

PD-AAZ-004

60233

SECOND ANNUAL REPORT

March, 1978 - March, 1979

Development Program Grant
AID/pha-G-1163

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Date: March 14, 1979

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PREFACE

The report which follows leads past an important milestone. Two years are gone; one year remains of the AID/IDEAS/DPG relationship. The question becomes ever more pressing...What next? How do we capitalize on the significant new assets which the DPG has helped build within IDEAS...assets of staff; completed training; contacts throughout Central America and the Caribbean; identified project opportunities; capability to design, implement and evaluate integrated rural development enterprises; special knowledge of the means of attracting private sector resources; close professional relationships with a wide variety of PVOs, consulting organizations and universities, in and outside of the United States.

There are no crystal clear answers to these questions. However, two facts affecting a response stand out, namely:

1. While in Mexico the IDEAS program of integrated rural development is 100% financed by private sector support; and, while this is the goal sought in other countries in which we are attempting to replicate the Mexican experience, there can be no doubt that attainment of this goal will be a gradual process, requiring a presence over at least three years in each place.

2. Reality and honesty dictate that for IDEAS to maintain the dynamic thrust of its work into countries other than Mexico, continued collaboration with and financial support from AID will remain a vital enabling force.

Naturally, IDEAS expects that any AID decision to continue to support, at whatever level consistent with available funds and current policies, will reflect a positive evaluation of performance under the terms of the current IDEAS/DPG. However, we are faced with a dilemma. On the one hand, AID should have in hand an evaluation of the IDEAS performance over the entire three year period of the grant. On the other hand, it is imperative to begin negotiations with AID, now, in order to ensure continuity after March 15, 1980.

There is no true escape from the horns of this dilemma. IDEAS must propose without delay. Indeed, the following report of Year 2 activities and progress attempts not only to provide AID with a means of evaluating contract performance in the past but, as well, the report attempts to provide a basis for immediate discussion of a "next phase" in the AID/IDEAS connection. However, to avoid being impaled and rendered helpless by the timing predicament, it was thought useful to supplement the basic, elemental description of Year 2 results with two additions:

First, a set of appendices, each part originally prepared for a different purpose and each containing some elements of historical perspective and operational detail overlapping with the others. In total, these appendices provide a reader with a comprehensive picture of what, precisely, is the rural development process which IDEAS has evolved and upon which the justification and support provided by the DPG was based.

Second, a brief review of the origin and evolution of the IDEAS program of rural development since its inception in 1963.

The appendices, more than anything else in this report, are intended to help those in AID who read the report but who are new to the IDEAS program. Since negotiations on the IDEAS/DPG began in late 1975, related AID personnel have changed rather continuously. Thus, it is understandable and inevitable that old memories dim and new images must be formed. Previous documentation becomes difficult to retrieve. In all, a situation is created unfair to all concerned as consideration is given to future relationships.

The brief historical review which follows in this preface is offered in the hope that by putting the three year life span of the DPG into the perspective of sixteen years of operating experience, it will be easier for AID to calculate its risk as it considers a proposal for future support a year before the IDEAS/DPG terminates. A proven record of past performance, predating the DPG by many years should, it would seem, be reassuring evidence minimizing the risk of commitments to an unknown future.

The origin and growth of the IDEAS program are of particular interest to AID because an enabling grant of \$250,000 by AID, in 1965, made field work possible. In turn, this pioneering field experimentation led to the IDEAS/CRAC/FORUSA model form of integrated rural development.

But going back a step earlier, a formal beginning can be traced to early 1963, two years before IDEAS was created. At that time, an opportunity was presented to Dr. Simon Williams (now Director of the IDEAS' Center for Agricultural and Rural Development and an Associate of IDEAS since its formation in 1965 by Mr. Brian Beun, current President) to undertake a worldwide study of the twin problems of world hunger and rural poverty. The sponsor was the International Minerals and Chemical Corporation (IMCC); the study went on for over two years.

The focus of the study was this: how might the private, profit-making, multinational, agribusiness corporations of the United States participate more vigorously, more directly and in a more innovative manner than in the past, in efforts to accelerate rural development...to accelerate the flow of knowledge into the rural areas of the underdeveloped countries...and, to do so in a manner which would increase food supplies, improve dietary conditions, stimulate economic growth and, in general, enhance the quality of life among tradition-bound, disadvantaged farmers?

By early 1965, the outlines of an answer had come into view and were reported in the Harvard Business Review that year (see Appendix A, attached). The operating structure which was built over the years, based on these outlines, is described in Appendices B and C.

However, all subsequent efforts to raise funds in the private sector of the United States, to support an effort to convert concepts to a field practice, failed. Negotiations with AID began and on October 1, 1965, \$250,000 was granted to the International Marketing

Institute, for two years; field work began in Mexico on November 1, 1965.*

What came of the risk taken by AID in 1965...a risk taken on far, far less tangible a basis than that which will be proposed to AID by IDEAS for the years 1980 and beyond? A gross measure of return may be found in the following tabulation of results.

1. By 1968, when the AID grant terminated, IDEAS obtained support funds from the National Council of Churches of Christ, U.S.A.; the Stern Family Fund and the Institute for Education and Social Development, which carried the field work until support was taken over by the Mexican private sector, in the form of Ingenieros Civiles Asociados, S.A. (the Grupo ICA).

2. By 1968, the first model rural development corporation, Fomentadora Rural, S.A. de C.V. (FORUSA), had been organized. While the equity paid in was small (\$5,200), the event was symbolic of success. The pioneering investors were: Bank of America, Massey-Ferguson, Anderson-Clayton, Ames-Tuina and several individuals. By 1979, equity had grown to over \$50,000; stockholders had increased four-fold; investment in profit-making enterprises exceeded \$100,000; participation had grown from one village to ten, from two farmers to over four hundred; farm practice was shifting from rain-grown dependency to irrigation; crop yields had increased five-fold; credit flowing to farmers from banks increased from zero to over fifteen million pesos per year; net income from the land increased tenfold; the federal government was using the FORUSA staff to train technical personnel; visitors from every public institution in Mexico and from many other countries are coming in increasing numbers to observe and study FORUSA as a model.

