")
-Procedimiento para la Administración de Faltantes. - -	-Plan Preliminar de Implementación. (Oct.75)
-Procedimiento para la Información y Registro de las Devoluciones por Financiamiento de parte de los Socios de INVIERNO (Mayo 1976).	-Financiamiento por Cultivo para 1976. (Mar.76)
-Manual de Programas de Auditoría. (Junio 76).	-Plan de Crédito Agropecuario. (Mar. ")
-Procedimiento para la Creación de Registros de la Reserva para obsolescencia de INVIERNO. (Junio 76).	-Plan de Implementación Detallado para 1976. (Abr. ")
-Manual de Formularios para el Análisis de Control Interno. (Junio ").	-Programa "Fondo de Garantía para Compra de Tierras". (May.76)
-Manual para la Entrega de Financiamiento Agropecuario. (Junio ").	-Códigos de los Gastos y de las Tareas Agropecuarias - Costo de Producción y Financiamiento para 1976. (May.76)
-Sistema para la Preparación de Pronóstico de Fondos. (Julio ").	-Plan Nacional de Vivienda Campesina, Volúmenes I y II. (May.76)
-Sistema de Información de INVIERNO. (Junio ").	-Evaluación del Sistema de Comunicaciones de INVIERNO. (Jul.76)
-Reglamento de Caja Chica. (Sept.1975).	-Plan de Implementación - Programa de Mejoramiento y/o Construcción de Caminos de Acceso (Jul. ")
-Instructivo para la Conservación de Activos. (Oct. 1975).	-Manual para el Sistema Contable de Fincas. (Ago. ")
-Instructivo para la Preparación de las Descripciones de Trabajo para los cargos de INVIERNO. (Nov. 1975).	-Manual para la Entrega de Asistencia Técnica. (Nov. ")
-Reglamento Interno de Trabajo. (Nov. 1975).	-Manual del Agromoc para la entrega de Asistencia Técnica para Especialista y Supervisor. (Ene.76)
-Instructivo para el establecimiento del Manual de INVIERNO y el sistema para su administración. (Nov. 1975).	-Guía Técnica para las Parcelas Demostrativas (Abr. ")
	-Indicaciones para tomar muestras de suelo. (May.76)
	-Manual del Promotor Social. (Abr.76)
	-Plan de Implementación M.O.C. (Feb.76)
/2.

PROCEDIMIENTOS

- Instructivo del Plan de Seguro Médico Hospitalario. (Dic. 1975).
- Reglamentación de Horas Extras. (Dic. ").
- Reglamento Interno para la Administración del Programa de Ahorro Personal de INVIERNO. (Dic. 1975).
- Manual General de Organización. (Ene. 1976).
- Manual para el Establecimiento de las Comunicaciones. (Ene. 1976).
- Instructivo para el Control de Formas. (Ene. ").
- Reglamento para el Pago de Viáticos. (Feb. ").
- Manual de Procedimientos del Personal. (Ene. ").
- Manual de Transporte. (Feb. ").
- INSTRUCTIVO PARA EL CONTROL DE INVENTARIO de Mobiliario y Equipo de INVIERNO. (Marzo ").
- Anexo No. 1 - Control de Mantenimiento de Equipo, anexo del anterior, (Junio ").
- Manual de Procedimientos Contables y Catálogo de Cuentas. (Año 1975.)

MANUALES

- Manual para el estimado de cosechas. (Jul.76)
- Plan de Implementación del Departamento de Asistencia Técnica. (" 75).
- Paquete Tecnológico para la Producción de Hortalizas. (May.76)
- Paquete Tecnológico para la Producción de Granos Básicos. (- -)
- Paquete Tecnológico para la Producción de Papa. (Abr.76)
- Manual de Vacunación y Desparasitación del Ganado Bovino. (Abr. ")
- Instructivo para llenar los registros de datos para las Parcelas Demostrativas. (May.76)
- Instructivo para el llenado de "Registros de fechas de diferentes sucesos en la producción agropecuaria. (Por Localidad). (Jun.76)
- Manejo y Uso de Pesticidas. (Jul.76)
- Manual de Procedimientos. (M.O.C.) (1975)
- Manual de Procedimientos del Departamento de Insumos y Mercadeo. (Ene.76)
- Plan de Implementación - Estructura Lógica de INVIERNO. (Ene. ")
- Manual de Procedimientos del Credomerc. (Feb. ")
- Manual de Procedimientos del Especialista Credomerc. (Feb.76)
- Estrategia para la Creación de Cooperativas de Mercadeo. (Feb.76)
- Manual de Información de Precios. (Jun.76)
- Manual para Almacenamiento en Trojas. (Jun.76)
- Procedimientos para la Compra de Granos Básicos. (Jun.76)
- Manual de Compra de Granos Básicos. (Jul.76)
- Plan de Implementación Departamento de Mercadeo. (Año 75)
- Programa de Pequeña Empresa. (Sep.76)
- Programa de Pequeña Empresa - Asistencia Técnica. (Sep.76)
- Programa de Crédito p/el Desarrollo Municipal (Sep.76)

accomplishments is prepared, the plans for the next two months are refined and a third month is added. These plans are coordinated among all personnel of a given unit. CEDE Managers, Regional Managers, and Department/Division Managers all submit a monthly report on operations of their units. These reports are monitored and registered by the head of Programming and Control.

(iv) Weekly Planning Meetings. Saturday morning in each CEDE is devoted to a weekly planning meeting in which problems are presented, work plans are revised, new information is communicated, and the basic philosophy and operating principles of INVIERNO are reinforced. The material covered in this meeting is recorded in a formal Acta which is sent to the Regional and Central Offices and registered by Programming and Control. The same process is also followed by the Regional Office.

(v) Executive Committee. The Executive Committee, composed of the heads of all departments of the Central Office, the Divisions of Accounting, Legal and Personnel/Administrative Services, and a representative of the Auditor, meets each week. This meeting is devoted to a detailed discussion of problems and plans. Decisions are made, studies are commissioned, and actions to be taken are defined. Each decision, commission or action is assigned to a particular individual with a date for compliance. This information is recorded in an Acta signed by all present and distributed throughout the institution. Assignments are recorded in a register maintained by the head of Programming and Control. The status of these pending items is reviewed at each meeting.

D. SUMMARY EVALUATION

1. Inputs

a. Law. The Ley Creadora del Instituto de Bienestar Campesino was published on 5 May 1975 (c.l.a.). The law establishes an adequate philosophical and organizational base. Some of INVIERNO's proposed operations were restricted by other laws or traditions, but additions, amendments or authorizations which relieved INVIERNO of these constraints were published in another decree on September 27, 1975.

b. Administrative Procedures, Operating Manuals and Program Plans. To date, 31 administrative and organizational manuals and procedures have been issued (C.4.b.ii), and an additional 45 manuals and procedures govern program plans and instruct personnel in the conduct of program operations. The general quality of these documents is remarkably good. They are generally well organized and clearly written. The content clearly describes program and process, defines limits and assigns responsibility. At the same time, the manuals are written as a guide and not as a straightjacket. Despite their very good initial quality, there is ample evidence that material is already being compiled to guide the revision of major manuals.

c. Personnel. Program plans called for a total of 249 people (94 in the Central Office, 11 in the Regional Office and 144 in the CEDEs), of whom 138 were professional/technical and 111 were support staff. On August 31, 1976, there were 217 people (81 in the Central Office, 15 in the Region and 121 in the CEDEs), 132 of whom were managerial/professional/technical and 85 were secretarial/clerical/support (C.3.b.).

Staffing is lean and tough, adjusted to reality, without visible fat. Personnel are dedicated and work hard and productively. As indicated earlier, careful selection, good training and motivation, and excellent supervision are responsible for the high output.

d. Contributions. The following operations budget was projected for 1976 (C\$000):

	<u>Central Office</u>	<u>Regional Office</u>	<u>CEDEs</u>	<u>TOTAL</u>
Salaries	3997	420	4130	5847
Benefits (Fringe)	1477	154	1526	3157
Administrative Costs	<u>1995</u>	<u>294</u>	<u>2891</u>	<u>5180</u>
Total	4769	868	8547	16884

INVIERNO continues to expand, while the accounting system now segregates banking and non-banking programs and adds depreciation as a cost (C.2). Taking this into account, based on costs to August 31, 1976 and projected at the August level plus 10 percent through December 1976, we estimate total costs for operating both credit

and non credit programs as follows:

	<u>Central</u>	<u>Region</u>	<u>CEDEs</u>	<u>TOTAL</u>
Personnel Costs	N o t	d i s t r i b u t e d		9280
Administrative Costs	"	"	"	3103
Deprec/Amort	"	"	"	<u>844</u>
Total	7191	775	5261	13227

A reduction of C\$2.5 million in salaries and fringes and a saving of C\$2.1 million in administrative expenses far offset the addition of C\$0.8 million for depreciation. A considerable proportionate saving was made at the CEDE level by treating Pantasma as a subCEDE and adding Agromocs only as number of socios increased.

UNIT COST COMPARISONS

	<u>Projected</u>	<u>Actual</u>
Total Ordinary Expenses	16,884,000	13,227,000
Total socios (Lines of credit)	5,000	4,500 (est)
Total loan volume	42,000,000	17,100,000 (auth)
Total manzanas	22,000	19,570 (auth)
Average cost		
Per socio	3,377	2,939
Per C\$1000 auth	402	774
Per manzana auth	767	773

Cost comparisons showed a reduction in the cost per socio due to these savings from C\$3337 to C\$2939. Cost per manzana was virtually as projected (C\$767 and C\$773). Cost per C\$1000 authorized was close to double that projected (C\$402 to C\$774). This increased loan cost was due to a reduction in average loan per line of credit from an estimated C\$8400 to C\$3800.

e. Equipment. Equipment costs were originally estimated at C\$3,430,000 for the year. These costs now stand at C\$4,866,000 (C.2.d). The increase is all in vehicle costs, i.e., more vehicles to provide mobility to Agromocs at a greater unit cost. This enhanced mobility is

desirable both operationally and economically, as can be demonstrated by the reduced personnel costs.

f. Training. INVIERNO places great stress on training and has a comprehensive program of pre-service and in-service training for all levels of personnel and for the Voluntary Collaborators with whom the Agromocs work in the communities. This plan is very ambitious, leading to a shortfall because of the pressure of other work. Of a proposed total of 711 course participants, 259 have been trained so far this year. However, much of the shortfall is expected to be made up by a heavy training schedule beginning immediately after the initial work of the postrera has been completed. The quality of training appears to be generally good, with evaluations indicating an average retention of 75%, which is considered good for this type of training.

2. Outputs

Intended outputs for 1976 were an established Central Office, a Regional Office, and six CEDEs, operating effectively and following proper administrative procedures.

The Central and Regional are in operation, as are five of the CEDEs. A management decision was made not to open an office in Pantasma until 500 socios were enrolled, but to service the area as a subCEDE to Jinotega. This has been accomplished with very good results, and a significant saving in costs.

It is expected that the total number of CEDEs planned for future years may decline, as a result of this year's operating experience, perhaps to only ten or twelve, compared with the original target of nineteen. The knowledge that major areas can be managed effectively as subCEDEs and that Agromocs can operate effectively up to 25 kms. from their CEDE, rather than 15 kms. permits this reduction and attendant savings. INVIERNO should review and revise the study which led to the selection of the original sites, using the new criteria.

Operations in all offices are tautly supervised. Personnel at all levels appear to know what they are doing. The various manuals are much in evidence and personnel receive training in their content and in following the procedures outlines.

Management problems are promptly identified and dealt with on the basis of facts derived from special studies as well as frequent planning conferences. A management information system is in place and growing.

None of these outputs are yet in final form, but the pattern is clearly established. There will be continued incremental improvements in the operations of personnel and organization management and program operations.

3. Purpose

The objective of the INVIERNO institutional development project is to create an institution capable of effectively and efficiently serving the rural farmers in two Regions. At this point in time, the project is on schedule quantitatively and well ahead of schedule qualitatively. The institution is in place and operating effectively in the first Region. The system is sound and capable of expansion. The entire staff of INVIERNO deserve a commendation for what has been accomplished.

Services are being provided to farmers in an integrated fashion (credit, technical assistance, inputs, and marketing assistance), using group methods and effective communication and training practices. This is discussed in some detail in Chapter IV.A (Agricultural Credit).

Some initial organization of communities, identification of needs and development of projects has begun under the leadership of the Promotores Sociales. This work is limited by the lack of a good manual of the functions and methods for the Promotor Social (one is in preparation), and by the lack of supporting programs, which are also still in the development stage.

Judging by the progress of the first year, we expect that desired end-of-project status will be achieved by 1979, if not sooner.

IV. INVIERNO: PROGRAMS

A. AGRICULTURAL CREDIT

INVIERNO's agricultural credit program attempts (successfully, we think) to address the problem of making credit available in small amounts to large numbers of small farmers at reasonable costs and adjusted to their needs. It is based on a five year line of credit for crop production, family maintenance, and investment, with drawdown organized around the two major cropping seasons and repayment related to crop sale and ability to pay.

1. Objective and Strategy

Credit is considered to be a tool to use in combination with guidance by the Agromoc to progressively move a farmer up the scale of wellbeing by leveraging his own efforts. It is therefore restricted to farm families whose total situation, including the requested loan, indicates an ability to repay.

2. Important Concepts

a. Line of Credit. When a farmer first borrows from INVIERNO, he is granted a five year line of credit based on his initial loan application. The amount of the line is based on the acreage controlled and the credit requested, but its approval is based on eligibility factors. This line of credit may be used for production loans, maintenance or investment. The amount of this line of credit may be increased but not reduced. The line of credit is down by an application for funds for a specific purpose, and each request must be approved by INVIERNO. In effect, the line of credit approach guarantees the farmer that he will have access to credit in the amount he can rationally use, regardless of bad weather or bad luck, as long as he follows the advice of the Agromoc and INVIERNO remains solvent. The line of credit drawdown is repaid out of crop proceeds. Interest is paid on the amount drawn down and on the unpaid balance after partial repayment.

b. Multiple Use. The line of credit covers production costs of several lines of crops, family maintenance and investment. All three are commonly included in a single loan. The seasonal production loans normally cover two or more crops with the amount determined by

economic crop models and acreage. Financing covers a rational part of the cost of producing the crop, i.e., it excludes family labor, but covers other inputs for the technology level to be followed.

Family maintenance is calculated by a formula based on a field survey and is estimated for the time from drawdown to crop sale. The maintenance loan is granted only once, but maintenance costs are considered in calculating repayment capability, so that this is a continuing element in the line of credit approach.

Investment is adjusted to the farmer's experience, resources, and level of technology. If a farmer has oxen, INVIERNO will finance a plow. If he has a plow, the Institute will finance oxen. If he has neither, it will finance a set of hand tools. For calculation purposes only, investment is for five years with repayment expected after each of ten harvests (two per year).

c. Variable Payment Adjusted to Ability to Pay.

Repayment is due whenever a farmer sells any crop financed with the line of credit. The estimated payment due at any one time is the total outstanding balance plus accrued interest, adjusted for that portion of investment which would not be due if this were a traditional investment loan. Availability is a calculation of income from sale of a particular crop. It is based on the averaged yield, determined on a sample of crops at the same technology level in the locality times the selling price, reduced by 75% of the maintenance costs calculated to the next crop sale. If availability is less than the estimated payment, the actual payment is the availability, i.e., the borrower pays it all. If availability is greater than the estimated payment, the borrower pays the full estimated payment plus 30% of the difference between availability and outstanding debt. If the amount actually paid exceeds the balance owed, the excess is placed in an interest bearing savings account for the client, which he may withdraw if he wishes.

The variable payment concept is intended to protect both the farm family and INVIERNO against the inherent risks of production fluctuations. The use of the line of credit to carry the client during bad years must be offset in good years. The percentage used is arbitrary, but conceptually rational and can be adjusted by experience

over time.

d. Delinquency. Delinquency is based solely on willful nonrepayment of debts as calculated by on the above formulae - not on nonrepayment for lack of resources, unless this lack of resources resulted from willful misuse of inputs or neglect. A farmer is delinquent if he pays less than the availability of the higher sum calculated above.