*At that time, Dr. Williams was an Associate Director of the International Marketing Institute, Cambridge, Massachusetts. In 1966, Dr. Williams became an Associate of the newly organized IDEAS. Upon the termination of the AID/International Marketing Institute grant at the end of 1967, the Mexican field program became a formal and integral part of IDEAS and has been so ever since.

3. By 1969, the essence of the FORUSA system of integrated rural development so captured the attention of the Bank of America that it served as the stimulus to organize what became the Latin American Agribusiness Development Corporation (LAAD). However limited the impact of LAAD has been during the intervening years, it represents the only private-sector development institution of its kind in the world. Dr. Williams was retained as a consultant to the Bank of America during 1969 and part of 1970, while interest and participation in LAAD was being promoted. At the same time, the Bank of America encouraged the growth and strengthening of FORUSA.

4. By 1970, IDEAS was able to persuade the Grupo ICA to take full responsibility for the first FORUSA and to organize a development company with national scope both to strengthen the original model and to foster process replication throughout Mexico. This new organization is called Coordinación Rural, A.C. It is 100% financed by the Grupo ICA. By October, 1979, the Grupo ICA will have made available over \$3,500,000 for operations and investment. Plans are being made to double this rate of support over the next decade, entirely from the Grupo ICA. Discussions are also under way which may lead to participation in CRAC by a selected group of other large Mexican-owned, private sector corporations. Given such group participation, support for CRAC and investment via a network of FORUSAs could increase tenfold over 1978-79 levels.

5. By 1972, the replication process in Mexico had begun. The first repeat failed, at a loss of roughly \$100,000, due largely to bad management and faulty management training; this project was a joint venture with a U.S.P.V.O., Farm Centers International, Inc., of California. The second project, a joint venture with still another U.S.P.V.O., Heifer Project International, succeeded in an economic sense but proved to be very complex in terms of management. After a three year effort, the original investment of roughly \$100,000 was recovered, at a profit, and the lessons learned incorporated. The third replication has succeeded and is flourishing; three villages, 125 farmers and approximately 2000 hectares of soybean and safflower

are involved, with an equity input by the Grupo ICA and two other large Mexican enterprises of \$36,000 and short and medium term financing in the order of \$450,000. The fourth attempt at replication again proved too difficult to manage with the limited capital made available by a group of fifteen young Mexican businessmen. However, in one sense this project was a success in that a bank which is 51% owned by the Government of Mexico was persuaded to take the project on. By the end of 1979, two new FORUSA entities will be established. Feasibility studies and financial promotion have been completed and corporate organization is in process.

Note to AID - *the IDEAS/CRAC/FORUSA system was never intended to "do it all." The program and the process of integrated, self-sustaining, investment oriented rural development which has been engendered were, from the outset, meant to be experimental and demonstrative. The goal has been and remains to lead both the private sector and the government to an appreciation of how both can collaborate and be mutually reinforcing, under certain conditions, in the search for means to accelerate rural development.*

In Mexico, IDEAS and the Grupo ICA are moving rapidly toward this goal. The Government of Mexico is expressing more and more interest in the FORUSA model and CRAC is now actively engaged, in cooperation particularly with the Banco Nacional de Crédito Rural, in seeking out joint venture opportunities. A joint venture with the Nacional Financiera and three corporate groups has already been approved. Studies are under way in an effort to define tax benefits which would encourage a sharp increase in private sector investment in rural areas. In the end, the idea is to absorb CRAC, in its present form, into a much larger rural development corporation which would be

*a joint venture of the private and public sectors,
with public policy support and private sector manage-
ment.*

6. By 1979, the staff of the CRAC/FORUSA network is completely Mexican, with IDEAS serving in an advisory and collaborative role. Nineteen professionals have been trained; by the end of 1979, this number will grow to at least 22. All IDEAS proposed extensions into other Latin American countries involve the use of this Mexican staff, both in the field and for training.

7. In 1977, IDEAS completed one cycle of interaction with AID and began another. The 1965 investment of \$250,000 surely must be said to have paid off handsomely, in Mexico. The time was right to capitalize further on this early investment by adding new capital, the DPG, which is permitting IDEAS to go beyond Mexico and encourage history to repeat itself. Payoff is already in sight. As described in the following report on the results of Year 2 of the IDEAS/DPG, a first replication is close at hand in the Dominican Republic and, at the invitation of the Governments of Guatemala and Costa Rica, proposals have been submitted for the establishment of the IDEAS/CRAC/FORUSA system of integrated rural development in each country.

In concluding this preface, IDEAS would like to express its appreciation for the entrepreneurial spirit which promoted AID to invest in an idea, in 1965, which has led to a successful rural development enterprise, the IDEAS' Center for Agricultural and Rural Development and its sister organization, Coordinación Rural, A.C. It is our belief that there is a substantial market for our product, "The FORUSA," and it is our hope that again AID will risk the capital needed to capture an important part of this market.

INTRODUCTION

This report will be divided into the following sections, in accordance with the second grant year implementation schedule, as described in the DPG/AID/IDEAS contract:

I. Institutional Development Performance Factors

A. Training in program design, evaluation and implementation for field staff.

B. Active utilization of pertinent experience and professional inputs of IDEAS' Associates, Trustees and Collaborating PVOs.

C. Cooperating arrangements with colleges and universities maintaining international development faculties...to broaden IDEAS' professional resource base.

II. Program Development Performance Factors

A. Extension of LDC program sites.

B. Collaboration with LDC agencies at program sites.

C. Linkages with national rural development planning sectors.

D. Planning for additional projects in Year 3.

E. LDC program site impact.

i. Laying the institutional base for country-wide replication

ii. Identification of resource base for replication

iii. Identification of funding sources for project development, long range.