A penalty of 6% is added to the normal interest charge of delinquent accounts and the payment due from the margin of availability over estimated payment is raised to 70% until the delinquency is erased. Payments are used to reduce delinquent interest, current interest, delinquent principal and current principal, in that order.

e. Provision of Credit. Loan applications are made in the locality before each planting season. Each locality is canvassed completely in a "census" to reach each farmer, explain the credit program and ascertain his desires. If he wishes a loan, a census form is filled out which identified the farmer, describes the essential characteristics of the farmer, family and farm, and applies for a loan for a specific purpose. This application is checked at the CEDE, and submitted to the Central Office where it is key-punched and inserted into the data bank. The data is analyzed electronically, and, if approved, the amount of the loan is calculated on a loan contract, notification letter and a budget is printed (all electronically) showing dates of anticipated withdrawal and amounts for seed, inputs, etc.

When the loan is approved, INVIERNO delivers the cash, (usually in two installments), and at the same time delivers the inputs which the farmer can buy. At harvest, INVIERNO will buy the crop at support prices or will weigh the product for the farmer to sell to a commercial buyer. INVIERNO receives payment in the locality, normally at the same time the farmer sells his crop.

f. Interest Rates. Interest rates were 13% for the spring planting, but were raised to 18% for the postrera. A calculation showed that the value of taking applications in and delivering money and materials to the locality easily offset the 5% spread between INVIERNO credit and that charged by BNN. Farmers recognized this and accepted the higher rate without difficulty.

g. Eligibility. Besides the threshold limit of income (or acreage), a borrower must demonstrate creditworthiness, i.e., the probability of both being able to pay and actually paying. The farmer must have lived in the zone for at least two years, in a community of more than 25 but fewer than 300 families, which has an allweather access road. He must have secure control of the amount of land he expects to farm (ownership, rental agreement, established use rights), and farm it himself. He must wish to be a socio (line of credit borrower), and be willing to adhere to the conditions which this implies. The projected return from his requested loan must meet minimum standards required for repayment, and his references must be satisfactory. If he passes all of these screens (which are automatic reasons for rejection) he may still be rejected on "points", a calculation which weighs the marginally passing grades on each of the above criteria.

Almost 30% of applicants were rejected in the spring planting, but some rejects were accepted when it was found that the cause of rejection was a misinterpreted question. A similar level of rejection occurred in the postrera, and discovery of another screening problem led to reincorporation of some of these rejects. These screening problems are considered normal in tuning the program. The acceptance of rejects upon discovery of system error also demonstrates the flexible application of system rules, based on reason.

Clients who wish to participated but who are rejected from borrowing for any reason are still asked to join the agricultural group. They may join in technical assistance activities, buy inputs, sell their produce through INVIERNO - in short, do anything but borrow money. Many, whose eligibility was limited by temporal residency requirements, tenure problems, etc., may become eligible with INVIERNO assistance from these other programs.

h. Technology. Two levels of technology are accepted for financing, with the amount authorized per crop acre adjusted for the level used. Technology "A" uses no fertilizer, with other costs adjusted as appropriate for a lower yield. It is based on the same technology which the farmer used, as improved by better seed, insecticides and management practices, but without major cost increases. The idea of Technology "A"

is to improve the farmer's practices and hence his yields, at a very modest increase in his costs.

Technology "B" is the best available technology for commercial practice. Technology "B" is the only technology which will be financed for any crop other than corn, beans and sorghum.

3. Operating Experience

a. Spring Planting. In the primera, 2,882 loans were authorized* in an average amount of C\$2,832 to finance an average of 3.7 manzanas per farmer (Table 11). These loans were concentrated on corn and beans (10,526 manzanas), with the remaining 247 manzanas for potatoes, cabbage and other vegetable crops. Only 80 loans (2.8%) were authorized in amounts greater than C\$10,000. Of these, 80, 47 were below C\$15,000 and 61 were less than C\$20,000. Only three exceeded C\$30,000: 33,000, 38,250, and 42,100, all for vegetable crops. Loans over C\$20,000 (\$2,857) accounted for 0.8% of loans and 7.3% of volume authorized.

b. Second Planting. In the postrera, 3,494 socios were approved for an average loan of C\$2,560 to finance an average of 2.5 manzanas. As with the primera, the great majority of loans were for production of beans, corn and sorghum (8,274 manzanas) with the remaining 525 manzanas for vegetable crops. Only 111 loans (3.1%) were larger than C\$10,000, many of these for potatoes. Forty-eight loans were over C\$15,000 and 25 were over C\$20,000. Seven loans exceeded C\$30,000: 30,360, 37,200, 37,830, 41,000, 42,540, 60,500 and 69,700, all for vegetable crops. The twenty-five loans for more than C\$20,000 accounted for 0.7% of loans and 8.3% of authorized financing.

c. Comparison with Targets. The principal inputs to the Agricultural Credit Program are (1) policies, criteria and procedures (2) qualified personnel (3) automatic data processing (4) \$6 million (C\$42 million) in funds (5) identification of borrowers, and (6) a complete organizational structure, all to be in place by March 1976. All these inputs were in place with the exception of the full C\$42 million,

* Actual amount borrowed may be less.

Table 12

LOAN AUTHORIZATION BY PLANTING SEASON

CEDE	LOANS	Manzanas			Amount (C\$000)			
		Grains	Other	Total	Production	Maintenance	Investment	Total
					<u>P R I M E R A</u>			
San Ramon	659	1907	6	1913	1229	295	---	1525
Matiguas	286	1587	--	1587	719	181	---	900
Jinotega	608	2094	204	2298	1785	322	---	2107
La Trinidad	570	2544	34	2578	1575	322	---	1897
Condega	<u>759</u>	<u>2394</u>	<u>3</u>	<u>2397</u>	<u>1368</u>	<u>367</u>	---	<u>1734</u>
Total	2882	10526	247	10733	6676	1487	---	8163
Average/Loan				3.74				2832
					<u>P O S T R E R A</u>			
San Ramon	497	767	115	882	748	43	50	841
Matiguas	367	833	2	835	475	52	--	526
Jinotega	824	2613	385	2228	2677	124	45	2846
La Trinidad	792	2558	49	2607	2498	200	81	2780
Condega	<u>1014</u>	<u>2241</u>	<u>6</u>	<u>2247</u>	<u>1771</u>	<u>156</u>	<u>24</u>	<u>1950</u>
Total	3494	8274	525	8799	8169	475	200	8943
Average/Loan				2.52				2560
					<u>B O T H S E A S O N S</u>			
Total	6376	18800	772	19572	14845	1962	200	17106
Average/Loan				3.07				2683
Average/Manzana								874

which was not required since the entire amount approved for lending in primera and postrera amounted to only C\$17.1 million. The amount available on March 1 was C\$20 million from GON reduced by about C\$3.5 million spent on vehicles and other equipment. On August 31, 1976 INVIERNO had more than C\$25 million immediately available for lending and operations, so lack of capital has not affected operations.

As for the others, a good credit manual was available; the essential parts of the ADP were in place; a Regional Office and five CEDEs were inaugurated on March 1, 1976 with a full complement of personnel who had received two months training and carried out two censuses in the zone. None of these had been proven in action, but they were in place and ready to go.

The principal outputs listed for the credit program are: number of borrowers (5,000), areas financed (22,000 manzanas, of which 20,300 in basic grains and 1,700 in other crops), and C\$42 million lent. At this point, we must refer to authorizations rather than actuals, since disbursement has not been completed. It is estimated that as many as 10% of socios may not withdraw any funds, while some may withdraw less than authorized.

The total number of socios authorized (primera alone plus postrera alone plus primera and postrera) is estimated at 4,500. This number is only slightly under the 5,000 socio target, and well over the level prognosticated in the CAP. The number of socios financed is the key figure for work load and is the best guide to operational capacity.

The amount lent was less than half that projected, C\$17.1 million vs. C\$42 million. This is the result of smaller average loans (C\$2,700 vs. C\$8,400), from smaller acreages (3.0 mz. vs. 4.4 mz.), and smaller authorizations per manzana (C\$874 vs. C\$1,909). Our interpretation of these figures is that INVIERNO is reaching a strata of farmers who have limited resources and limited experience with technological agriculture. A corollary is that the smaller portfolio yields smaller interest income to finance the banking program.

These are first year results and considerable

caution is needed in projecting results. We think that INVIERNO has followed a proper course, first in directing its attention to low income farmers and second in limiting their exposure.

On the basis of this first year's experience, INVIERNO has reprogrammed the rate at which it will reach 19,000 socios to a somewhat more gradual build up in the first three years (Table 13). Even so, the 1977 growth is predicated more on growth in established CEDEs than from opening new offices.

d. Qualitative Assessment

(1) The System. The system appears to be excellent in both concept and execution. Three important aspects are conceptualized but not completely functional: (1) incorporating variations from authorization, (2) repayment, and (3) reporting.

The amount which is authorized is not always drawdown completely. A farmer may decide not to use credit at all or agree with the Agromoc to use less fertilizer than that authorized, if his land is "new". These authorized differences are noted by the Agromoc on his detailed printout and returned to the Central Office where they are entered into the data base. Similarly, the Cashier and the Credomerc report the amounts which they have disbursed to the same borrower, and these are also entered into the Central Office data.

These various sources of data may not be reconcilable by the ADP system, because of errors in reporting the client, the transaction, or the amount by one or more of the three INVIERNO employees, or the client may be doing something without authorization. In a manual system, such differences might be prevented by pre-certification (which would required an immense staff or cause delays) or found on a sampling basis by a post audit (too late to do anything about). The computerization of the reconciliation system should permit early identification of differences in time to react positively. This generates a feedback to the sources of the problem and correction of both the error and the source of the error. At this point in time the programs which are necessary to permit this reconciliation are still undergoing test, which means that many errors undoubtedly are still in the system, as they

Table 13

PROJECTED GROWTH RATES

	1 9 7 6		1 9 7 7		1 9 7 8	1 9 7 9
	Primera	Postrera	Primera	Postrera		
<u>REGION V</u>	<u>2,882</u>	<u>3,494</u>	<u>7,300</u>	<u>8,500</u>	<u>10,900</u>	<u>12,700</u>
San Ramon	659	497	1,300	1,400	1,900	2,200
Matiguas	286	367	500	500	600	700
Jinotega	608	824	1,300	1,400	1,800	2,100
La Trinidad	570	792	1,650	2,000	2,600	3,000
Condega	759	1,014	1,700	1,800	2,000	2,200
Esquipulas	--	--	350	600	900	1,100
Wasaka	--	--	500	800	1,100	1,400
<u>REGION II</u>	--	--	<u>500</u>	<u>1,000</u>	<u>3,100</u>	<u>6,300</u>
Masatepe	--	--	500	1,000	3,100	6,300
<u>TOTAL</u>	<u>2,882</u>	<u>3,494</u>	<u>7,800</u>	<u>9,500</u>	<u>14,000</u>	<u>19,000</u>

would be in a manual approach.

Repayment is only partially processed. Only the earliest crops of the first planting season have been sold and payments made to INVIERNO. Most of first crop corn is still drying on the stalk and part of the first crop of beans is still in storage. Consequently, the system has not yet passed its operational test for incorporating repayments, and for adjusting payments to the drought conditions which reduced some yields and eliminated others. The computer program for calculating payment levels on an individual basis is not yet operational, but individual calculation at the CEDE level covers the immediate requirements.

Reporting is only about half complete, in the sense that only part of the reports which the ADP system is intended to generate are being generated now. This is not a serious deficiency from an overall accounting viewpoint, since the reports now generated cover movement of the portfolio and interest payments and provide a control system. Similarly, reports now issued provide the information needed for program operation and supervision. However, these reports are not enough to refine the system nor identify the details in operations which must be modified or the specific areas to be strengthened.

The deficiencies in the system as currently constituted are the result of priorities established in getting the program into operation in time for the planting season, and appear not to have limited operations. Progress is being made on each, so that the entire system should be fully operational by the spring planting season.

(ii) The Target Group. The INVIERNO credit program is clearly directed at borrowers who are in the small farmer category as indicated by average loan size and the limited number of large loans.

We reviewed all credit applications which resulted in loans greater than C\$15,000 for basic grains or C\$20,000 for vegetable crops. Farmers who receive these larger loans are more affluent than their neighbors but are of the same social and cultural milieu. They control more land and own more of that which they control, but appear to be well within the income, tenure and other limits which INVIERNO has established.

This is particularly true of the basic grains farmers. A farmer with 50 manzanas of dry farm land, a good part of it in steep hillsides and unsuitable for cultivation, is not well endowed. Twenty manzanas of dryland beans or sorghum will scarcely net him C\$4,000 (\$570) after deducting rent and labor costs.

The producer of potatoes and other vegetables is considerably better off. Although his farm is smaller, it is usually at a higher elevation in a cooler, wetter climate. The prospective return from vegetable crops is high but so are production and marketing risks. Two manzanas of properly cultivated potatoes or four of cabbage, tomatoes, onions or garlic will (according to the economic crop models) provide the C\$10,000 net income which is INVIERNO's near term goal. Many of these loans are of a size which would automatically achieve this level when the crop is sold at the anticipated price.

(iii) Quality Control always leaves something to be desired, and this program is no exception. Even so, the use of automatic data processing considerably reduces the probability of error. As one example of this error reduction, our careful examination of 40 applications, selected from the postrera list because of their exceptional size, revealed five cases which showed a variation between loan request and authorized loan. Three of these cases were errors in manual selection of the applications to respond to our request, but were not of the system itself. The remaining two cases were combination errors resulting from mistakes of the Agromocs who entered information on the form in an incorrect manner, and the perforator, who failed to correct them, and which were not picked up by the consistency check.

Two of the forty cases presented raw data which should have been investigated specifically before authorization of loans of this size. One showed an outstanding debt of C\$40,000 with no explanation. The other showed total loss of the immediate prior crop, no owned land, and a C\$3,000 debt, also unexplained. In both cases satisfactory references, residency and other factors noted on the form could well justify creditworthiness despite these factors, but a file memorandum or a comment on the application which recognized and addressed the specific problem would have been welcome.

Two applications which resulted in the two largest loans (C\$62,500 and C\$69,700) could not be found.

A somewhat similar situation was presented by an examination of large loans from the primera. Several applications could not be located immediately or were located erroneously. Although there was generally more commentary on each application than there was in the postrera, four applications showed very large outstanding balances (up to C\$27,000) on prior loans, one farmer owned exactly 99 manzanas, and one applicant, who in 1975 grew only one manzana of potatoes was authorized a loan for 5 manzanas of potatoes on rented land. Eighty-five percent of these borrowers had used bank credit, usually from BNN, in 1975.

4. Problem Areas and Recommended Solutions.

The review of this excellent program turned up some problem areas which require additional study:

a. Graduation. INVIERNO starts from the immediate situation of its clientele, which means that it may work with all classes of people who are within an established income limit. Socios incorporated this first year include many who are using credit for the first time to cultivate a manzana or two of basic grains, a goodly number at intermediate stages of development, and some who are well advanced. INVIERNO proposes to use its resources to move its clients up in the scale of performance to the point that some at least will exceed the established limits and "graduate". As indicated above, some of the current borrowers may exceed the income limit in the first year. This leads to two questions: (1) Is the income limit a reliable criterion for graduation? (2) What is graduation, and how should it be effected?

In at least some cases, these prospective graduates will have exceeded the target income level for the first time in their lives, and solely because of an integrated program provided by INVIERNO, and only by INVIERNO. Neither the farmer himself nor other elements of the PAS are capable at present of providing such an integration of resources at these levels. To reject a client because the

Instituto was successful in changing a single factor (income) in a single year, without establishing a basis for permanent change, seems both unwise and counterproductive.

It is also evident that some farmers will never achieve the income limits. They may become very successful farmers, but because of resource or other limitations they will remain within the established limits and will always be eligible for INVIERNO services.

We believe that INVIERNO should consider very carefully the combination of factors which indicate a successful individual before "graduating" any farmer.

The primary reason for the concept of limits and graduation is the desire to concentrate resources on a target group - in this case the rural poor. We feel that the limits now in effect may be too high to coincide with a reasoned definition of the rural poor (see below), but this is not the immediate problem. INVIERNO's credit resources are not now limited, so the resource concentration argument is moot. In fact, one could make a strong case that the portfolio balance should be invested in loans to affluent farmers at 18% instead of drawing 8.5 to 10 percent in time deposits which are relent to even more affluent people.

One way to resolve the graduation dilemma is to establish an upper limit on INVIERNO loans, perhaps initially at C\$20,000. Although INVIERNO's lending criteria and conditions are more stringent than those of competing banks, its services and personal guaranty approach make it an attractive credit source. A loan limit would force clients to borrow excess requirements elsewhere and would also limit INVIERNO's exposure and loss of reputation as a small farmer lender.

b. Competition. A joint BNN-INVIERNO study revealed that sixteen percent (range 7.5 to 27.0 percent by CEDE) of INVIERNO clients have been clients of the BNN, and still owed money on prior debts or are current borrowers. Preliminary indications are that only a small percentage are delinquent in these accounts. BNN and CEDE Managers now exchange lists of clients and discuss ways of dealing with problem cases.

We doubt that competition between these institutions will present anything other than a bureaucratic problem. The small farmer will go to whichever bank provides him the best service at the least cost. In practical terms, this means that the only overlap in clientele will be the more affluent members of INVIERNO's target group. INVIERNO should not waste time trying to purge its rolls of BNN clients, but it should conduct periodic spot checks to control the possibility of socios borrowing money from the two sources for the same purpose.

c. Clientele Limits. The outside limit of national average per capita income appears to be very generous, particularly since it is so difficult to verify. An average rural family of six persons could have a farm family income of C\$25,000 (\$3,500). Given the disparity between urban and rural income, such an income level would probably place such a family in the top of one-fourth of rural residents. Although certainly not wealthy, it would not be poor by national standards.

We do not wish to belabor this point. The average level of loans granted by INVIERNO is clear evidence of its basic orientation, as is the remarkably low frequency of large loans. The problem is more of image than substance. Our inclination would be to leave the limits as they are, but to protect the image and the substance by a limit on loan size.

d. Loan Review Process. At present there is no formal review of loan authorizations which compares application with authorization. This places entirely too much reliance on both the automatic data processing system and the integrity of staff and clients. We believe that all loans above a selected level, e.g., C\$10,000, should be reviewed by a credit committee and that any questionable information should be investigated and the results recorded before disbursement. In addition, a random sample of loan authorizations should be selected and studied to determine and correct the sources of errors in the system.

5. Projected Credit Requirements.

Agricultural credit requirements projected in the CAP to provide a basis for estimating loan and counterpart requirements appear quite low on the basis of INVIERNO's first year performance. We are fully

aware of the extraordinary margin of error involved in trying to anticipate the future on the basis of one year's experience. The following estimate is based on the following assumptions:

- (1) Average loan size for first year borrowers will increase by 10% per year as INVIERNO's confidence improves.
- (2) Average loan size for subsequent borrowings will increase by 10% per year as farmers gain confidence.
- (3) Maintenance as a percentage of new loan volume will remain as it is now (12%).
- (4) Investment for first year borrowers will start at 1% of total borrowed, increasing to 5%, 10% and 15% in the following three years.
- (5) No maintenance or investment loans will be available for relending before 1982. Ninety percent of crop production loans will be available in following year and all will have been repaid two years after lending. All interest collected is used to pay banking program administrative costs.
- (6) Program growth is as projected in Table 13 . We have estimated number of loans for two cropping seasons (Table 14).
- (7) The 1975 GON contribution of C\$20 million financed the 1976 borrowing of C\$17 million, with the remainder going for investment in equipment.

In constructing Table 14 we have shown the requirement being taken up first by the GON contribution to capitalization, and then by the AID loan.

The GON is paying C\$100 million in annual installments to capitalize INVIERNO and is absorbing all interest costs of the AID loan. Even with these contributions, which considerably exceed the C\$26.25 million contribution to agricultural credit in the Loan Agreement, and with C\$22.4 million from the AID loan the credit program would have shortfalls of C\$12 million in 1978, C\$48 million in 1979 and C\$75 million in 1980. Some part of these shortfalls will be absorbed internally as interest incomes rise, and it is always possible to limit the number and amount of loans. However, it is evident that INVIERNO will have to seek additional capital if it wishes to establish a constant rhythm for its growing operations.

Table 14

PROJECTED LENDING LEVELS (1976-1979)

<u>Years in Program</u>	<u>1976</u>			<u>1977</u>			<u>1978</u>			<u>1979</u>		
	<u>Loans</u>		<u>Total</u>	<u>Loans</u>		<u>Total</u>	<u>Loans</u>		<u>Total</u>	<u>Loans</u>		<u>Total</u>
	<u>No.</u>	<u>Amt.</u>	<u>C\$million</u>	<u>No.</u>	<u>Amt.</u>	<u>C\$million</u>	<u>No.</u>	<u>Amt.</u>	<u>C\$million</u>	<u>No.</u>	<u>Amt.</u>	<u>C\$million</u>
First	6600	2600	17.16	10,700	2860	30.60	10,000	3145	31.45	10,500	3460	36.33
Second	--	--	--	6,600	3145	20.76	10,600	3460	36.68	9,900	3805	37.67
Third	--	--	--	--	--	--	6,400	3805	24.35	10,300	4185	43.11
Fourth	--	--	--	--	--	--	--	--	--	6,300	4605	29.01
Total Loans	6600	2600	17.16	17,300	2860	48.58	27,000	3145	92.48	37,000	4605	146.12
Maintenance			2.06			3.34			3.78			4.36
Investment			0.20			.31			.32			.36
			--			1.04			1.83			1.88
			--			--			2.44			4.31
			--			--			--			4.35
Total			2.26			4.69			8.37			15.26
Production			14.90			43.85			84.11			130.86
			<u>1977</u>			<u>1978</u>			<u>1979</u>			<u>1980</u>
Relendable			13.41			39.50			75.70			117.78
CON Contribution			20.00			20.00			20.00			20.00
Available			33.41			59.50			95.70			137.78
Requirement			43.85			84.11			130.86			165.00 (est)
Deficit			10.44			24.61			35.16			27.22
AID Loan			<u>10.44</u>			<u>11.96</u>			--			--
Shortfall			0.00			12.65			35.16			27.22
Cumulative						12.65			47.81			75.03
Dollar equivalent						\$1.81			\$6.83			\$10.72

B. OTHER AGRICULTURAL PROGRAMS

1. Input Supply and Product Marketing (Annex C)

The objective of this activity is to assure that productive inputs are available to the farmer in the amount and at the time he needs them, and to assist him in marketing his product to assure that he retains as much of the fruit of his labors as possible.

In its initial operations, INVIERNO has assumed direct responsibility for the provision of inputs, since this is the only alternative which will assure their availability. INVIERNO estimates the quantity of seed, fertilizer and agricultural chemicals which will be required, procures these through bids by local suppliers, and distributes them to warehouses in each of the CEDEs. When loans are approved, the Credomerc arranges with the Agromoc and the Cashier to visit a locality, where the Agromoc identifies the farmer, the Cashier disburses the loan money and the Credomerc sells the required inputs. Inputs must be sold at cost, which includes sales tax, transport to the CEDE and the locality, plus 2% for inventory loss and 5% for management costs.

INVIERNO also acts as a marketing agent for the farmer. The Instituto provides information about prices and will arrange procurement by private buyers when prices are above the support price. INVIERNO will weight the product to assure honest measure. If private buying prices are below the support price, INVIERNO acts as an agent of INCEI, buying the product at the official support price with the requisite deductions for moisture and inert materials. INVIERNO transports the product to the INCEI warehouse, charging the farmer for transportation.

Both systems currently work well and efficiently, but the long lead time (up to 15 months) required to perform all steps in purchasing of inputs and lack of operating experience contribute to a high inventory. This problem should diminish with more operating experience.

A related problem is the transfer of responsibility for both input supply and purchasing to some other entity, preferably a farmer cooperative. INVIERNO has moved ahead on designing a program for cooperative development (Annex D) and has a couple of pilot efforts

underway. However, its perspective is long term, the result of its lack of organizational experience and that of its clients.

It may be possible to resolve both these problems by organizing central cooperatives around the input supply/product marketing activity, using paid cooperative staff to perform the same functions which INVIERNO staff now performs (See III.A.7.d, p.16). For this to be economically viable, INVIERNO should raise the prices of its products now to the level which will have to be charged by cooperatives, placing the excess over cost into a cooperative capitalization account, so that the central cooperatives begin with a nest egg. Using this approach, INVIERNO may be able to restrict its responsibility for these functions within two or three years to the purchase of inputs in bulk for distribution through the cooperatives, and to arranging with INCEI for the cooperatives to act as purchasing agents.

2. Applied Research. (Annex E)

This program contemplates the conduct of research to develop farm management practices and packages of inputs to improve those already being recommended. It also seeks to develop systems of farm management which will permit INVIERNO's clients to utilize their time and land resources more effectively throughout the year.

The research activity is to be carried out by the Ministry of Agriculture's research department under a contract with INVIERNO. Complying with the terms of this agreement, MAG submitted a "Plan de Investigación Agrícola para el Pequeño Agricultor" in July 1976 covering the 1976-1979 period. This plan proposes a program for testing varieties, production systems and disease and insect control for the principal crops grown in Region V. It also proposes a program for production and certification of seeds of improved varieties and provides analytic services for soil tests. Work under this plan has not yet begun.

Delay in the initiation of this research has not materially harmed the program. A set of recommendations developed by INVIERNO from earlier work by the Ministry satisfies the immediate requirements, i.e., demonstration parcels not affected by drought are yielding 16 qq of frijoles per manzana, compared with a national average

yield of 9 qq. There is still a good deal to be done, however, both in raising these yields and in adapting recommendations more precisely to microclimates in the zone. Part of this need may be covered by the experience with demonstration plots on which detailed records are kept. Still, these plots are not the equivalent of standardized experiments and are more useful as additional inputs to a research program than as substitutes for it.

A related problem of some seriousness in part of Region V is the marginal character of the resources in some areas. Much of the land being farmed in Condega and La Trinidad suffers from severe and frequent drought. Climatological and ecologic investigations in these areas may reveal an unacceptable level of production risk in the driest parts, or may provide the basis for establishing some form of crop insurance to minimize the impact of drought in a particular year.

3. Land Sale Guaranty Program (Annex F)

The Land Sale Guaranty Program seeks to improve the availability of land for small farmers by inducing large land owners to sell to landless farmers. The program guarantees the payment of a mortgage worked out between the landlord and a farmer or a group of farmers (INVIERNO has contracted with the Instituto Agrario Nicaragüense (IAN) for its assistance in working out these arrangements). The farmer must have a production of above average yields, an income below the national average, and be able to come up with five percent of the value of the property. INVIERNO will lend him fifteen percent to complete the twenty percent down payment. INVIERNO holds the mortgage, the farmer pays the seller, and if he doesn't, the Land Sale Guaranty Fund goes into effect to pay off the seller.

The objective of the loan financed program is to establish a Land Sale Guaranty Fund and operating methods which will result in the transfer of 16,300 manzanas to 1630 families by 1979 and 76,300 manzanas to some 7630 families by 1982.

To date, a general plan of implementation has been prepared and this has been supplemented with a more detailed operational guide. INVIERNO expects to receive AID's approval and begin operations in January 1977.

Our review of the proposed program indicates several conditions which may inhibit the success of the program in facilitating land transfer. Perhaps the most significant of these is the requirement that the farmer be able to come up with 5% of the price of the land. It is difficult to see how a landless farmer with income below the national average can save enough money to meet this requirement.

It also appears to us that several of the other conditions and requirements are both excessively rigid and may be conflictive with each other and with the objective of the program. For example, a requirement that a farmer have yields above the national average may imply either income above the national average, which would disqualify him, or its effect may be to eliminate virtually all of the class of farmers who most require the security of land ownership.

The program does not address the problem of the willingness of land owners to part with property which is traditionally held as a hedge against inflation, except at prices which anticipate future values.

C. RURAL DEVELOPMENT PROGRAMS

1. Motivation-Organization-Capacitation-MOC (Annex G)

MOC is a methodology which pervades all INVIERNO operations, including the development of its own personnel as well as the way in which the staff deal with their clients in the local communities. As a methodology, MOC seeks to identify the wants, needs and motivation of people; to organize natural groups of people with similar interests so that these interests may be more effectively met, either through self help or with outside intervention; and to provide the training or stimulus needed to help the people meet their needs.

MOC is also a program which uses this methodology to identify community needs, organize communities and bring together the community energies and the external resources needed to satisfy these needs. As a program, MOC concentrates on finding ways to 1) facilitate the delivery of services to the rural population, 2) to help that population in improving its own lot, and 3) to generate community action supported by those INVIERNO programs directed at improvement of the lot of all people.

The heaviest burden of MOC activities with communities lies with the Promotores Sociales who work alone and with the Agromocs to identify community needs and help to organize appropriate groups to work towards their solution. The Promotor Social is also the principal link between INVIERNO and the local office of the Ministries of Public Health and Education, seeking to find ways to introduce the programs of these organizations into INVIERNO communities.

Among the activities currently underway are a number which tie into ongoing activities of the Ministries of Health and Education (immunization, school construction, letrínization, potable water); some which are purely self-help (road improvement); some which will shortly benefit from direct INVIERNO assistance (access roads); and some which are archtypal MOC activities from which other needs may be met (Clubes de Amas de Casa).

During 1976, a reorganization of the technical back-stopping departments of the Central Office relocated the MOC technicians in the Department of Producción Agropecuaria y Desarrollo Rural. The MOC training division concentrated heavily on the training of INVIERNO staff in preparation for field operations. With limited formal guidance, Promotores Sociales in the field have developed their work on an individual initiative and target-of-opportunity basis, since much of the energy of the Instituto has necessarily been concentrated on agricultural credit and related services. The lack of an operations manual has also hampered a more organized approach.

Despite these limitations, the volume of organizational effort has been remarkable. Some 92 formal groups with 3533 members have been organized. In the last four months more than 1300 meetings were held with an average attendance of 27. Projects underway include 15 potable water systems, 40 road betterment programs, and the construction of 323 latrines, as well as a number of educational groups, agricultural clubs, and immunization projects.

It is imperative that this activity be given a clearer orientation in terms of policies, criteria and procedures if it is to fulfill its evident promise for meeting the needs of the rural population.

There is some evidence that this type of orientation is being developed: a manual is being prepared, a training course in social surveys and the identification of community needs is coming up, and a series of additional programs which will provide both resources and several specific work fronts will come on stream in 1977. Additional attention should be given to indicators of success at the output level, and to their classification. Groups organized, meetings held, etc., do not reflect the objectives of group or meeting or their value in achieving INVIERNO's objectives.

2. Access Roads (Annex H)

This project has as its objective the construction or improvement of roads to communities so that allweather access will permit the provision of other services. The program contemplates a total of approximately 430 kilometers of road, including both construction and betterment, mostly the improvement of allweather roads in deteriorated condition, or converting dry season roads to allweather roads.

This program will be executed by the Ministerio de Obras Públicas in conformity with its agreement with INVIERNO, the latter acting as supervisor and coordinator. The implementation plan is completed and approved, and the GON has made available to MOP the necessary operating funds. The only problem to be resolved before entering operation is a proposed redistribution of funds, which would increase equipment procurement and reduce funds for operations.

3. Municipal Development Program (Annex I)

This program, which will be carried out jointly with the Ministry of Government, provides loan financing to municipalities for the development of facilities to support agricultural production and marketing activities, and technical assistance to municipal administrators to improve municipal organizational structure and governmental services. Primary emphasis is to be placed on fee producing marketing centers, supply centers, transportation terminals, etc., which can also expand municipal revenues. These additional revenues, combined with improvement in municipal government capability, should help the municipality to become a more effective development institution.

INVIERNO has contracted with the Ministry of Government's Department of Instrucción, Capacitación y Asesoría Municipal to conduct management surveys and provide technical assistance and training. INVIERNO's Department of Municipal Development will promote projects, analyze applications and conduct feasibility studies, and present loan requests for approval by INVIERNO's Consejo Directivo. Loan maximums are \$7,000 for feasibility studies and \$300,000 for projects, with all over \$25,000 requiring approval by USAID. A technical assistance agreement between municipio and Ministry of Government is a precondition for all loans to municipalities.

1976 activities were entirely preparatory, including staffing of INVIERNO's Municipal Development Department, undertaking a detailed survey of 44 municipalities in Zones II and V, presentation of CP 3.07 material to AID, and assisting in documenting the PRP for the proposed Municipal Development Loan organization of the Ministry of Government municipal technical assistance unit and working out an agreement with that Ministry.

This project has undergone several changes in organization, none of which appear to weaken the activity:

- (1) INVIERNO will contract with the Ministry of Government for the technical assistance to municipalities, with the Ministry receiving some of the equipment and technical assistance originally programmed for INVIERNO.
- (2) INVIERNO, instead of the Banco Nacional de Nicaragua, will become the banking and loan administrator for the project.
- (3) An advisory council will be used instead of forming a Municipal Development Executive Council, if AID/W authorizes an amendment to the Loan Agreement.