SECTION I

Institutional Development Performance Factors

A. Training - Training in program design and implementation has been a continuous procedure and has taken place by means of regular conferences at the Fort Collins, Colorado, headquarters of the IDEAS Center for Agricultural and Rural Development and, by means of field analyses of potential projects in Mexico, Dominican Republic, Costa Rica and Guatemala. Not only does the training focus on existing and potential projects within the framework of the program of IDEAS but, as well, analytical attention has been given to other projects and programs, such as those of the Dominican Development Foundation, Plan Sierra of the Dominican Instituto Superior de Agricultura, Costa Rica Instituto de Tierras y Colonización, Costa Rica Programa Nacional del Desarrollo Rural Integral, Guatemala Instituto Nacional de Transformación Agrícola, among others.

The training in program design and implementation referred to above is essentially non-formal in character. In addition, during the past year a formal course in the management of rural enterprises was designed and tested in Mexico under the auspices and at the cost of Coordinación Rural, A.C. (CRAC), IDEAS' sister institution. IDEAS staff, particularly Dr. Simon Williams and Ing. Alberto Jaime G. (the latter now a consultant to IDEAS), participated in the evolution and evaluation of the course, which ran for five months, wherein instruction took place in Mexico City and in Guadalajara, on Friday nights and all day Saturday. Every member of the CRAC staff took the course. As a test of the potential of the course to become self-financing, the course was opened to outsiders, at a fee. Enough others took the course that income exceeded cost. More importantly, several federal institutions sent people to the course (the Central Bank of Mexico - from FIRA - Fideicomisos Instituidos en Relación a la Agricultura; and, the Ministry of Agrarian Reform), as did several private agribusiness corporations, exposing the IDEAS/CRAC concepts of integrated rural development in an ideal manner. The course content included

such basic and standard subjects as organizational structure, fiscal systems and control, marketing concepts, and human relations; as well as such special subjects as Agrarian Law and the implications of such law on the design and implementation of rural enterprise; organization of rural people; the unique character of small-scale rural businesses; the philosophy of integrated rural development; among others --which reflect the particular aspects of the management of change.

This course was so successful that plans are being advanced for IDEAS and CRAC to collaborate in the design and placement of a permanent training center which will concentrate on the development of top management talent for integrated rural development enterprises. The goal of the center will be to offer training to people from all over the world. No decision has been made as to components or location. It can be imagined, for example, that some cognitive inputs can best be tied to actual operating experience at the sites of IDEAS/CRAC projects in Mexico and elsewhere in Latin America. Indeed, projects directed by other, collaborating institutions may also be utilized for this purpose, eventually permitting field experience to occur in environments chosen to approximate most closely those from which the trainees come. On the other hand, it can be also be imagined that some intellectual inputs might best be obtained in the United States, at an institution like Colorado State University. These are issues to be dealt with in the year ahead.

As the experimental training course evolved for test, the question arose: how should candidates for future courses be selected? Asking the question led to a series of meetings in Fort Collins which included IDEAS staff, Lic. José Zaragoza, General Manager of CRAC, and two consultants: Mr. Jack Gill of Boulder, Colorado, training expert; and, Dr. Douglas Benton, Director of Special Programs, Colorado State University. Contact was made with the College of Business at Rensselaer Polytechnic Institute, Troy, New York where a pioneering study has been under way for some years concerning the early identification of managerial talent. While nothing definitive has yet come of all this, the absolute importance of selection procedures has been

identified and will be taken into account as the training center emerges. A summary of the thoughts which emerged from the discussions about selection may be found in Appendix C.

Note: The close interaction between IDEAS and CRAC is very important to the attainment of the goals of the DFG. For example, in the proposals which IDEAS has submitted, by invitation, to the Government of Costa Rica and the Government of Guatemala, covering the introduction of our system of integrated rural development, the use of trained CRAC staff, both as residents in these countries and, for the purposes of training in Mexico, is basic. More detail on these proposals is to be found later in this report. However, it is important to emphasize that while CRAC is an independent legal entity, financed outside IDEAS by the private sector of Mexico, CRAC sprang out of the work of IDEAS and, to all intents and purposes, the two organizations function as one and are guided by the same principles and personalities.

Finally, re training, it is to be noted that over the past year, again in Mexico with CRAC operations, since no other project sites had been fixed, an evaluation procedure has been under test and is proving to be most valuable. Essentially, the method is qualitative, with a means of providing an index number of achievement built in. Schematically, what is attempted is this:

1. Project management and staff together define goals covering a projection of six months.
2. At the start of each subsequent month, goals for the month are worked out between the project manager and the particular staff member responsible. The entire team is made aware of these goals and many contribute opinions, pro and con. Once the goals are set, a numerical weighting is given to each, in accordance with judgments as to importance and ease of achievement, as perceived by the entire team. All are involved since all are concerned; all are

knowledgeable of the entire thrust; and, all are affected by what happens.

3. At the end of each month, achievement is analyzed and against the original weighting of each goal there is placed a performance rating. The reasons for results are carefully analyzed. Everyone participates in the rating decisions. Overall and specific goal achievement is tabulated.

4. The procedure is repeated, each month, with goals kept constant or redefined based on experience. Weightings may also change.

5. The entire experience is then subject to two types of further analysis:

a. that between the project manager and individual members of the staff, as a part of personal training and development; and,

b. that between the project manager and the whole staff, as a part of a thrust toward general understanding; team morale; team motivation; and, the upward movement of people who operate at first in technical roles and, then, develop a capability to manage.

By way of illustration, a typical evaluation sheet looks like this, taken from the files of Fomentadora Rural de Jalisco, S.A., a CRAC operating company and representing the work of one agronomist in December, 1978, who has a supervisory role in three villages.