Approval of CPs 3.07 and 3.08, and AID/W authorization of an amendment to the Loan agreement are expected in October. Project instruction and field promotion visits will begin in October, with first subprojects to be presented in January or February of 1977. INVIERNO will contract for technical assistance for the Ministry in November.

A significant problem which may be anticipated lies in the relationship of this activity to the proposed Municipal Development Loan. This project was originally viewed as a pilot activity which would

generate experience to be used in developing and programming the larger activity. It appears that INVIERNO is anticipating much more rapid disbursement of the 031 Municipal Development Fund than was originally contemplated and well before AID could move on new loan authorization. This would limit both the opportunity for gaining experience by a more deliberate approach, and create a lending hiatus which would interrupt progress. We suggest better communications between INVIERNO and USAID on this matter and recommend that municipal projects be carefully scrutinized and limited in size to maximize the experience to be gained before the Municipal Development Loan has been authorized.

4. Small Rural Enterprise Development Program (Annex J)

The Campesino Industries program is another of INVIERNO's tools for promoting employment and income generation in rural areas. The program provides credit and technical assistance to single unit home industries, small enterprises employing around five employees, and larger, cooperative-based business enterprises. It is anticipated that these enterprises will be concentrated on the transformation of agricultural products, the preparation of agricultural inputs or the production of consumer goods for rural consumption, but INVIERNO also expects to finance artsanry activities and service enterprises, e.g., carpentry, machine repairing.

Primary responsibility for promoting this program in the field lies with the Credomercs, who will be backstopped by a Rural Enterprise Technician located in each CEDE. This individual will review all loan applications, and will perform or arrange for feasibility studies, training or other technical assistance. Applications under C\$24,000 may be approved by the CEDE manager. Those between C\$25,000 and C\$50,000 require approval by the Regional Office, and those for more than C\$50,000 require approval by the Central Office.

The Central Office backstopping staff for this activity has been appointed and has developed the essential manuals for project operations, including cooperative development, credit regulations, field manuals, and costing data. The following schedule for operations is expected:

- October - USAID approval of CP's 3.09 and 3.10.
- November - Initiation of detailed case study training of Credomercs.
- December - Initiate project activities.
- January - Hire and train Rural Enterprise Technicians.
- February - Contract longterm technical consultants.

5. Housing (Annex K)

The campesino housing program was not included in the Loan Agreement, but is being developed by INVIERNO to round out its service programs. As such, it follows the same pattern as the other programs: a study and analysis of the rural housing situation in Regions II and V, followed by preparation of a detailed program plan and securing of financing.

The near term objective is to improve or construct some 28-29,000 houses, benefiting 174,000 campesinos in five years. This figure was considerably scaled down in establishing the logical framework targets to provide housing loan assistance to 5400 families composed of 33,500 people. It is somewhat difficult to ascertain the precise difference between these estimates, since the program includes both directed self-help activities (non-financed) and more substantial construction requiring credit. It also contemplates a wide variety of improvement intensities, ranging from modification in housing materials and construction methods, through letrinizacion, to structural additions or improvements, and construction of complete houses.

INVIERNO has prepared a proposed contract with the Banco de la Vivienda de Nicaragua (BAVINIC) and has been trying to interest that organization in rural housing. So far, there has been no meeting of the minds. INVIERNO plans to begin a pilot program using its own funds, but the precise limits of this operation have not yet been established.

In the meantime, INVIERNO is seeking alternative financing sources to meet a need whose ultimate dimensions are estimated at more than C\$200 million. A PRP is in preparation to deal with the requirements of the five year rural housing program in Regions II and V.

V. MINISTRY OF AGRICULTURE RESTRUCTURATION

A. OBJECTIVE AND STRATEGY

As indicated in the introduction, the law which reorganized the public agricultural sector also relieves the Ministry of Agriculture of all operating responsibilities, leaving it to serve as the overall coordinator of the sector. Policy control over the semi-autonomous operating agencies would be exercised through the National Rural Agricultural Development Council, composed of all sector agencies; through the Regional Rural Agricultural Development Councils to be formed when the various agencies adhere to a plan for regionalizing their decentralized elements; through participation by the Minister on the Boards of Directors of various agencies; through the policy analysis power of the Dirección de Planificación Agropecuaria (DIPSA) and its eventual expanded role in program design and budgeting; through management of a sector training center; through control of a sector development fund - in short, through a series of instruments which are intended to guide the sector institutions towards achievement of the promise of the Policy and Strategy for Development of the Rural Sector, without diminishing their creativity and initiative.

This process was begun with the establishment of INVIERNO and the organization of DIPSA. It will be continued through the creation of INTA (Instituto Nicaraguense de Tecnología Agropecuaria), IRENA (Instituto de Recursos Naturales Renovables), and CENCA (Centro Nacional de Capacitación) and completed with the regionalization of the PAS. Of these, AID Loan 524-L-031 supports the creation of DIPSA, INVIERNO, CENCA and Regionalization.

Before the Ministry can divest itself of its operating arms, several successive stages must be successfully completed: (1) pre-planning, e.g., deciding where the pieces will go (to a new institution or to an existing agency, and if the former, how it should be structured); (2) drafting and approval of enabling legislation; (3) preparation of a budget and securing its approval; (4) creation of the new institution and nursing it to effective operation. The speed with which these stages are reached depends substantially on the capacity of the

Ministry to carry them out effectively, while continuing to manage the remaining pieces. The Ministry does not start tabula rasa, but must continue to direct and support its own operating units until divested; subsequently, it must guide their development until firmly established. This dual responsibility places considerable strain on an agency which is also trying to assert its new role of sector leadership. Some of this burden necessarily involves DIPSA, which is also attempting to establish itself as a significant tool of the Ministry and of the sector. Finally, in an era of limited resources, the policy has been to concentrate financial as well as managerial resources on a limited number of new organizations until these are capable of sustained performance at an effective level.

B. SCHEDULE

The result is a much slower evolution of the restructured PAS than might have been hoped for, but one which is realistic. This approach seeks to create a new institution per year to absorb divested activities, while adding a new unit or function to the Ministry.

1976 - 1) Create INVIERNO as a new sector institution responsible for PAS services for the small farmer.

2) Create DIPSA, as the sector planning, program budgeting and evaluation arm of the Ministry.

1977 - 1) Create INTA, which will absorb the divested education, research and extension functions from the Ministry.

2) Create CENCA as the primary preservice and inservice training organization for the PAS.

1978 - 1) Create IRENA, to absorb forestry, fisheries, water and conservation programs.

2) Initiate the process of Regionalization in two or more regions.

C. STATUS

1. DIPSA. DIPSA functioned only as a cadre of UNASEC personnel from September 1975 until January 1976 when its organization and budget were officially approved. This approved budget became effective in terms of the complete staffing of the organization in June, 1976. Although DIPSA has made a start on all of its programs, there is little

which warrants comment at this time because of the very late start. A major technical assistance contract has been signed but the advisors are just arriving.

2. CENCA. A director has been appointed, who, with a very small support staff, is preparing an operating program and budget for 1977. This planning is well advanced and it is anticipated that the program will get underway in January, 1977.

3. INTA. INTA's enabling legislation has been passed and it is expected to begin functioning independently in January, 1977. This will remove well over half of the Ministry's operating personnel and budget, and will relieve the Minister and his staff of a significant management responsibility.

4. IRENA. Enabling legislation is expected in 1977, together with a detailed program for future operations beginning in early 1978. Until 1978, IRENA will continue to function as a part of the Ministry of Agriculture.

5. Regionalization. Although regionalization is authorized by the Coordinating Law of the Public Agricultural Sector, no significant action is expected before 1978, when two or three regions will be organized on a pilot basis to develop operating experience before extending the system to all regions in 1979. At that time, the Ministry will be structured as indicated by the Law.

LOAN AGREEMENT SUMMARY

Implementation Actions

GON RESPONSE

USAID's IMPLEMENTATION
LETTER RESPONSE

I.- CONDITIONS PRECEDENT

**3.01 CP to Initial Disbursement
for Technical Assistance**

- a) legal opinion; b) GON representative;
- c) preliminary time-phased implementation plan for program events; d and e) plans for obtaining technical advisors for DIPSA and INVIERNO; and
- f) preliminary land term measures.

**3.02 CP for MAG Special Studies, Training Activities,
and Commodities**

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- a) legal establishment of new officers and allocation of sufficient funds and personnel;
 - b) 1st. year MAG restructuring plan; c) establishment of salary for contracting quality technicians; d) assurance of transfer of UNASEC to MAG.

3.03 CP for INVIERNO Training Activities

- a) plan and budget for the training of INVIERNO staff; b) plan and budget for the training of Campesino leaders; and
- c) evidence of qualified training personnel.

3.04 CP for Small Farmer Research Activities

- a) overall plans budget and organizational arrangements for implementing project research; and b) evidence of qualified people

Date Submitted	Status	Dates	No.	Content
- December through January 25, 1976	Approved	Nov. 18, 1976	1	Instruction for completion of initial CPS
		Jan. 21, 1976	2	Disbursement and procurement procedures
- January 25, 1976	Approved	Jan. 27, 1976	3	Approval of 3.01
		Feb. 5 1976	4	Approval of 3.02
		March 11, 1976	5	Approve request for extension of 3.04 and 3.06 from March 25 to July 25.
- March 26, 1976	Approved	April 26, 1976	6	Approval of Section 3.03
		June 7, 1976	7	Approval of Section 3.05
		Augt. 18, 1976	8	Elimination of AID approval of all contracts less than \$5,000.
		Augt. 25, 1976	9	Approval of Sections 3.04 and 3.06
- July 29, 1976	Approved	Augt. 30, 1976	10	Extend completion of evaluation from September 1 to September 30

3.05 CP for Integrated Agricultural Development Project

- May 10, 1976

- a) detailed implantation Plan I2 project to include
 - i.) regional Plan for delivery of integrated services
 - ii.) local level technical assistance and promotion activities;
 - iii.) agricultural credit policies and procedures;
 - iv) policies and procedures for providing land sale guarantees;
 - v) criteria for developing an under-utilized land tax and its implantations;
 - vi) criteria for landlord-tenant new arrangements and plan for implementing regulations;
 - vii) plans and procedures for establishing small farmer marketing and service organization and develop independent farmer-owned cooperatives;
 - viii) evidence of sufficient budgetary resources through 1976;
- b) operating procedures, organizational structure, annual budgets for INVIERNO;
- c) interim measures to protect small-farmer tenants until final land-lord tenant have been enacted;
- d) adequate salary and personnel to maintain quality personnel;
- e) hiring sufficient qualified personnel to initiate field operations and
- f) evaluation plan for all project elements

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3.06 CP for Disbursements for Access Road Betterment

- July 29, 1976

Approved

- a) Ministry of Public Works and INVIERNO agreement whereby MOP implents road betterment project;
- b) organizational and staffing arrangements for MOP;
- c) implementation plan;
- d) GON additional \$1million contribution which in 1976 will earmark \$200,000 to MOP.

3.07 CP for Technical Assistance and Training for Rural Municipal Development Project.

a) establishment of a separate Rural Municipal Development Unit in INVIERNO; b) establishment of Executive Council for Rural Municipal Development Project; c) coordinating agreement between Ministry of Government and INVIERNO; and d) plan for use of technical assistance and training funds.

- May 19 - a and d and
June 9 - b and c.

All material presented, however GON requests the formation of Advisory Council rather than Authorization Executive Council. USAID awaiting reply to its mid-July cable on Authorization amendment to 3.07 (b).

3.08 CP to disbursement for Rural Municipal Project Credit Funds

a) Regulation and procedures for funds sub loans to include capitalization plan, policies governing Fund, project eligibility and sub-lending criteria and model sub-loan contract.

- September 25, 1976

Mission review expected as of mid-October.

3.09 CP for Technical Assistance for Rural Enterprise Development Fund

a) agreement between BNN and INVIERNO; and b) BNN's arrangement with INVIERNO to obtain long-term advisory services

GON has presented material but review pending AID/W approval of Authorization Amendment

BNN not interested in participating in Project. AID/W informed July 20, and Mission waits AID/W authorization amendment.

3.10 CP for All other disbursements for Rural Small Enterprises Development Project

a) BNN and INVIERNO organizational and staffing plan for implementing Project; b) policies and regulations for implementation of Rural Small Enterprises Credit Fund; c) that GON provide for fund capitalization.

Same as above

Same as above

3.11 CP to all Disbursements subsequent to December 31, 1977.

a) GON enacted and implanted land tax promoting the sale and/or rental of underutilized land to "campesinos"; b) GON enacted and implanted new arrangements for regulating landlord-tenant relations; and c) an updated report on Nicaraguan land tenure conditions.

3.12 CP to All Commitments of Funds Subsequent to September 1, 1976.

Joint Evaluation underway.

Implementation letter sent extending date of submissions. Expect all to be presented until early November.

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a) MAG, INVIERNO and AID have conducted evaluation; b) above parties have programmed next years activities; and c) above parties reviewed progress in developing underutilized land tax and new arrangements for regulating landlord-tenant relationships.

II. - REPORTS

Section 4.10: "The Borrower shall furnish to AID such information and reports relating to the Loan and to the Program as AID may request"

Pursuant to completion of the joint evaluation of the Project, a mutually agreed upon reporting system to adequately monitor all activities within the Project will be designed. This should be completed by and prepared as implementation letter in late November.

In addition to this routine scheduled reporting system, the Loan Agreement requires, 1) our annual report of the reviews and a description of the policies and programs being implanted to increase access to land by small farmers (5.02) and 2) borrow present not later than September 77 a study of agricultural interest rates to determine adequacy of present rates (5.04).

III. - ANNUAL REVIEW 5.08

Ministry of Agriculture, INVIERNO and USAID will undertake an annual review and evaluation of the program and jointly program future annual loan and Borrower inputs. This review will be presented in early November.

IV. AUDITS

The AAG is programing its first audit of the Project in January/February 1977.

CRITERIOS DE DISTRIBUCION DE GASTOS, PARA PROPOSITOS ESTADISTICOS Y DE CONTABILIDAD; Y DE BASE PARA ELABORACION DE PROGRAMAS DE COMPUTADOR.

Definiciones para Información a Contabilidad e Información Estadística.

1. **Distribución de gastos para propósitos del Estado de Pérdidas y Ganancias.**

El Estado de Pérdidas y Ganancias estará compuesto de un resultado presidido por lo que llamamos Operaciones Bancarias de Ingresos y Egresos y de Gastos de Promoción y Mejoramiento del Desarrollo Social. Con relación a este último Estado de Egresos, los gastos serán reembolsados por el Gobierno contra la cuenta de reembolsos de éste que llevará en el Pasivo el Balance de INVIERNO.

2. **Criterios para establecer cuáles gastos son Bancarios y cuáles corresponden a otros Programas:**

- 2.1 Al mejor criterio, dentro de cada posición de trabajo del personal, el Lic. Mario Pfaeffle preparó un cuadro donde aparece qué porcentaje del sueldo de cada persona debe ser imputable al Programa Bancario y qué porcentaje debe ser imputable a otros Programas.

Basados en estos mismos porcentajes se deberán distribuir los otros Gastos de Personal.

- 2.2 Se toman como Centros de Gastos los siguientes:

- Oficina Central.
- Oficinas Regionales.
- Cedes.

3. Para cada Centro de Gastos, y de acuerdo a los porcentajes establecidos en el 2.1, se determinará el monto total de sueldos y el de "Otros Gastos de Personal", imputables al Programa Bancario y el porcentaje que este monto de sueldos representa con relación al monto

total de sueldos de ese Centro de Gastos. Dicho porcentaje será usado para multiplicarlo por el gasto total de cada rubro dentro de la rama - "Otros Gastos Administrativos", y en esta forma, se establecerá qué - cantidad debe ser imputable como gasto bancario por cada uno de esos - rubros dentro de esas ramas. La diferencia entre el total de un rubro y la parte imputable al gasto bancario será el que corresponde a gastos de Otros Programas. En igual forma se establecerá la proporción de la depreciación y amortización que debe ser imputable al Programa Bancario y a otros Programas.

4. Distribución de Gastos de Sueldos por Centro de Gasto:

a) <u>Oficina Central:</u>	<u>Gastos Bancarios</u>	<u>Otros Programas</u>
Gerencia	100.	0.
Auditoría	75.	25.
Vice-Gerencia	0.	100.
Programación y Control (ex-Div. Fin.)	0.	100.
División Financiera	100.	0.
Personal y Serv. Administrativos	50.	50.
Procesamiento de Datos	75.	25.
* Desarrollo Municipal	0.	100.
Contabilidad	100.	0.
* M. O. C.	0.	100.
* Mercadeo	0.	100.
* Fomento de Empresas Campesinas	0.	100.
* Asistencia Técnica	0.	100.
b) <u>Oficinas Regionales</u>		
Gerencia	100.	0.
Personal de Apoyo	0.	100.
* Asistencia Técnica	0.	100.
* M. O. C.	0.	100.

Cont.	Gastos Bancarios	Otros Programas
b) <u>Oficina Regional:</u>		
* Credomar (Mercadeo)	0.	100.
* Fomento de Empresas Campesinas	0.	100.
* Desarrollo Municipal	0.	100.
c) <u>Cedes:</u>		
Gerencia	100.	0.
* Asistencia Técnica	50.	50.
* M. O. C.	0.	100.
Administrador Rural	0.	100.
* Credomarc (Mercadeo)	75.	25.
* Fomento de Empresas Campesinas	0.	100.
* Agromoc	0.	100.
Cajeros	100.	0.
* Bodegueros (Mercadeo)	0.	100.
Chofer	100.	0.
* Ayudante y Mozo	0.	100.
Contador	100.	0.
Secretarias	100.	0.
Mecanógrafas	75.	25.
Celador	100.	0.

5. Distribución de Gastos de Otros Programas entre los diferentes Programas:

Como "Otros Programas" se consideran los siguientes: MOC, Asistencia Técnica, Mercadeo, Fomento de Empresas Campesinas, Caminos de Acceso, Desarrollo Municipal y en el futuro los que se vayan agregando. Pequeña Empresa, Tierra.

5.1 Sueldos directamente identificables con un solo Programa. Para cada uno de estos Programas, los cuales se identifican con un asterisco en el punto 4, se sacará la sumatoria de los sueldos

directos correspondientes y se calculará el cociente entre el total de sueldos directos de cada Programas y el total de sueldos Directos de todos los programas con asterisco. Este cociente será usado como se indicará en el párrafo siguiente.

5.2 El cociente de cada Programa, indicado en el 5.1 será aplicado a la proporción de los sueldos consignados en "Otros Programas" de las siguientes unidades, para establecer qué monto de estos gastos indirectos en sueldos es imputable a cada programa:

a) Oficina Central:

Auditoría,

Vice-Gerencia de Operaciones

Programación y Control, (exceptuando Ingeniería Rural y la Div. Financiera).

Personal y Servicios Administrativos,

Procesamiento de Datos.

b) Oficina Regional:

Personal de Apoyo.

c) Cades:

Administrador Rural,

ilecanógrafas.

5.3 En adición a lo anterior, se establece que en el caso de la "Oficina Central", el sueldo del Jefe del Programa de Producción Agropecuaria y Desarrollo Rural y el sueldo del Jefe del Programa de Fomento de Empresas Campesinas, será dividido mitad y mitad, en el caso del primero, entre el Programa de MOC y el Programa de Asistencia Técnica, y en el caso del segundo, entre Mercadeo y Fomento de Empresas Campesinas propiamente dicho.

En el caso de los Agromocs el sueldo se distribuirá 70.% en - Asistencia Técnica y 30.% MOC. La proporción del monto resultante de sueldos para los mencionados Agromocs, será tomada - como sueldos directos de cada Programa para propósitos de cálculo del cociente mencionado en 5.1.

5.4 Una vez determinados los sueldos directos e indirectos asignables a cada Programa, se sumarán, los directos e indirectos, para cada Programa y se determinará la relación porcentual con respecto al total de todos los Programas no Bancarios. Este factor se usará para determinar los gastos de personal y los gastos administrativos de cada Programa. En esta forma se establecerá el total de gastos por rubro imputable a cada programa. Con relación a las depreciaciones y amortizaciones, se usará el mismo criterio de distribución indicado anteriormente, salvo con los vehículos asignados a los Programas Producción Agropecuaria y Desarrollo Rural y Fomento de Empresas Campesinas, cuyas depreciaciones totales se distribuirán por partes iguales, entre los Programas de: Mercado, Asistencia Técnica y MOC.

Se aclara, sin embargo, como excepción que en el caso de los gastos relacionados con vehículos (combustible, mantenimiento, seguros, etc.) se distribuirán en proporción a las depreciaciones.

5.5 Todo el Personal de Ingeniería Rural debe ser identificado como Programa de Caminos de Acceso y el 100.% del sueldo es identificable con ese Programa, (sueldos directos). Cabe mencionar que en el futuro habrá algún personal directamente identificable con un Programa de Pequeña Empresa y se prevé que en lo futuro, alguno de estos - sueldos se tengan que distribuir también con Viviendas Campesinas y Programa de Tierra.

SUMINISTROS DE INSUMOS Y MERCADEO DE PRODUCTOS.

OBJETIVOS

El objetivo primordial aquí, es la superación económica de los Socios, a través del suministro de los insumos necesarios para aumentar la productividad de sus actividades y ejecutar la mejor alternativa para la comercialización de sus productos.

- Las funciones específicas serían: Suministrar a los socios sin percibir utilidades los insumos necesarios en el lugar y tiempo adecuado.
- Proveer información sobre precios de oferta y demanda de los productos agropecuarios.
- Coordinar actividades de transportación de los insumos y de los productos.
- Diseñar y controlar la ejecución de la política global de mercadeo de productos agropecuarios.
- Promover entre los Socios de Invierno, el mejoramiento de la actual infraestructura de mercado.

METODOLOGIA:

Con el fin de servir de soporte a la adquisición de insumos, se determinan las necesidades, investigación de precios y cuándo comprar. Posteriormente se procede a la adquisición de los insumos, donde se realizan cotizaciones, licitaciones y finalmente la adjudicación de los contratos.

En una etapa siguiente, los Insumos son retirados de los CEDE y entregados a los socios en las Localidades.

Para el transporte, la logística consiste en ubicar los insumos en el lugar, forma y tiempo adecuado, para que se lleven a efecto los programas integrales del Instituto.

Para transportar productos, se hace con dos meses de anticipación una estimación de los volúmenes a transportar, indicando además el lugar donde se recolectarán dichos productos. Con estos datos se calculará el número de vehículos y viajes necesarios.

La metodología utilizada para la comercialización de productos, busca proporcionarle al socio las mejores alternativas en el momento y en el lugar que las circunstancias lo demanden.

El Instituto establece dos alternativas de mercadeo:

1. Actuar como agente vendedor del INCEI. Existe un convenio entre INVIERNO e INCEI, donde este último se compromete a comprar a precios de garantía la producción del Socio que el quiera vender a esta institución.

2. Actuar como comerciante mayorista. El Instituto le informa al Socio de los posibles compradores mayoristas. El Instituto se encarga de buscar posibles compradores que ofrecen precios razonables.

S T A T U S

Según el Plan General de Implementación, los pasos iniciales a este programa eran el establecimiento de políticas, criterios, procedimientos, etc., para la operación del Proyecto a partir de 1976. Además, la firma del convenio con el INCEI para la comercialización de insumos y productos para los Socios.

Las metas anuales expuestas en Plan General de Implementación son:

<u>M E T A S A N U A L E S</u>					
(1000 Unidades)					
<u>Rubros</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>T o t a l</u>
Semilla	12.3	24.5	36.7	41.7	115.2
Fertilizantes	39.2	78.3	117.5	133.2	368.2
Pesticidas					
Q.	8.6	17.2	25.8	29.2	80.8
Gls.	19.5	39.0	58.5	66.3	183.3

Fuente: Invierno

Los rendimientos a esta fecha consisten en contar con la estructura organizacional adecuada, la licitación y adquisición de los insumos para suministrar a los socios, y la firma del convenio con el INCEI.

También en el cuadro adjunto se muestra el movimiento de insumos en la la. siembra de 1976, desglosado en cantidad física requerida, cantidad comprada, vendida, inventario y el valor de los mismos.

En cuanto al movimiento de insumos, al compararse estos con las metas expuestas en el Plan General de Implementación, se ve que quedaron muy por debajo de los estimados. Esto se explica por la razón de que el área financiada fué menor al que se había previsto en el Plan de Implementación. Además, las proyecciones hechas al inicio del año, corresponden a una sobre estimación de los insumos a ser utilizados.

Aún las proyecciones posteriores en base a los requerimientos, se ve una variación apreciable en la cantidad comprada por el Instituto y la cantidad vendida por el mismo. Parece ser que la causa de esto, sea que cierta cantidad de los financiados utilizaban tierras nuevas, y para ellos no era imperante el uso de fertilizantes. En el caso de la semilla, muchos agricultores utilizaron semilla que tenían guardada para este fin.

En cuanto a la estructura para la ejecución de este proyecto se ve que está bien implementada y con los respectivos manuales para dirigir su acción.

El proyecto de Suministro de Insumos y mercadeo de los Productos, parece ser uno de los más atractivos a los productores del área, de todo el programa de IN - VIerno.

PROBLEMAS Y RECOMENDACIONES

Parece ser que existe un problema en la estimación de las cantidades de insumos a ser utilizados. La existencia de grandes inventarios en las bodegas en los CEDE puede causar pérdidas en este proyecto. La recomendación es pues la de incorporar las experiencias obtenidas en el primer año de ejecución y re-evaluar las metodologías utilizadas en este cálculo.

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MOVIMIENTO DE INSUMOS 1a. SIEMBRA 1976

PRODUCTO	REQUERIDO	COMPRADO		VENDIDO		INVENTARIO	
		QQ/GLN.	\$	QQ/GLN.	\$	QQ/GLN.	\$
<u>Semillas</u>							
Maíz	1810	1776	363.955	1054	197.674	722	139.915
Frijol	2622	952	176.120	546	93.076	406	86.080
<u>Fertilizantes</u>							
Nitrogenado	4069	4983	269.082	4631	281.440	352	20.344
Completo	3857	5080	364.714	4813	378.096	267	19.976
<u>Pesticidas</u>							
Sólido	1644	2478	450.127	1070	185.902	1408	208.134
Líquido	3932	1577	<u>274.898</u>	210	<u>37.509</u>	1367	<u>227.522</u>
			\$898.896		\$1,173.697		\$701.977

La fórmula para el cálculo del precio de los Insumos que se usó en la primera siembra es la siguiente:

$$PV = PC + I + CTC + CTL$$

PV = Precio de Venta; PC = Precio de Compra; I = Impuesto/Ventas;

CTC = Costo del Transporte al CEDE; CTL = Costo del Transporte a Localidad.

La fórmula para el cálculo del precio de los Insumos que se está aplicando a partir de la segunda siembra es la siguiente:

$$PV = \left[\left[(P.C. + I + CTC) 1.02 \right] + CTL \right] 1.05$$

1.02 = 2% para obsolescencia de Inventarios

1.05 = 5% de contribución a los gastos de manejo.

E. CREACION DE ORGANIZACION DE MERCADEO

OBJETIVOS

El objetivo primordial del sistema económico cooperativo, es brindar a sus miembros igualdad de oportunidades, eliminando el afán de lucro del intermediario y sustituyéndolo por el afán de servicios. Los objetivos económicos están acompañados de fines sociales y de mejoramiento del individuo como ser humano.

El esquema cooperativo que desarrollará INVIERNO, contempla la creación de cooperativas, a partir de 1977, para brindar a sus Socios, servicios de comercialización de los siguientes productos:

1. Granos básicos
2. Plátanos
3. Hortalizas
4. Miel de abeja
5. Frutas

Lo que se pretende lograr con esto es:

- La superación económica de sus Socios.
- Autodeterminación de sus Socios.
- Mejorar sistemas de comercialización existentes.
- Mantener un servicio constante y eficiente.
- Permitir a sus Socios participar en las gestiones de la organización.
- Facilitar la labor de capacitación.
- Facilitar la implementación de programas comunitarios.
- Facilitar la organización.
- Generar empleo.

METODOLOGIA:

Antes de que las cooperativas puedan iniciar sus operaciones, es necesario contar con las instalaciones y equipos. También, para asesorar a las cooperativas en comercialización, tratando de asegurarles el mejor precio; el sistema de información de precios deberá estar completamente diseñado y operando.

A fin de justificar la existencia y darle el complemento básico (humano) a las cooperativas que formará INVIERNO, se hace imprescindible la concurrencia y/o existencia de cierto número de cooperados, que en todo caso no deberá ser menor de 1.000 a 2.000 miembros por cada cooperativa formada por los Socios de cada dos centros.

La estrategia de incorporación de Socios es la siguiente:

- a) Detección de los futuros Socios cooperados.
- b) Presentación y explicación de los programas al Socio de INVIERNO.
- c) Formación de conciencia cooperativa a los futuros miembros.
- d) Decisión de los Socios para formar parte de las cooperativas.

Las funciones de la Cooperativa de Mercado son:

- a) Acopio de los productos
- b) Clasificación de los productos
- c) Empaque
- d) Comercialización y almacenamiento
- e) Publicidad

RESULTADOS ESPERADOS:

Durante 1976 se hará el estudio detallado de factibilidad para la creación de las Cooperativas. Asimismo se hará el estudio de mercado para hortalizas que incluirá aspectos de clasificación, limpieza, empaque, preservación y transporte. Se diseñará el sistema de información de precios de granos básicos.

En 1977 se tendrá funcionando la primera cooperativa. En 1978 iniciarán operaciones dos cooperativas más. En 1979 funcionarán dos cooperativas adicionales y se efectuarán los proyectos artesanales diseñados los años anteriores.

METAS ANUALES DE GRANOS A COMERCIALIZAR POR LAS COOPERATIVAS

<u>C o n c e p t o</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Total</u>
Organización Cooperativa por año	1.0	2.0	2.0	5
Miles de Socios Cooperados	2.0	4.0	4.0	10.0
Volumen de granos a Comercializar (miles de QQ.)	204.0	462.0	564.0	1230.0

Para alcanzar estas metas se ha estimado el siguiente presupuesto de capital para préstamos a las cooperativas para su establecimiento:

RECURSOS FRESCOS NECESARIOS

(Miles U.S. \$)

<u>Fuente</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Total</u>
AID	64.3	698.6	1298.3	1311.6	3.372.8
GOB	-	571.4	1241.7	1264.0	3.077.1
<u>GRAN TOTAL:</u>	<u>64.3</u>	<u>1270.0</u>	<u>2540.0</u>	<u>2575.6</u>	<u>6.449.9</u>

S T A T U S:

Ya se han preparado los criterios, procedimientos, políticas, etc., para organizaciones de mercadeo a partir de Enero de 1977. También se ha elaborado los criterios de la política de capitalización. Se espera que el proyecto pueda iniciarse de acuerdo a lo programado en el Plan General de Implementación.

Durante 1976 se comenzó a trabajar con una cooperativa de paperos, a los -- cuales se les brindó financiamiento. Para esta cooperativa se está en el proceso de legalización de ella. Actualmente cuenta con 50 socios y tiene un potencial - para 150. El primer financiamiento fué de producción y ahora es está financiando la comercialización que contempla la construcción de una bodega, asistencia técnica en mercadeo y la administración que será llevada a cabo por INVIERNO.

También se ha realizado ciertos estudios de factibilidad para cooperativas futuras.

VARIACIONES:

Al comparar los diferentes documentos relacionados como son el CAP, el Plan General de Implementación y el documento de Estrategia para la Creación de Cooperativas de Mercado, no se distinguen diferencias entre uno y otro. Es decir, el proyecto de Creación de Organización de Mercadeo no ha sido modificado absolutamente.

PROBLEMAS:

El único problema que se visualiza actualmente y que podría atrasar la iniciación del mencionado proyecto, es que no se ha podido obtener los servicios de un técnico capacitado en organizaciones. Después de varias entrevistas de trabajo, se llegó a la conclusión de que será necesario contratar a una persona y en - trenarlo debidamente, una vez que forma parte de la Institución.

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INVESTIGACION APLICADA

A.J. Gonzalez AID/Nicaragua
Octubre 1, 1976

I.- OBJETIVOS

- A. Realizar un estudio de prácticas agronómicas las cuales producirán recomendaciones las que serán puestas en práctica por las socios de INVIERNO al final del segundo año de operaciones.
- B. Producir una serie de preguntas tecnológicas mejoradas, las que serán diseminadas por los "Agentes del Cambio" (Agromocs) de INVIERNO de los socios de los diferentes Centros de Desarrollo .
- C. Orientar la investigación hacia el desarrollo de un sistema de producción que permita al socio de INVIERNO, laborar su tierra con mas eficiencia durante 12 meses del año si los factores de producción lo permiten, por medio del uso de una combinación agropecuaria, que sea la más adecuada para el productor.