What this agronomist had to do in December, 1978, involved a set of fairly simple tasks. Were we to add, as is often the case, such activities as the collection of crop insurance; attraction of new members or interesting a new village; the transfer of ownership to the farmer organization of a business originally financed and operated by FORUSA; involving women in a project; among other interactions, the problem of setting up goals, weighting their importance and difficulty, evaluating performance and extracting the essences of the development process for training purposes becomes much more difficult...and, indeed, these difficulties are apparent and are the focus of on-going analysis and the refinement of the evaluation technique.

EVALUATION SHEET

(From the Files of Fomentadora Rural de Jalisco, S.A.)

<u>Objectives</u>	<u>Activities</u>	<u>Goal Weight</u>	<u>Performance Weight</u>
Provide proper and satisfactory technical assistance	Direct field supervision of harvesters in Santa Clara and Urena	4	4
	Program harvest with members in Ahuescuko; adjust prices and controls for harvest by machine or by hand	10	10
	Locate and analyze for members the markets and prices for sorghum and corn (as grain and in the ear)	5	5
	Ensure that members receive exact cash payment, without delay, once harvest is sold	10	10
	Ensure that crop credit collections and records are up-to-date as harvest proceeds and that bank repayments are on time	10	10
	Regular society meetings to discuss harvest operations; status of credit collections and bank repayment; preparations for credit applications for new crop year	7	7

etcetera

B. Active utilization of pertinent experience and professional inputs of IDEAS' Associates, Trustees and Collaborating PVOs - on pages 6 and 7 of the First Annual Report of the AID/IDEAS/DPG, a statement is included which relates to the integration of corporate experience into the IDEAS' rural development program. There is nothing new which can be added at this time.

With regard to collaboration with other PVOs and like institutions, IDEAS intends to do everything possible to maximize such relationships. For example, in the Dominican Republic, contact has been made with Technoserve, Inc. It is hoped to develop the first replication of the IDEAS' Mexican model with both capital and professional inputs from Technoserve. Our closest linkage in the Dominican Republic remains with the Instituto Superior de Agricultura (ISA). We hope to relate to ISA in three ways:

First, to utilize the ISA experiment station as a source of information about crop diversification and improved farm practices;

Second, to avail ourselves of expertise in the faculty; and,

Third, to offer the IDEAS project(s) as a field laboratory for students taking courses in rural development.

Too, in the Dominican Republic, IDEAS has engaged itself with the Instituto Dominicano de Tecnología Industrial (INDOTEC), which has done the technical feasibility study of the canning factory in Monción.

In Costa Rica, no formal collaborative arrangements have been consummated. Contact has been established with ACCION/AITEC because of the work they have been doing in the province of Guanacaste. There exists the possibility that should IDEAS be contracted for services by the Government of Costa Rica, the first and highest priority project would be in Guanacaste; in this case, we would seek for close collaboration with AITEC. In Costa Rica, we have also established a liaison with the Costa Rican Development Foundation and with CATIE

(the Centro Agronómico Tropical de Investigaciones y Enseñanza). The purpose of establishing contact at CATIE was twofold, namely: to open the doors to consultation on crop production and utilization matters which might have become relevant to IDEAS projects throughout Central America; and, to determine what special training courses might be available as supplements to IDEAS' own program. It is clear that CATIE can be a very valuable asset and that many forms of collaboration are possible.

In Guatemala, as well, no formal collaborative arrangements have been developed, although talks have begun with the Renny Foundation.

C. Cooperative arrangements with colleges and universities - Other than relationships already described between IDEAS and ISA in the Dominican Republic, no working agreements have evolved with institutions of higher learning in Latin America. In the United States, Dr. Williams has become an Affiliate Professor, Department of Economics, Colorado State University and, as well, is acting Chairman of the International Advisory Council of CSU. While neither of these associations pay for services, the arrangements have led to close and widespread contacts throughout the faculty. Since the CSU faculty has extensive overseas rural development experience, it is expected that at some time in the future, IDEAS will be able to draw upon this expertise. Too, since CSU is a member of the Consortium for International Development, the door is open to reach into the roster of overseas experts of C.I.D., which represents many of the land grant universities of the western states.

SECTION II

Program Development Performance Factors

A. Extension of LDS sites

1. Dominican Republic - Year 1 of the DPG saw entry into the Dominican Republic to explore a potential project site in the Sierra Region of north-central D.R., at a place called Monción. At the time of the First Annual Report, in March, 1978, the investigation had barely begun. As of March, 1979, this project is much further along. The feasibility study has been completed and a summary of this report is attached as Appendix D. Further, a market survey has been completed in the United States and arrangements made to sell the entire output of the Monción cannery. Market studies are continuing in Europe and in the Far East (with an emphasis on India, the largest producer and consumer of "guandul" in the world).

On the basis of the encouraging data obtained from both the feasibility and market studies, Mr. Eugene Miller of the IDEAS' staff is currently in the Dominican Republic attempting to complete the organization of an operating company and arrange for equity and loan financing. Several aspects of this project are worthy of special note:

a. Equity and working capital requirements are being sought within the private sector of the Dominican Republic, with special attention focussed on the Asociación para el Desarrollo (a well organized and powerful group of businessmen and professionals, with headquarters in Santiago de los Caballeros); the Corporación Dominicana de Inversiones, S.A., a high risk, rural development arm of the private Financiera Dominicana, S.A.; and, the private Banco Popular. Very close relationships have been developed with all three of these institutions; indeed, it was through the Santiago Asociación that IDEAS was led to the Monción/guandul opportunity. In addition, Technoserve has expressed interest in the possibility of either equity participation or providing a loan or both. Negotiations with Technoserve will proceed further once the level of investor participation in the Dominican Republic has been more closely ascertained.