Esta serie de preguntas tecnológicas esta dirigida a beneficiar al pequeño agricultor, ya que al aumentar sus rendimientos físicos de los cultivos obtendrá un mayor ingreso y, por ende, mejorará su nivel de vida.

II. METODOS

Se espera realizar este programa mediante un convenio firmado entre el Ministerio de Agricultura y Ganadería de Nicaragua (MAG) e INVIERNO el 31 de Mayo de 1976, válido por un año. El convenio contempla principalmente la elaboración por el MAG de los paquetes tecnológicos que serán usados por los socios de INVIERNO y un servicio de laboratorio consistente en el análisis de cienes de muestras de suelo para fertilidad, procedentes de los socios de INVIERNO. Este, presentará al MAG, una lista de aquellas líneas de investigaciones de su interés con sus respectivos derivados, y el MAG realizará el trabajo por el cual recibirá el valor correspondiente, de conformidad con los términos estable-

cidos en el Convenio. Para la primera siembra en Mayo pasado los socios de INVIERNO de la Región 5, que comprende las CEDES de San Ramón, Matiguas, Jinotega, Condega y La Trinidad, fueron repuestos en una serie de paquetes tecnológicos que se elaboraron con la aportación de varios estudios de trabajo de investigación que había previamente realizado el MAG. Como resultado de esta primera experiencia, se espera que se hagan ciertos reajustes en los paquetes tecnológicos recomendados para su aplicación en el futuro.

STATUS

- 1.- En Enero de 1976 INVIERNO elaborará para dar cumplimiento a la Condición Previa respectiva del Convenio de Préstamo, un Plan General de Implementación, el cual contenía un renglón sobre la Investigación Aplicada que el MAG se encargaría de llevar a cabo en el período 1976-79. Este plan contempla presupuesto, personal, equipo y líneas específicas de investigación.
- 2.- Como resultado de la firma del Convenio que sobre la realización de trabajos de investigaciones agrícolas se firmó entre el MAG e INVIERNO en Marzo de 1976, la Dirección de Planificación Sectorial Agropecuaria del MAG elaboró un "Plan de Investigación Agrícola para el Pequeño Productor" para el período 1976-79. El Plan se hizo en Julio 1976. Este plan describe el marco geográfico de la investigación a realizarse que incluye las características generales de la región, su los, vegetación y actividades agrícolas y ganaderas. El plan contempla las investigaciones siguientes:
 - a) Prueba de variedades, sistemas de producción y control de plagas y enfermedades de maíz, frijol, sorgo, tomates, repollo, cebolla y papas en San Ramón, La Trinidad, Jinotega y Matiguas de la Región V. (Interior Central).
 - b) Producción y certificación de semillas mejoradas.
 - c) Programa de análisis de suelos. El Plan también contiene su presupuesto, necesidades de personal, equipo, materiales, forma de preparar informes, etc.

- 3.- INVIERNO, en su programa de crédito para sus socios en sus Centros de Desarrollo, ha encargado al personal de asistencia técnica la implantación de una serie de parcelas demostrativas sobre granos básicos y hortalizas en su area de acción. Estas parcelas se hicieron aplicando las recomendaciones establecidas en los paquetes tecnológicos que INVIERNO preparó para sus socios.
- 4.- En Mayo de 1976, un grupo de 10 técnicos chinos se unieron al programa de INVIERNO, mediante un acuerdo que sobre asistencia técnica se ha establecido entre la República de China y Nicaragua. Dos técnicos chinos se han asignado a cada Centro de Desarrollo de INVIERNO y trabajan tanto en parcelas demostrativas de granos básicos como de hortalizas y frijol.

CONTRIBUCIONES AL PROGRAMA

Por un atraso involuntario del MAG en la preparación del Plan de Investigación Aplicada que le encomendó INVIERNO en su oportunidad, las parcelas experimentales, con su respectivo personal, equipo, materiales, etc., no se han iniciado en las diferentes localidades de INVIERNO. Por lo tanto, no se ha gastado suma de dinero alguna en esta actividad hasta la fecha. Se espera que el programa entre de lleno en 1977.

INVIERNO, haciendo uso de su personal de asistencia técnica, estableció para la siembra de primera en todos sus Cinco Centros de Desarrollo 73 parcelas demostrativas, divididas así: Maíz 50, Frijoles 22 y Hortalizas 1.

Resultados: Aquellas parcelas de frijoles que no fueron afectadas por la pasada sequía, promediaron un rendimiento de 16 quintales por manzana. Falta por medir las parcelas de maíz y hortalizas.

El rendimiento de frijol se considera bueno, tomando en cuenta el promedio nacional de 9 quintales.

VARIACIONES

En vista de que el Programa de Investigación Aplicada no se ha iniciado, este informe no está en posición de decir si existen variaciones con respecto al CAP, Plan de Implementación, etc.

que no sean, por ejemplo, la fecha de iniciación, que los citados documentos señalan para 1976.

Como se ha apuntado anteriormente, por un atrazo involuntario del MAG en la presentación del Plan de Investigación que estipula el Convenio que sobre la materia se había firmado en Febrero de 1976 entre las dos instituciones, el programa no pudo iniciarse en el año 1976. No obstante lo anterior, se cree que ello no tendrá ningún impacto de importación sobre los programas de INVIERNO, ya que cuenta con unos paquetes tecnológicos considerados como altamente recomendables y también por el hecho de estar INVIERNO en su primer año de operaciones.

PROBLEMAS

El hecho de no haberse iniciado las actividades sobre la investigación aplicada no representa problema de tipo administrativo o gerencial, ni tampoco se anticipa ningún detrimento o alteración en la planificación y programación de la producción de diferentes rubros agrícolas por INVIERNO.

El problema que se tiene en mente mencionar y comentar aquí es la alta incidencia de sequías que desde hace años viene afectando a un gran número de comunidades de por lo menos dos Centros de Desarrollo, Condega y La Trinidad. Es de todos conocido de que la parte noroccidental del país ha estado sufriendo con mucha frecuencia de sequías, las cuales causan la pérdida total de aquellas parcelas de granos básicos o pérdidas parciales (producción extremadamente baja). Paralelo a este problema, que es extremadamente serio, está el hecho de que la mayoría de los pequeños agricultores tienen parcelas donde la fertilidad del suelo y otras características de la tierra deja mucho que desear. Bajo esta doble desventaja es muy poco recomendable que INVIERNO trate de estimular a sus socios a que hagan uso de alta tecnología de producción en sus cultivos, si una sequía prolongada les puede causar grandes pérdidas

viéndose imposibilitados de poder pagar sus préstamos en el tiempo prescrito.

Se admite que algunas comunidades dentro de la comprensión geográfica de los Centros mencionados, gozan de mejor régimen de precipitación fluvial, lo suficiente por lo menos para producir una cosecha mediana. Pero estas comunidades son tan pocas que el costo por atenderlas para INVIERNO sería extremadamente alto, aún tratándose de grupos organizados.

De un total de parcelas demostrativas con granos básicos establecidos por INVIERNO en los Centros de Desarrollo en la Trinidad y Condega, para la siembra de primera, informes de campo revelan que parcelas se perdieron total o parcialmente.

A causa de la sequía el personal de campo de INVIERNO informa que un total de 2057 familias han sido afectadas por la sequía y han sido recomendadas para recibir alimentos por trabajo en La Trinidad. Mientras que en Condega se han identificado 1680 familias para los mismos fines.

RECOMENDACIONES

Asumiendo que cualquiera de las dos partes contratantes disponga de fondos, sería recomendable que se hicieran los preparativos pertinentes para de inmediato establecer en las localidades adecuadas de la Región V parcelas experimentales de frijol y hortalizas. Donde se dispone ya de riego, a costo razonable, también se recomienda establecer parcelas experimentales bajo el Programa de Investigación aplicada.

En vista de lo expuesto sobre los efectos de las prolongadas sequías en la mayor parte de las comunidades de La Trinidad y Condega, se recomienda que INVIERNO estudie la conveniencia de discontinuar prestando servicios sobre producción agrícola, bajo lluvia natural y se traslade a otra región hacia el este de dichos Centros, donde las condiciones de lluvia sean más propicias para inducir al pequeño productor, socio del Instituto, a adoptar prácticas modernas en la producción de granos básicos.

FONDO DE GARANTIA PARA COMPRA DE TIERRAS

OBJETIVOS:

En el Programa Agropecuario se ha contemplado como una actividad de alta prioridad el establecimiento del proyecto: "Fondo de Garantía para - Compra de Tierras".

El objetivo inmediato de este proyecto es proveer tierras a campesinos que se dedican a las actividades agropecuarias en tierras ajenas, lo cual les permitirá aumentar su producción y productividad y elevar en forma sostenida su nivel de vida. Esto se logrará mediante el apoyo de los otros Programas Integrales de INVIERNO.

Este proyecto se ha diseñado para beneficiar a aquellas personas, - socios de "Invierno" que tengan ingreso familiar por persona menor que el - ingreso promedio del país por persona.

METODOLOGIA

1. Financiamiento

Para llevar a cabo este proyecto se establecerá un fondo que servirá para avalar la deuda que contrae el socio con el vendedor de la tierra.

Se exigirá preferiblemente que los campesinos interesados, aporten de sus fondos por lo menos el 5% del valor de la tierra, el cual junto al préstamo de "Invierno" hasta por 15% del valor será entregado como prima al vendedor.

El préstamo al campesino para completar la suma se regirá por las normas establecidas en los contratos de Línea de Crédito.

El plazo total será calculado de manera que las cuotas más intereses no sean mayores de lo que podría ser un canon de arrendamiento razonable.

Se hipotecará a favor de "Invierno" la propiedad adquirida por el monto de la suma de los financiamientos directos más la suma de los documentos suscritos a favor del vendedor con sus correspondientes intereses y los intereses que se acumulen sobre los préstamos directos mencionados anteriormente.

Dentro de este proyecto se prevé la necesidad de efectuar préstamos para inversiones necesarias en la propiedad adquirida y que podrá incluir para la vivienda.

2. Metas

Las metas del proyecto hasta el año de 1982 se presentan a continuación:

M E T A S D E L P R O G R A M A

AÑO	FAMILIAS	AREA COMPRADA (Manzanas)	MONTO AVALADO (\$1,000.00)
1976	30	300	312.00
1977	100	1,000	1,040.00
1978	500	5,000	5,200.00
1979	1,000	10,000	10,400.00
1980	2,000	20,000	20,800.00
1981	2,000	20,000	20,800.00
1982	2,000	20,000	20,800.00
TOTAL	7,630	76,300	79,352.00

Fuente: Invierno

El valor por manzana utilizada es de \$1,300.00 (córdobas), el 80% del cual será avalado por el fondo. El 20% restante será pagado en efectivo al vendedor en calidad de prima, aportando 5% el comprador y financiándole Invierno el 15%.

La mora se ha estimado en un 10% anual, la cual sería reembolsada a los acreedores con dinero del Fondo de Garantía. También se estimó que cada año se recuperará un 50% de los saldos moratorios correspondientes al año anterior.

Bajo estas condiciones, el Fondo de Garantía permitiría adquirir tierras hasta por un monto equivalente a once veces su valor.

3. Procedimientos:

Para ser elegible, en la etapa inicial, el agricultor preferentemente tendrá que ser socio de Invierno, tener rendimientos superiores al promedio ó al standard del CEDE, poseer menos de 5 manzanas de tierra agrícola, no tener deudas pendientes por descuido ó incumplimiento voluntario.

A los agricultores elegibles se recolectará la información adicional necesaria para que el Departamento de Programación y Control haga el estudio de factibilidad. Este Departamento presentará sus recomendaciones basadas en el estudio de factibilidad.

Referente a la resolución de la solicitud, la compra de tierra a través del Fondo de Garantía por valores menores de \$100,000.00 tendrá que ser recomendada a la Gerencia General por un comité de estudio. Si la decisión del comité fuera unánime, el Gerente General podrá autorizar o vetar la resolución; si la recomendación no es unánime, se agregará la opinión del Vice-Gerente de Operaciones. En este último caso, el Gerente General someterá su recomendación al Consejo Directivo, donde se tomará la resolución final al respecto.

En el caso de operaciones de \$100,000.00, como también en todo caso que involucre la construcción de caminos públicos de acceso, la evaluación y recomendación del Comité, deberá llevarse a la atención del Consejo Directivo.

2. RESULTADOS ESPERADOS

Se ha previsto en el Plan General de Implementación, como primer paso, el establecimiento de políticas, criterios, procedimientos, etc., para la operación del proyecto, a partir de marzo de 1976. Anterior a esta fecha se deberá contar con el personal calificado para el diseño y ejecución del plan y contar con un sistema de operación para computadora.

Igualmente, se deberá tener la identificación de Socios y áreas de cobertura antes de marzo de 1976, como del presupuesto necesario.

(Miles de U.S.\$)

Rubro	1976	1977	1978	1979	T o t a l
AID	57.9	193.0	955.0	1932.0	3,137.9
GOB	57.9	193.0	955.0	1932.0	3,137.9
SOCIOS	11.7	39.0	190.0	386.0	626.7
TOTALES	127.5	425.0	2100.0	4250.0	6,902.5

Fuente: Invierno

Los resultados esperados en base a los insumos anteriores, serían la existencia de la estructura organizacional completa para la ejecución del proyecto a partir de marzo de 1976, que permita atender a 1630 familias con la compra-venta de 16.300 manzanas en los cuatro años en las regiones de cobertura:

M E T A S A N U A L E S

Concepto	1976	1977	1978	1979	T o t a l
Socios	30	100	500	1000	1,630
Manzana	300	1000	5000	10,000	16,300

Fuente: Invierno

S T A T U S

En enero de 1976 se presentó el Plan General de Implementación con la descripción inicial del proyecto. Esta descripción incluía objetivos, metas, procedimientos, propósitos, etc. Posteriormente, precisamente en mayo de 1976, se hizo el documento guía del proyecto. Este documento describe las normas y condiciones, metas, evaluación de la capacidad del fondo para avalar la compra de tierras y los procedimientos.

Aunque se había programado que este proyecto comenzaría a funcionar en 1976, la nueva fecha de inicio lo constituye enero de 1977. La principal causa de este atraso lo constituye la falta de presupuesto para hechar a andar este proyecto, - como la falta de los datos necesarios sobre los Socios anterior a la fecha propuesta.

Por tanto, de los resultados esperados para esta fecha solamente se cuenta el documento guía.

VARIACIONES

En cuanto al número de socios y manzanaje total a comprarse no se detectan diferencias entre uno y otro documento con relación a este proyecto. Sin embargo, al hablar del presupuesto estimado, existe una considerable disminución en el presentado en el documento guía de Mayo de 1976, al compararse con el -- Plan General de Implementación de Enero del mismo año. La causa principal de esto lo constituye el hecho de que en la fecha en que fué preparado el Plan General de Implementación, no se contaban con los elementos de juicio y criterios para que estas proyecciones fueran más veraces.

Según los ^{últimos} planes, le será posible a "Invierno" financiar el mismo número - de socios para comprar el mismo manzanaje con un presupuesto menor.

* Aquí hace falta comparar con el loan Agreement.

PROBLEMAS Y RECOMENDACIONES

En esta sección señalamos las debilidades y fallas del Plan. Asimismo, se aportan recomendaciones y sugerencias para cada caso. Para este análisis, la - información básica lo constituye el documento "Fondo de Garantía para Compra de Tierras".

En el inciso dos, "Sujetos de Financiamiento" el documento contempla, "... que el ingreso familiar por persona sea menor del ingreso promedio del país por persona". También, la "Estructura del Financiamiento" exige que los campesinos aporten de sus ahorros, por lo menos un 5% del valor de la propiedad, que junto a un 15% obtenido como préstamo de "Invierno", sea entregado como prima al vendedor. Las dos condiciones expuestas son bastantes conflictivas entre si. La falta de dinero para hacer el pago inicial puede ser el principal problema a - que se enfrenten los compradores. La tasa de ahorro de un sujeto con ingresos menores que el promedio nacional es de cero, con un considerable endeudamiento. Esta primera debilidad considerada, que el sujeto de financiamiento considerado en este proyecto, aporte 5% del valor de la propiedad y que sea de ingresos menores al promedio nacional, no le da una perspectiva muy halagadora. Esta combinación de condiciones sirven como freno en atraer participantes que se han - caracterizados siempre en ser orientados en producción, para autoconsumo y restringidos financieramente.

A este fin, se sugiere que para mantener como sujeto potencial de financiamiento a aquel de ingresos menores del promedio nacional, que "Invierno" le financie el total del valor de la prima al comprador, es decir, el 20% del valor de la propiedad.

Dentro de la misma Estructura de Financiamiento, se estipula que el vendedor obtendría del fondo de garantía un pagaré a la orden, u otro título de valor, el cual será avalado por Invierno: "El pago de la deuda del comprador a favor - del vendedor de la propiedad, se efectuará mediante abonos mensuales, semestrales o anuales, mediante el sistema de cuotas niveladas a la tasa de interés acordada entre las partes".

Se sabe que en lugares que presentan tasas altas de inflación, la tierra es una de las mejores formas de proteger el capital. Si las expectativas de inflación proyectan tasas altas, es improbable que un terrateniente esté dispuesto a vender su tierra, especialmente a plazo y financiados por él. Con esto en mente es improbable que quiera vender su tierra bajo las condiciones propuestas en el documento de "Fondo de Garantía para Comprar Tierras".

Para este problema había que inducir a los terratenientes a que ofrezcan sus tierras en el mercado. Esto se podría hacer con la imposición de un impuesto sobre tierras ociosas ó la creación de un instrumento financiero negociable, que podría ser utilizado en el mercado financiero por el vendedor. La tasa de descuento, debería ser flexible y debe depender de la tasa de interés en el mercado financiero. También habría que reglamentar para que este instrumento financiero pueda usarse como reserva legal por las instituciones privadas. En todo momento, la tasa de descuento debería servir como incentivo para que dueños de tierras rurales participen en el proyecto.

Se observan ciertas inflexibilidades en el programa, tales como: tamaño de la finca, selección de los solicitantes y en la metodología de la evaluación de la capacidad del fondo para avalar la compra de tierras.

En lo referente al tamaño de la finca, se ha estimado que 20 ó 50 manzanas sería el tamaño máximo de la parcela a comprarse, según la zona por los socios de Invierno. Factores tales como, fertilidad de la tierra, capacidad administrativa del productor, posibilidades futuras de compras adicionales de tierras, etc., necesitan incorporarse dentro de los criterios de tamaño de la finca.

En relación a la selección de solicitantes, se han mencionado condiciones necesarias. Entre otras, está la de tener rendimientos superiores al promedio. En "Normas y Condiciones" se contempla que el ingreso familiar por persona debería ser menos que el ingreso promedio del país por persona. Un productor que tiene en su historial rendimientos continuamente por encima del promedio nacional, debería tener también ingresos por encima de los promedios nacionales. Además, las condiciones expuestas en el documento no son necesariamente un indicio de los candidatos más apropiados para un programa de desarrollo. También son de primordial importancia la integridad personal, el interés expresado y las habilidades del solicitante.

Finalmente, referente a la capacidad del fondo, se ha estimado una mora en cuotas anuales de un 10% y que cada año se recuperaría un 50% de los saldos moratorios correspondientes al año anterior. Los estimados expuestos padecen de ser demasiados optimistas. Sería conveniente obtener valores correspondientes a experiencias de otros países con condiciones similares.

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MOTIVACION, ORGANIZACION Y CAPACITACION (M.O.C.)

OBJETIVOS:

El objetivo fundamental de este programa es el de promover cambios deseables en la conducta humana, a fin de incrementar la calidad de la vida, no sólo en términos de los aspectos productivos y de consumo de bienes y servicios, sino y principalmente de su participación en la toma de decisiones que afecten su vida misma.

El objetivo específico del área de motivación es la de estimular la aplicación de las capacidades individuales y de grupos a la solución de las necesidades fundamentales que experimentan las familias rurales. Del área de organización sería para lograr una estructura flexible de organización campesina que:

- Facilite la entrega de servicios a la población rural.
- De oportunidad a la población rural, para que programe su autodesarrollo.
- Apoyada por Invierno, genere acciones de producción, mercadeo y desarrollo comunal en beneficio de todos sus miembros.

Los objetivos del área de capacitación tienen que ver con promover el desarrollo de actitudes, habilidades y conocimientos de los participantes de los diferentes niveles; actualización tecnológica de los técnicos; y estimular el desarrollo de potencialidades de la población rural a fin de que los socios - puedan aprovechar mejor los recursos a su disposición.

También existen objetivos específicos del área de Educación del Hogar y de Divulgación.

Este programa se ha diseñado para beneficiar al pequeño productor, pero de una manera de que tome conciencia, tanto individual como colectiva, del rol que le corresponde realizar en el proceso de desarrollo.

METODOLOGIA

Durante los primeros cuatro años de labor se procederá a coordinar esfuerzos con los Ministerios de Obras Públicas, Salud Pública, Educación Pública y la Acción Cívica de la Guardia Nacional. Esta coordinación se efectúa, para asegurar que estos servicios lleguen a las familias campesinas y que sean de una forma integrada.

Las actividades específicas de cada área son:

a) Motivación:

Programar, orientar, supervisar y evaluar la motivación en labores de organización, establecimiento de proyectos, capacitación, eventos culturales, recreativos y sociales.

b) Organización:

Programar, orientar, supervisar y evaluar la organización de grupos, clubes, cooperativas, etc., en las localidades donde se desarrollan los programas de Invierno.

c) Capacitación:

Identificar, planear, montar y dirigir las actividades de capacitación; asistir al personal de oficinas regionales, CEDES y Localidades en la ejecución de sus programas de capacitación de personal y socios; preparar material escrito para mantener actualizada la preparación del personal de todos los niveles, etc.

d) Educación para el Hogar:

Orientar a los especialistas en educación para el hogar de las oficinas regionales y CEDES; preparar modelos, maquetas, diseños para las actividades relacionadas con nutrición, salud, mejoramiento de la vivienda, vestuario, etc.; redacción de manuales, instructivos, guías, etc., para las actividades de Educación del Hogar; desarrollo de campañas especiales para la superación campesina, etc.

El procedimiento a seguir en el desarrollo de estas actividades consiste primeramente en la programación a nivel de oficina central, regional, CEDES y Localidades. Seguidamente vienen las actividades y proyectos para cada nivel, la supervisión y la coordinación.

La coordinación puede ser interna ó externa. La interna es con técnicos de la Institución. La coordinación externa se realiza con otras instituciones gubernamentales que en alguna forma se relacionan con las labores de Invierno y con instituciones privadas que realizan trabajos de desarrollo y promoción rural.

e) Evaluación:

La evaluación se realiza teniendo como referencia la situación inicial y estará orientada a percibir los elementos positivos y limitantes que se deriven en su desarrollo.

f) Informes:

Los informes contendrán una sección estadística donde se presentarán resultados cuantificables, y en forma concreta un narrativo de las actividades realizadas. Estos informes se presentarán de acuerdo al nivel de donde proceden.

RESULTADOS ESPERADOS

En el Plan General de Implementación se describen los insumos necesarios para alcanzar las metas propuestas por año. Posteriormente se preparó el Plan de Implementación para el Programa M.O.C. Entre ambos documentos no existen divergencias, a excepción del insumo presupuesto estimado. La explicación a este hecho es que en el Plan General de Implementación para este proyecto específico no se consideraban los gastos fijos, sino aquellos referentes a materiales y otros gastos.

Se pensó que para poder ofrecer los servicios de una manera integral y más eficiente, fusionar este proyecto con el de Asistencia Técnica, para crear el Departamento de Producción Agropecuaria y Desarrollo Rural. Actualmente esta situación es la que está vigente.

Los resultados esperados consisten en:

CAPACITACION A SOCIOS
Nº DE REUNIONES POR AÑO

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Nº de Grupos	90	120	140	170
Nº de Socios	4563	8102	6971	6435
Nº Reuniones	351	273	264	231
Desarrollo		351	273	264
	<u>351</u>	<u>624</u>	<u>537</u>	<u>495</u>

NUMERO DE GRUPOS ORGANIZADOS

<u>Grupos</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Productores	90	120	140	170
Amas de casa	30	120	140	170
Desarrollo comunal	90	120	124	170
T O T A L :	210	360	404	510

PROYECTOS REALIZADOS

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
- Sistemas agua potable	5	5	5	5
- Area comunal manzanas	186	182	176	154
- Núcleos educativos	12	10	10	6
- Letrinas	150	1200	1200	3000

Fuente: Invierno

Otro resultado esperado era el de tener identificado las categorías de líderes dentro de la comunidad, para la fase inicial y para cada período posterior.

S T A T U S

Debido a la reorganización a que fué sujeto este programa, no existe un manual de procedimientos para comparar los resultados obtenidos con los propuestos.

Entre las actividades correspondientes al programa actual y que se iniciaron en los comienzos del Instituto, está la de Capacitación y Asistencia Técnica. La Capacitación a que se refiere aquí, es la misma que se menciona en el Programa de Desarrollo de la Institución. Habría que añadir a estos las capacitaciones efectuadas entre los socios.

Las demás componentes como son educación del hogar, organización, divulgación, etc., aunque se iniciaron con los demás proyectos no contaban con el personal de apoyo necesario en la oficina. Los encargados de las áreas de organización y educación del hogar fueron nombrados hace exactamente un mes. Por lo tanto, actualmente se está trabajando en la preparación de los respectivos manuales.

VARIACIONES

El Departamento de Producción Agropecuaria y Desarrollo Rural, no se encuentra en el CAP, Estructura Lógica o Plan de Implementación; sino como se dijo anteriormente, proviene de la unión del M.O.C. y Asistencia Técnica. Sin embargo, en cuanto a las proyecciones para cada año, para las áreas de Motivación, Organización, Capacitación, Educación para el Hogar y Divulgación, no ha habido variaciones entre Plan General de Implementación de Invierno y el Plan de Implementación del M.O.C.

Los resultados obtenidos a esta fecha se describen en el cuadro adjunto. Al comparar estas cifras con los estimados en el Plan de Implementación, se ve una gran diferencia, tanto en el número de reuniones como en el número de Asistentes. De 351 reuniones estimadas a realizarse se efectuaron 1337, contando solo cuatro meses del año para los cuales existe información. Lo expuesto también es válido para el número de asistentes.

En la actividad correspondiente a los grupos organizados, los resultados observados son inferiores a los esperados. Esto se explica por la falta del personal en la oficina central para este Programa.

Con referencia a los proyectos realizados, nuevamente los resultados observados son muy superiores. Entre los proyectos realizados se menciona el de mejoramiento de caminos. Este proyecto no se refiere al programa específico de construcción y mejoramiento de caminos de acceso, sino parte de las actividades correspondientes a la Motivación, Organización y Capacitación de la población rural.

REUNIONES DE CAPACITACION A SOCIOS

Y COLABORADORES VOLUNTARIOS

<u>Mes</u>	<u>No. de Reuniones</u>	<u>No. de Asistentes</u>	<u>Asistentes Por reunión</u>	<u>No. de Localidades</u>
Mayo	225	4510	25	20
Junio	419	8262	20	120
Julio	416	12.799	31	138
Agosto	277	10.697	39	65
TOTAL :	1337	36.268	27	363

GRUPOS ORGANIZADOS

<u>CEDE</u>	<u>Número de Grupos</u>	<u>Miembros</u>	<u>Miembros/Grupos</u>
01	25	899	36
02	8	43	5
03	4	113	28
04	36	1753	49
05	19	725	38
TOTAL :	92	3533	38

PROYECTOS REALIZADOS

<u>Proyectos</u>	<u>Cantidad al 30 de Septiembre 1976</u>
Sistemas Agua Potable	15
Núcleos Educativos	22
Letrinas	323
Mejoramiento de caminos	40

PROBLEMAS:

Debido a las reorganizaciones experimentadas por este Departamento, aún no se cuenta con la estructura necesaria y eficiente para que este proyecto - funciones a su cabalidad. Ciertas áreas, tales como la asistencia técnica y capacitación, están desarrollándose de una manera eficiente, mientras que las de motivación y organización son deficientes.

Actualmente se está trabajando en la preparación de diversos manuales - de procedimientos, y espera que con los nuevos nombramientos para las vacan - tes que existían, este Programa tenga otra fisonomía.

En el área de capacitación que se contempla en este programa, se refiere al mismo área de entrenamiento en el proyecto Desarrollo de la Institución, por lo menos en lo que a personal de la Institución se refiere. Sería prudente atribuir esta actividad a uno de los proyectos solamente, y cuando fuese - necesario en otro proyecto señalar el proyecto responsable de esta actividad.

RECOMENDACIONES:

Diseñar una estructura organizacional completa para todo el programa con las políticas, criterios y procedimientos para la ejecución del mismo.

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Programa de Mejoramiento y/o construcción de caminos de Acceso (Presentado el 26 de Julio de 1976).

Este programa tiene el objetivo de dotar a las comunidades rurales de caminos que permitan el acceso ^a núcleos poblacionales de mayor importancia en cualquier época del año.

Originalmente, el plan de implementación contemplaba la construcción y/o mejoramiento de 499 kms. desglosados en la siguiente forma:

79 kms. de caminos que actualmente son de vereda

133 kms. de caminos de estación seca

287 kms. de caminos de todo tiempo que se encuentran en mal estado.

Sin embargo, el número de kilómetros a mejorarse y/o a construirse realmente será de 430 kms. aproximadamente. Esta cifra es aún menor que la establecida en el CAP (486 kms.) ya que originalmente se habían obtenido los datos de costos en el Ministerio de Obras Públicas los cuales resultaron muy bajos en comparación con los reales. La nueva cifra es un estimado al que se llegó después de haber elaborado el Cuadro Resumen de los Gastos del Programa (Pag. 69 en el Plan de Implementación). INVIERNO tendrá a su cargo la coordinación y supervisión del Proyecto y el Ministerio de Obras Públicas será el responsable de la ejecución. Para lograr esto, ambas instituciones firmaron un convenio en Mayo de 1976 en el cual se definen y especifican las responsabilidades de cada una de las partes.

Recursos

AID aportará 1.3 millones de dólares de los fondos del préstamo 524-T-031 y la contrapartida del gobierno ascenderá a 1.0 millón de dólares dando un total de recursos de 2.3 millones de dólares.

Con la elaboración del plan de implementación se cumple con la condición 3.06 acápites b) y c) del Convenio de Préstamo. El acápite d) era el único pendiente pues establecía que GON asignaría US\$200,000 al presupuesto del Ministerio de Obras Públicas para respaldar el proyecto de Mejoramiento de Caminos. En el mes de Mayo, AID recibió una carta del Ministerio de Hacienda notificándole que el Ministerio de Obras Públicas tendría a su disposición \$1,000,000 para la implementación del Programa de construcción y/o Mejoramiento de Caminos de Acceso.

Metodología empleada para realizar el estudio:

1. Se inició un inventario de caminos en oficina con información del Ministerio de Obras Públicas, la Oficina Ejecutiva de Encuestas y Censos y la Unidad de análisis Sectorial sobre longitudes, tipos, etc. Luego, con esta información se elaboraron mapas los cuales fueron corregidos con base en las visitas de campo que se realizaron posteriormente.

Para estimar los costos totales del programa (mejoramiento y construcción) se aplicaron los estimados del Ministerio de Obras Públicas sin considerar ubicación geográfica de los caminos.

Sin embargo, en la realidad estas estimaciones de costos resultaron muy bajas por lo que se ha determinado reducir el número de kilómetros a mejorarse y/o construirse.

En relación con el plan, los costos establecidos en el CAP para la adquisición del equipo son menores en un 28%. Esto se debió a que el equipo que se consideró en el CAP no tenía capacidad para finalizar el proyecto en 4½ años que es la duración del programa. Esta modificación está en trámites de aprobación en AID.

2. Selección de caminos a mejorar y/o construir

Para realizar esto se tomó en cuenta la población beneficiada considerando un área de influencia de 5 kms. por camino (2.5 kms. a cada lado). Así también, se tomó en cuenta el costo de mejoramiento y el número de fincas.

A continuación se realizó el estudio económico basado en varias hipótesis que siguen una secuencia lógica.

Para estimar los ingresos y beneficios se consideró solamente el ahorro de los productores por reducción en las pérdidas de almacenamiento de granos básicos. No se consideró el ahorro en concepto de transporte personal.

Se estimó la tasa interna de retorno y se realizó un análisis de sensibilidad para tres variaciones específicas.

Se establecen los procedimientos de construcción, las metas físicas anuales y un análisis de cada uno de los costos.