b. The Central Bank continues to express great interest in providing a loan, by means of which up to 75% of the needed capital for land, buildings, equipment, supervision of plant erection and machinery installation and, working capital, could be financed under very favorable terms of interest burden and repayment schedule. Mr. Miller is working to resolve the two remaining problems attendant to completing negotiations with the Central Bank. The first, most easily taken care of problem, is to form the operating company, legally. This involves a commitment by a minimum number of investors and going through the required legal procedures. The second problem is somewhat more complex but this, too, is in the process of resolution. The Central Bank requires that the borrower, either the company being formed or an acceptable intermediary, guarantee 50% of the loan. Various alternatives are being explored.

c. The Banco Agrícola, the central agricultural credit institution of the federal government, continues to express its willingness to provide service in three aspects of project credit needs, namely: one, short term credit to finance the purchase of the crop at harvest time to ensure immediate cash returns to producers and a full inventory of raw material for the cannery; two, credit in the future, as the project introduces superior production practices for guandul and introduces new crops, e.g. certain fruits, which would diversify the income base of the farmers and diversify the product line of the cannery (as well as increasing the number of operating days per year); three, short and medium-term loans for plant construction and expansion.

d. Despite efforts to speed up the process, it proved impossible to complete the marketing and feasibility studies and go through the financial promotion in time to create an operating cannery which could buy and process the 1978 guandul crop. It is likely that the cannery cannot be erected and put into operation in time to handle the 1979 crop. A vitally important constraint (on the IDEAS work plan), operative over the past year and still in evidence, although to a lesser degree, in 1979, has been the change in government

leadership. For example, INDOTEC required almost six months more to complete the feasibility study than was originally projected...this despite constant guidance and prodding by IDEAS staff. The fact was that the study team was constantly called upon for "highest priority" responses to queries from the new government, with consequent delays (the latest one always being reported as the "last one") in completing the cannery study. More than this, as could be expected, the private sector entered into a period of "wait and see," to which IDEAS had to adapt.

e. During the past year, Mr. Miller developed very close and warm relations with the guandul producer associations around Monción. These associations represent all the small-scale, poor, traditional farmers who are the intended beneficiaries of the IDEAS project; they will supply the raw material for the cannery. The response of the leaders of these associations to the cannery project and all it implies for the future, has been totally favorable, enthusiastic and understanding of the reasons why it is taking so much time to develop from concept to implementation. However, in recognition of the need to maintain interest and support among the farmers by doing something concrete, Mr. Miller was able to negotiate the sale of the entire 1978 guandul harvest of the association members to an existing cannery which was having difficulty in contracting supplies. The price obtained was the highest ever received in the area. Sales were for cash. All intermediaries were eliminated. The activity, involving as it did solving the problems of transport, was precisely of the nature to help solidify the sense of organization and to strengthen the bond of confidence and trust between the associations and IDEAS. This activity will be repeated, if necessary, in 1979. Collaboration with this other cannery may also be used for the purposes of a marketing test in the United States and elsewhere, in 1979. Since the raw material being processed is the same as the Monción/IDEAS cannery will buy...and, if the quality of the canning process used by this "other" canner proves to be up to a high standard...it may be an excellent opportunity to introduce the Monción label to U.S., European and,

perhaps, Indian consumers, in anticipation of full production, in Monción, in 1980. The details of such a marketing plan remain to be worked out.

f. There are several additional but very important reasons for the experiment noted in (e) above, both in terms of a demonstration of how to optimize the return on the guandul harvest and a market test. IDEAS staff has given considerable thought to alternatives, should it prove impossible to finance the Monción cannery as quickly as we hope. Suppose it is not practical to begin the integrated rural development program in Monción with a manufacturing facility? Then what? One answer might well be to concentrate at the outset on the creation of a marketing enterprise which would utilize the canning facilities of existing plants in the Dominican Republic, while, at the same time, placing the Monción label on the product. Simultaneously, the marketing company (truly, the development enterprise in the model of Fomentadora Rural, S.A., as evolved in Mexico) might concentrate on increasing the yield of guandul among association members; on crop diversification in collaboration with the research staff of the Instituto Superior de Agricultura; and, on studies of other investment opportunities in the area, e.g. tree farms tied to the wood products traditions of the people of the Sierra. Given the impulse of success of these alternative activities, the cannery might then be more readily financed and the time pressure for its installation might be eliminated. Thus, even while IDEAS is currently devoting its full strength to the promotion of the cannery, it is keeping very much in mind the alternatives noted above and, as the months of March through May proceed, IDEAS will make a judgement about which way to go.

g. No matter which developmental route is followed, that is, via the cannery as step 1 or via a marketing organization as step 2, it is clear that the cash flows to be generated will be limited during the first several years. Of a consequence, restraints will exist on the speed with which the IDEAS total process of integrated rural development can be set into motion. There is nothing

inherently "bad" about this situation. However, if the action toward full utilization of the IDEAS/FORUSA system, taken from the Mexican model, can be accelerated, it would be all to the "good." Therefore, a draft proposal for an OPG was submitted to the AID Mission in the Dominican Republic in October, 1978. This proposal, which is attached as Appendix E, explains how acceleration can be achieved and why such an investment by AID is one logical means of maximizing its return on the IDEAS/DPG. Lack of funds, rather than a lack of expressed interest, was given as the reason for rejecting the proposal. However, during Mr. Miller's current stay in Santo Domingo, IDEAS plans to rework and reintroduce the OPG proposal, in the hope that it will be approved as new funds become available.

h. On pages 14 and 15 of the First Annual Report covering the IDEAS/DPG, reference was made to the role of Carnation International (CI). Matters have changed. As agreed, CI did participate in the study of U.S. markets. Too, CI provided a nutritional profile of guandul and did help in the location of sources of supply of machinery. However, the internal structure of the parent corporation, Carnation Company, prohibits the CI from taking the product of the Monción cannery and marketing the goods in the U.S. Marketing in the U.S. is the charge of a national sales division which, for policy reasons, cannot handle canned guandul; nor can CI market in the U.S. Therefore, first, other marketing arrangements have been made to deal with exports to the U.S.; and, second, market opportunities in Europe and India are being explored and should these be encouraging, IDEAS may again try to involve CI. This would be the case only if other organizations appeared to offer fewer benefits as marketing partners.

i. Finally, as regards the project in the Dominican Republic, it may be noted that a potential manager, a Dominican, has been identified. Too, sources of machinery have been located. With respect to machinery, contact has been made in Washington, D.C. with Tools for Freedom. However, since it is necessary to pay a service fee of 5% of the value of the machinery obtained in order to take

advantage of the intervention of Tools for Freedom, it is first necessary to form and finance the Dominican company which will own and operate the Monción cannery...when this has been accomplished it may prove desirable to work with Tools for Freedom in order to reduce the investment in machinery.

2. Costa Rica - In the course of the late months of 1978, contact was made with Sr. José Miguel Alfaro, Second Vice-President of Costa Rica and the senior government official charged with agricultural and rural development. His reaction to the philosophy and format of the IDEAS/CRAC system of integrated rural development was clear, prompt and positive. In his own words, "...let us not wait to persuade the private sector to take the initiative; we will go ahead with government participation and then attract private sector investors as partners." This led to an invitation to submit a very broad proposal for a variety of services which IDEAS might provide. Such a proposal was written and submitted in mid-January; following the submission, meetings were arranged in Costa Rica between Vice-President Alfaro and other government officials and Mr. Brian Beun, President of IDEAS, Dr. Simon Williams, Director of the IDEAS' Center for Agricultural and Rural Development and Mr. Joseph Recinos, IDEAS resident representative in Central America (actually headquartered in Guatemala City).

This proposal is attached as Appendix F. A copy of the proposal was given to the AID Mission in Costa Rica and was thoroughly discussed. The response of the Mission director and staff was most supportive.

What became clear during very detailed and frank discussions with Sr. Alfaro; Ing. Willy Gloria, Vice-Minister of

Agriculture; Lic. José María Quiroz, Economic Advisor to Congress; Lic. Adrian Hidalgo, Vice-President of the Corporación de Desarrollo, S.A. (CODESA); and, the entire executive staff of ITCO, the Instituto de Tierras y Colonización (except the President, who had not yet been appointed at the time of our meetings) was,

First, a keen desire to incorporate the IDEAS integrated rural development system and the network of IDEAS contacts throughout the world and,

Second, that Costa Rica was entering into a period of fiscal austerity that most likely would make it impossible to finance the entire proposal (all three phases) as submitted.

In turn, these talks led to the conclusion that if it were possible for Costa Rica to contract IDEAS' services, the most likely target would be to establish one or two working models of FORUSA and, then, build a larger national program around these successful demonstrations. Two specific projects, of current interest to Costa Rica and already partially studied by CODESA and ITCO, were called to our attention; two additional possibilities also came into view which were most intriguing; one of these, as noted below, could conceivably lead to a contract for IDEAS' services outside of the agencies of government named above. Very briefly, these four project opportunities in Costa Rica may be described as follows.

a. ITCO/CODESA/CASE PRESIDENCIAL

This project, which could involve collaboration with ACCION/AITEC, is to be located in the Province of Guanacaste and would involve the production of new supplies of fresh milk for marketing in the Province and the production of camembert cheese as a joint venture

with a French company which has agreed to supply the machinery, the technology and management training. Much of the technical and marketing feasibility studies have been completed. What the project lacks, in addition to financing, is a structure and a long range plan capable of attracting participation by a large number of small-scale, low productivity dairy farmers; capable of ensuring that the maximum economic and social benefits flow to the producers; or, capable of a dynamic thrust toward diversification, with attendant growth of new capital formation in the area. It is with respect to corporate structure, planning, training, formation and transfer of new capital to local ownership, and other aspects of integrated rural development that IDEAS might have a role to play.

b. CODESA/MINISTRY OF AGRICULTURE/COCA-COLA Inter-
americana

Costa Rica imports, largely from Panama, 100 percent of the orange juice it consumes, at a cost in foreign exchange of roughly U.S. \$5 million a year. It is the intent of the government to develop self-sufficiency in this regard. With aid from Coca-Cola Inter-americana (which administers all of the Central American sales area), it has been determined that while Costa Rica is not located for ideal commercial production of citrus, the "best" location is in the southwestern region, specifically in the township of Buenos Aires. Based upon this decision, a long range project has been outlined but not yet studied. The first stage, at government cost but with technical assistance from Coca Cola, would be to establish the orchard and resettle, from the surrounding area, the people needed. This would require a seven year developmental period. In Year 6, the processing plant would be built; labor would then be added to the resettlement operation; and Coca Cola would be training key factory personnel in Florida. Coca Cola has indicated its willingness to invest up to 10 to 15% of the equity in the juice plant; CODESA would either take up the balance or whatever would be necessary over and above investment made by interested private nationals.

The role which might be played by IDEAS would be to provide a FORUSA-like plan and organizational structure, to ensure that the resettlement scheme is designed and implemented in socially beneficial ways and, that the entire project is a true example of integrated rural development.

c. CATIE DAIRY MODULE

The livestock research team of CATIE (Centro Agronómico Tropical de Investigaciones y Enseñanza), at Turrialba, has developed and placed in operation as a demonstration, a simple, one-family dairy unit that appears very exciting as a nucleus investment anywhere in Central America. The unit includes an efficient, if modest, milking shed with facilities for watering and feeding, and a carefully planned three and one-half hectare grazing area, designed with improved grasses and a rotational grazing pattern to ensure sustained yield. No irrigation of the pasture is required; it is obvious that irrigation would improve and guarantee the productivity of the pasture. Investment in the enterprise, including a herd of eighteen cows, is roughly U.S. \$10,000. Payout rate at the Turrialba model, is in approximately three years.