La organización y contratación del personal será llevada a cabo por el Ministerio de Obras Públicas y la supervisión será ejercida por INVIERNO sobre aspectos administrativos, técnicos y avance físico de las obras y por último, aspectos contables.

Se establece que la labor de mantenimiento de los caminos construidos y/o mejorados será realizada por el Ministerio de Obras Públicas con parte del equipo adquirido en el programa. Los costos de mantenimiento serán asumidos por el Gobierno de Nicaragua.

Problemas enfrentados

Problemas de coordinación entre INVIERNO y MOP. Actualmente se han logrado superar parte de estos problemas. Problemas con los fondos destinados para la compra de equipo. INVIERNO ha solicitado una redistribución de los fondos del préstamo: una ampliación de fondos para la adquisición de equipo con su correspondiente reducción de fondos para operaciones. Actualmente INVIERNO y AID están en trámites de justificación del equipo solicitado.

Comparación con el Log Frame, el Convenio del Préstamo y el CAP

En términos generales, se puede decir que el plan de implementación concuerda con ^{los} ~~el~~ documentos excepto en los casos que se detallan a continuación:

1- El presupuesto de operación del programa por año presentado en el log frame varía en relación con el presentado en el plan de implementación. Sin embargo, estas variaciones son poco significativas. Lo mismo sucede en las necesidades de personal.

2- En lo que a número de kilómetros a construir y/o mejorar se refiere, en el Log Frame se establece que serán 350, el CAP dice que serán 486, el plan de implementación 499. Se espera que en la realidad sean alrededor de 450. Estas variaciones eran de esperarse ya que no se disponía de un dato real de costos.

3- Según el Log Frame, el tiempo de duración del programa será de 4 años ^{hacer en} y medio. *el plan se establece que será de 4 1/2 años*

4- Finalmente, el CAP establece que deberá realizarse un análisis del impacto del proyecto en el medio. Dicho análisis no fue efectuado debido a la limitación de la cuantificación de los beneficios indirectos.

Status del Programa

<u>Fecha</u>	<u>Ruta</u>	<u>Tema</u>
1976		
26 Julio	INVIERNO---->AID	Carta Adjuntando: a) Plan de Implementación b) Convénio INVIERNO-MOP c) Evidencia de la contrapartida de GON
25 de Agosto	AID---->INVIERNO	Carta de implementación No. 9 acusando recibo de documentos enviados 26 de Julio y aprobando el Plan pero no el equipo propuesto.
26 de Agosto	AID---->INVIERNO	Carta adjuntando memo sobre observaciones relacionadas con plan de implementación.
6 de Septiembre	INVIERNO---->AID	Carta adjuntando documentos para clarificar las dudas expresadas en el memo del 19 Agosto.
27 Septiembre	AID---->INVIERNO	Carta en referencia al documento titulado "Análisis para la Selección de equipo" enviado Sept 6. En ella se solicitan aclaraciones.

MUNICIPAL DEVELOPMENT PROGRAM

Objective

The integrated development strategy to be undertaken in Region II and V requires that selected municipalities expand their marketing and service infrastructure facilities. This pilot program will better mobilize the rural municipalities in Zones II and V to be more effective marketing and service centers by providing:

- 1) Financing to municipalities for rural marketing facilities, and public services designed to improve rural production and marketing and,
- 2) technical assistance and training to municipal administrators to improve the rural municipal governmental administrative services and organizational structure.

Projects eligible to receive financing from the project's revolving fund include rural marketing centers, slaughterhouses, supply centers, transportation terminals, handicraft centers, rural electrification, etc. Municipal improvements such as hospitals or street paving are also planned. Primary emphasis will be placed on facilities which support production and/or marketing and which are revenue producing. The anticipated increase in municipal revenues combined with improvements in municipal administration, will help to mobilize municipalities to become more effective development institutions.

Approach

A jointly administered program has been designed to assure the provision of both financing and administrative improvement. The Ministry of Government's newly-organized Departamento de Instrucción, Capacitación y Asesoría Municipal will be responsible for analyzing the administrative systems of participating municipios and designing a technical assistance and training program to improve problem areas related to inter alia: personnel management, tax collection, budget preparation, local tax utilization, etc. INVIERNO's Department for Municipal Development will 1) provide project promotion services, 2) review project applications submitted by interested municipios, 3) conduct feasibility studies and

4) present loan packages to INVIERNO's Consejo Directivo for final credit determination.

No sub-loans from the Municipal Development Revolving Fund will be financed without the interested Municipio agreeing to receive the Minist of Government's technical assistance and training. Those applications exceeding \$25,000 will just receive AID approval. Specialized technical assistance related to project implementation will be contracted under the sub loan and overall project supervision will be provided by INVIERNO. Sub-loan maximums are \$7,000 for feasibility studies and \$300,000 for projects. No detailed interest rate nor repayment schedule has been developed. Since 1976, as the Program undertook its initial organizational activities, no sub-lending activity was programmed.

INVIERNO intends to use this same model for the proposed Municipal Development Loan. They anticipate disbursements under that loan to begin around September 1977.

Status

Year 1976 was the start-up, preparatory phase necessary prior to initiation of full project activities. Some of the more important of these 1976 activities are summarized:

- March/April - Hiring of INVIERNO's Department Chief and professional staff of Industrial Engineer, Account and Administration Expert.
- May/August - Completion of detailed socio-economic diagnóstico of 44 municipios in Zones II and V to measure levels of population, education, land use, municipal services, business marketing activities, transportation, etc. Also, all aspects of municipal administration were studied.
- May/June - Presentation of CP 3.07 material to USAID. Based of above detailed diagnóstico needs, project-fund technical assistance and training plans to assist in project implementation were developed.
- August/September - Presentation of PRP material for proposed Municipal Development Loan.
- August - Organization of Ministry of Government's technical unit, begin contracting of ten man staff (all should be on base by Dec. 76), obtain office.
- September - Presentation of CP 3.08 credit regulation material. In addition, work initiated on project promotion material, operational directives, contract document, and instruction manuals.

Important pending activities are:

- October - Obtain AID authorization for amendment of loan agreement for advisory council. CP 3.07 and 3.08 approval. Begin project instruction and promotion field-level visits.
- November - INVIERNO contracts programmed TA for Ministry.
- January/Feb - Presentation of disbursement for first sub-project.

Inputs - Project Components

No sub-projects loan-funded activities were obligated as Implementation letter approving INVIERNO material not yet submitted. For two month period Mission has been awaiting AID/W authorization amendment. Assuming AID/W amendment received, the following is a project of future sub-project activities:

	<u>Estimated Budget</u>
1) Project Funding - First disbursement anticipated February 1977	\$600,000
2) Technical Assistance - Plan presented for 17 MM of TA to assist Ministry of Government. Long term candidate identified. ETA likely Nov/Dec.	160,000
3) Equipment. INVIERNO has purchased most of its equipment from GON resources. Ministry of Government will submit to INVIERNO their needs in November, so that purchase can be initiated.	20,000
4) Training - Plan submitted; its execution should begin in early 1977	120,000
	<hr/> \$900,000*

Variations

As a result of INVIERNO's detailed Municipal level diagnóstico, which served as the basis for presentation of CP documentation and program material for proposed Municipal Development loan, the following adjustments from loan project documentation have been made.

- 1) Originally, INVIERNO was to provide all training and technical assistance in municipal administration, tax administration, facility

* Above breakdown is illustrative.

management, budgeting, etc., to municipal employees. It has now been decided that a new Department within the Ministry of Government with its larger staff will undertake this important local institution-building and administrative improvement responsibility. An inter-agency agreement defining this supportive arrangement has been signed. In response to this transfer of responsibility, which will better address the municipal improvement aspect of the rural development program, the Ministry of Government will become the principal recipient of equipment and technical assistance previously programmed for INVIERNO.

2) Originally, the BNN was to be the banking and loan administrator of this Project. However, INVIERNO's charter provides it with banking attributes and the banking and credit handling experience of its management has permitted this responsibility to remain with INVIERNO. Further, the BNN has stated that they are not interested in participating in the project, because of financial and personnel problems.

3) Instead of the request in the loan authorization that a Municipal Development Executive Council be created, an advisory council which is better suited to GON administrative legal systems has been recommended. In late July, cable Managua 3457, provided AID/W with the detailed justification for this amendment.

Problems

No actual project implementation will begin until early 1977. During 1976, attention has been directed toward organization planning, and procedures and other preparation activities. However, possible trouble area is the timing of this project relative to the proposed Municipal Development Loan.

The INVIERNO Municipal Development Project was originally considered by USAID as a pilot project which could hopefully provide a base of operating experience which could be used to prepare expanded Municipal Development Loan. INVIERNO now seems optimistic that early 1977 authorization of a new loan will be granted, permitting disbursement by September 1977. If so, no specific pilot project phase is provided, so one experience leads directly to the other. As maximum subloan amounts are now \$300,000, the original "pilot" fund could be depleted by early 1977, and only limited experience would be available to guide the preparation of the

Municipal Development Loan.

Recommendations

INVIERNO must be advised of Mission policy regarding presentation of the proposed Municipal Development Loans, stressing the importance of the pilot phase of Loan 031 to the proposed loan. It is important that specific loan criteria or remunerative projects, credit regulations, and interest and amortization rates be established. Maximum limits on subloans during this initial phase should probably be reduced to extend the loan amount over a variety of project types. Close USAID project monitoring will be required to maximize the value of the initial operating expense.

SMALL RURAL ENTERPRISE DEVELOPMENT PROGRAM

Purpose

The Rural Small Enterprise Development Program is intended to address two basic purposes:

- 1) Promote increased employment opportunities for small farmers and rural non-agricultural labor; and
- 2) develop local sources for providing agricultural inputs and consumer items, and for processing local products and materials.

Credit, technical assistance and training are to be provided for the development of a) single unit home industry, b) small rural enterprise units employing around five laborers, and c) larger co-operative-based rural business enterprises. During the initial phase of the project, emphasis is on small unit loans resulting from socio/economic surveys within the project area. Typical projects that could be eligible for funding are small slaughter houses, processing of milk and its products, furniture manufacture, artesanía, clothing, carpentry etc.

Approach

INVIERNO will be responsible for project identification, promotion, development, credit approval, technical assistance and training, and for loan supervision. This project has not yet been completed. The following methodology description indicates the division of labor and responsibilities among INVIERNO technicians. Major project responsibilities at the CEDE level:

1. Rural Enterprise Technicians

Beginning in January 1977 a Rural Enterprise Technician will be appointed to all CEDEs. This professional business-administration graduate will supervise the Credomercs in their development work, carefully reviewing their completed application forms. He will work on feasibility studies, and provide supportive project related technical assistance and training to the loan recipients.

2. Credomarc

This technician, who is a high school graduate with at least three years of basic accounting experience is primarily responsible for selling inputs to farmers in the credit program and for assisting them in the marketing of their products. During less active periods of the agriculture year, he will undertake small industry project promotion in the INVIERNO communities and also within the town in which the CEDE is located. In addition, he provides assistance in completing project application forms, provides information on marketing, and other project supportive activities. The Agromoc and Technical Assistance Supervisor also provide appropriate technical inputs.

3. CEDE Gerente

He will review all credit applications and will make credit determinations for those applications under C\$24.000. Those loans surpassing, but not exceeding C\$50.000 are reviewed by him, and are reviewed by him, and if eligible and feasible, will be forwarded to the Jefe Regional for his action. Applications surpassing C\$50.000, are submitted to INVIERNO's Central Office. The factors determining credit worthiness of these projects require review of more variable technical conditions and situations than the ag credit project. Consequently, use of the computer to assist in credit decisions is not now contemplated. During the last year work has concentrated on preparatory activities including the hiring of the Department's Chief and economist, business administration, contracting and logistics and support personnel. Various manuals were prepared on cooperative development, marketing, costing data, credit regulations, as was a detailed field manual. Remaining activities to be completed prior to initiation of project activity are:

- October - USAID approval of CPs 3.09 and 3.10.
- November - Detailed case study training for Credomercs.
- December - Initiate project promotion and probably approve just credit.
- January - Hire and training Rural Enterprise Technicians. (Budgetary limitations do not permit hiring of these technicians during 1976).
- February - Contract long term technical consultants.

Variations

The only substantial variation from original project documentation refers to a statement in the Loan Authorization concerning the establishment and administration of the Credit Fund within the Banco Nacional de Nicaragua. Because of a service of charges within both the Bank and INVIERNO since loan authorization, the Mission has requested AID/W to consider an amendment to permit INVIERNO to administer all phases of the project, eliminating the role of the Banco Nacional. A possible reply from AID/W is expected soon.

PLAN NACIONAL DE VIVIENDA CAMPESINA (finalizado en Mayo de 1976)

Este plan nació como respuesta a lo enunciado por la Ley Creadora de INVIERNO en la que se establece que se otorgarán préstamos para la mejora o construcción de viviendas para sus sujetos de crédito. El Banco de la Vivienda e INVIERNO debían elaborar, a más tardar 6 meses después de puesta en vigor la Ley Creadora de INVIERNO (mayo 1975) un Plan Nacional de Viviendas Campesinas. El primer volumen de dicho plan fue finalizado en Noviembre de 1975 (6 meses después) y presenta un diagnóstico de la situación habitacional tanto a nivel nacional como a nivel rural. El segundo volumen fue finalizado en Mayo 1976 y contiene un resumen del volumen I así como el Plan Nacional de Vivienda Campesina.

OBJETIVOS DEL PLAN

1. Disminuir el grado de hacinamiento rural a un promedio de 3 personas por cuarto.
2. Mejoramiento de pisos, paredes y/o techos.
3. Dotar de servicios sanitarios a los beneficiarios.
4. Lograr el mejoramiento de las viviendas mediante el aporte de la mano de obra.
5. Diseñar planos, especificaciones, etc. que permitan a las familias el acceso al crédito de acuerdo a sus capacidades de pago.

6. Construir proyectos en serie que permitan reducir costos.
7. Proporcionar empleo a las familias rurales en la construcción.
8. Indirectamente, reducir el grado de morbilidad rural.

SUBPROGRAMAS

1. Construcciones nuevas
2. Mejoramiento de la calidad de los materiales de que actualmente están hechas las viviendas.
3. Construcción de letrinas.
4. Ampliación de las viviendas actuales.

Los diferentes subprogramas se llevarán a cabo de acuerdo a la zona y a las necesidades de cada comunidad.

METODOLOGIA

Se utilizaron los censos nacionales de 1950, 1963, y 1971 y se elaboró un diagnóstico de la situación de la vivienda. El análisis se hizo tanto a nivel nacional como a nivel regional (regiones II y V solamente). También con base en esta información se estimó la situación que se presentaría dentro de 20 años. (1995). Luego, se indica el grupo objetivo al que debe de encauzarse el plan para disminuir el grado de hacinamiento a un promedio de 3 personas por cuarto como se establece en uno de los objetivos.

También, se recomendaron sistemas constructivos considerando:

- a) El tipo actual de viviendas
- b) Precio de los materiales de construcción
- c) Grado de calificación de la mano de obra disponible en el área rural

RECURSOS

Originalmente, se pensaba en firmar un Convenio con el Banco de la Vivienda en el cual éste se comprometiera a llevar a cabo las obras de construcción, mejoramiento, y ampliación de las viviendas rurales, así como ayudar a realizar un programa de letrificación. Sin embargo, hasta la fecha no se ha llegado a ningún acuerdo y se está considerando la posibilidad de emprender el programa con fondos de INVIERNO.

Si se emprendiera con fondos propios de INVIERNO, no se lograrían todos los objetivos propuestos ya que se realizaría en menor escala. Por lo tanto, a medida que avance el programa tendrá que solicitarse financiamiento externo si es que ^{se} quiere finalizarlo. Se ha estimado que el costo total del plan a largo plazo será de alrededor de 228 millones de córdobas. (NOTA: El PRP que se elaboraría contempla financiamiento para este programa).

El programa se piensa empezar a mediados de 1978 y tendrá una duración de aproximadamente 20 años para llevarse a cabo a nivel nacional. Se piensa que en los primeros 5 años se logrará beneficiar

a las regiones II y V.

RESULTADOS ESPERADOS

En el corto plazo (3 años) se propone beneficiar a un total de 174.000 campesinos que poseen 28.826 viviendas.

En el largo plazo (20 años) se beneficiarán 661.600 campesinos que habitan 131.700 viviendas.

Cabe mencionar que en log. frame sólo se había planeado beneficiar a 5.400 socios que tendrían un impacto sobre 33.480 campesinos aproximadamente (6.2 miembros por familia).