The FORUSA model envisioned is one which would aggregate a number of these CATIE units under common management, with a diversification plan leading to pasteurization, milk products manufacturing, beef production from culls and fattened bull calves, and animal by-products such as dried blood, bone fertilizer, among others. No specific sites were identified...this search would be part of a feasibility study, should IDEAS become involved either in Costa or elsewhere in Central America.

d. PROYECTO ARENAL/INSTITUTO COSTARRICENSE de ELECTRICIDAD

Costa Rica is investing many millions in the construction of a large multipurpose dam in the northeastern section of the Province of Guanacaste, tied to the river system in the zone of Lago Arenal. When completed, the dam will serve to irrigate an extensive area, well in excess of one hundred thousand hectares. Water is currently being impounded.

Under the authority of the Instituto de Electricidad, a Comisión para el Desarrollo del Proyecto Arenal has been constituted, with Ing. Henry Solis Bolanos as Presidente. After spending a day with Ing. Solis, it was learned that:

a). the Comisión is in process of making a large number of technical feasibility studies covering both industrial and agricultural opportunities; and

b). that Ing. Solis feels that the IDEAS system of integrated rural development could supply the missing link in the planning and implementation process of the Comisión

It was left that Mr. Joseph Recinos, IDEAS' resident representative in Central America, would spend several days in the field with Ing. Solis and would attempt to define more precisely and concretely how IDEAS might provide a service to the Comisión, utilizing funds already allocated for project development. This follow-up will occur late in March or during April, 1979.

It is premature at the moment of this report to develop a full proposal for an OPG, to be submitted to the AID/CR Mission. However, the possibility of such a submission was discussed. Hopefully, the IDEAS position with the Government of Costa Rica will be defined with sufficient clarity of focus within the next several weeks to permit an OPG concept paper to be written and sent to the Mission. If approved in the sense of Mission interest, a full OPG proposal will be sent.

It is also premature to state just how IDEAS might relate to the recently announced federal program, El Programa del Desarrollo Integral. However, contact was established with Sr. Romilio Rodriguez, Director, and the way cleared for further discussion.

3. Guatemala - Based on discussions between Mr. Joseph Recinos of IDEAS, Ing. Luis Felipe Escobar, Presidente, Instituto Nacional de Transformación, and Lic. Francisco Lopez Urzua, Presidente, Banco de Desarrollo Agrícola, a proposal identical to that submitted to the Government of Costa Rica was presented to these gentlemen. Meetings were then held with them in Guatemala over the period of one

week. Present from IDEAS were Mr. Recinos, Mr. Brian Beun, President of IDEAS, and Dr. Simon Williams, Director of the Center for Agricultural and Rural Development.

As in Costa Rica, austerity budgeting again proved to be a serious constraint; and, as in Costa Rica, it was deemed advisable to seek out an opportunity to begin with a model project. While no specific projects could be suggested by either Ing. Escobar or Lic. Lopez, two program areas of highest priority concern to the Government of Guatemala were identified for study.

The first of these programs involves the development of what is called the "Transversal del Norte," an area of roughly one million hectares north of Guatemala City, partially bordering on the State of Chiapas, Mexico. This is a tropical zone, with extensive hardwood forests which curve northward through absolute wilderness to the border of the State of Campeche, Mexico. A new highway is rapidly being pushed east-west which will connect Puerto Barrios and the Pan-American Highway. Toward the west, a small number of farming cooperatives have been established with some success, although soil erosion, sharp decreases in productivity and some abandonment of land is already in evidence, indicating a total lack of understanding (and technical assistance) of the problem of managing the soils of farmland created by clearing tropical forests.

Under the guidance of Col. Fernando Castillo Ramirez, Coordinador de Cooperativas Nacionales, IDEAS' staff was flown into the Transversal del Norte, with stops at five cooperative farms and a flyover the entire zone, at low altitudes. Given complete public support, adequate financing and a great deal of autonomy in management, it was not hard to imagine a FORUSA model being built in the area. However, the "givens" are far from current reality and just how and where IDEAS might be able to serve Guatemala in this area, even if asked, remain totally unanswered questions. More on this is noted below in the discussion of the study of IICA (Instituto Internacional de Ciencias Agrícolas).

The second of the high priority programs relates to the future of the so-called "national farms." After World War I, a number of German immigrants established what became very successful, fairly large-scale farms, mostly but not exclusively in the area around Coban, several hundred kilometers north of Guatemala City. As a result of World War II and hostility toward Germans, all of these farms were expropriated by the Government. Some are operated as cooperatives; some are actually run by the Government, with hired labor, and provide a source of federal income, which we understand, flows largely to INTA. All of these farms have deteriorated seriously. Productivity has fallen off sharply. Some land has been abandoned. The cooperatives are centers of discontent and political instability. The pressing question is: what to do with this resource? IDEAS' staff has yet to visit the national farms but since they were at one time profitable units, complete with the necessary supportive infrastructure, the idea of establishing a model FORUSA among them was instantly appealing.

While discussing the Transversal del Norte and the national farm problem with various government officials, IDEAS learned that IICA had been commissioned to make an exhaustive study of both areas, to be completed in 1979. Contact was immediately made with Ing. Jaime Yosa, in charge of the study for IICA, in order to determine not only the nature and extent of the study but, as well, whether or not it would be possible to include Mr. Recinos as a member of the study team. From IDEAS' standpoint, this would be the ideal way to be of service and, at the same time, have the opportunity to study each problem area with care and to evolve recommendations as to where and why a model FORUSA might best be considered. Ing. Yosa was completely open to the suggestion. As this report is being written, Mr. Recinos is exploring the possibility with Ing. Escobar, Presidente, INTA, whose approval is the key to such collaboration.

The other route to activity in Guatemala which has been very tentatively explored is via collaboration with the Penny Foundation. Discussions were held with Ing. Hernan Quan, Gerente General and Ing. Adolfo Rios Sharp, on the Board of the Foundation and on the Board of Solidarios, the joint promotional venture of all the development foundations in the Caribbean and Central America. The notion of collaboration was appealing but more thought must be given to the identification of projects suitable for the introduction of a FORUSA model.

B. Collaboration with LDC Agencies at Program Sites

C. Linkages with National Rural Development Planning

Sectors

The details which refer to these performance factors (B and C) have been revealed in Section A, above, and so will not be repeated.

D. Planning for Additional Projects in Year 3

Beyond maturing relationships and setting up model projects in the Dominican Republic, Costa Rica and Guatemala, IDEAS has not fixed a goal of moving in to other countries. It will be recollected from the First Annual Report that several trips were made to Honduras. Results of this investment were not particularly encouraging but if time and budget permit, IDEAS may probe Honduras again. Some contact points have been identified in the Caribbean, but no visits have been made. In any event, in the interest of the most effective use of scarce resources, it is planned to pursue the opportunities which have been identified to their ultimate productivity before branching out further. Careful analysis of the time and cost necessarily invested in bringing projects along, as has been done in the D.R., Costa Rica and Guatemala...and, as is involved in developing and pursuing contacts in new countries...clearly reveals the need for prudent and patient management of the DPG, lest operations become too thinly spread over too wide a territory.

E. LDC Program Site Impact

Insofar as it is possible to do at this stage of project development, all that can be said on the subject of impact, identification of resource bases for replication and identification of funding sources for project development, long range, has been covered in Section A, above.

III. STAFF RESOURCES

Appendix G provides a brief description of IDEAS' by staff and primary, on-going consultants. Other consultants have been used on an intermittent basis.

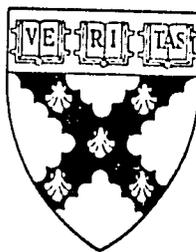
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- APPENDIX B - Publication - The Case of Coordinaci3n Rural, A.C.
- APPENDIX C - Conference Paper - Managing a Rural Development Enterprise--Query: How to Train for the Job
- APPENDIX D - Summary of the Results of the INDOTEC Feasibility Study of the Monci3n Guandul Cannery
- APPENDIX E - Operational Grant Proposal - Submitted to the U.S.A.I.D. Mission, Santo Domingo, Dominican Republic, October 16, 1978
- APPENDIX F - Proposal to Establish a National Program of Integrated Rural Development. Identical proposals submitted to the Governments of Costa Rica and Guatemala, January 15, 1979.
- APPENDIX G - Staff Resources

APPENDIX A

Private Investment in World Agriculture

By SIMON WILLIAMS

SIMON WILLIAMS is an independent consultant in the field of economic development. For the past year and a half, under the sponsorship of the International Minerals and Chemical Corporation, he has been studying the problem of world hunger and the dynamics of world agriculture.



REPRINTED FROM
HARVARD BUSINESS REVIEW
NOVEMBER-DECEMBER 1965

37

Harvard
Business
Review

NOVEMBER/DECEMBER 1965

VOL. 43, NO. 6



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Editorial, Business, Circulation Offices
Soldiers Field, Boston, Massachusetts 02163
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Annual index is published in the November-
December issue. Contents are indexed in
the *Business Periodicals Index* and *Bulletin*
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HARVARD BUSINESS REVIEW

November-December 1965, Vol. 43, No. 6
Published bimonthly by the Graduate School
of Business Administration, Harvard Uni-
versity. Printed in U.S.A.

Second-class postage paid at Boston, Mass.,
and at additional mailing offices.

Subscriptions \$10.00 a year in U.S.A. and
Canada; \$15.00 a year elsewhere.

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vard College.

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Private Investment in World Agriculture

— for the sake of worldwide economic and social stability, as well as a sound financial return.

By Simon Williams

During the next several decades the only large and continuing overseas outlet for the private investment capital piling up under U.S. management may be in agriculture in Latin America, Asia, and Africa — in farming; in processing and conserving basic crops; in distribution systems; in the multiplication of superior seeds; in the manufacture of fertilizer, pesticides, and implements; and elsewhere in the complex of enterprises required to produce and supply more and better food for the peoples of these areas.

Moreover, it is likely that unless there is a major movement of private foreign capital and management into agriculture and fishing in the overpopulated and underdeveloped countries of the world — and *soon* — all existing external investments and market franchises in these places, no matter of what type, will be threatened with extinction. Certainly no new private investments will be feasible or desirable.

Threat of Famine

The threat can be simply stated: *the world is faced with the likelihood of a massive famine, on a scale unimagined in the past.* In 1965, over half the people suffer from hunger or malnutrition; in some countries of greatest need, physio-

logical starvation is the daily outlook for as many as three fourths of the population. Disease, physical lethargy, a sense of hopelessness, and economic stagnation are the result. In turn, these debilitating conditions form a substratum supporting political restlessness, stimulating irrational behavior, and energizing an increasingly frantic search for alternatives. The passive response of ignorant, hungry people characteristic of the past is now rapidly giving way to a demand for something better as education and agitation reach deeper and deeper into their minds.

This is the case in 1965. What is the forecast for the years ahead? It is conservatively estimated that during the next 35 years world population will double and that nothing short of famine or war can alter this fact. Birth control — the ultimate, rational, regulatory mechanism balancing supply and demand — cannot hope to be effective on a universal scale before the early years of the twenty first century. Meanwhile, we must face such harsh facts as this one: During the past five years, despite the distribution of huge quantities of surplus food from the advanced countries and despite every other effort made by national and international agencies of financial and technical assistance, the gap between existing hunger and available food has widened, particularly in Latin America and Asia.

One may be appalled by the difficulty and urgency of learning how to feed 6 billion people by the end of the twentieth century when it is so obvious that we are doing a shockingly poor job of feeding 3 billion now. One need not preach doom to be insistent, even passionate, in stating that the persistence of hunger among half the people of the world — a half which in less than two decades will be larger than the current whole — will be intolerable to the human spirit; that violent political disorder will erupt; and that economic activity, within the United States and anywhere else, will be disrupted and threatened at every turn.

Admittedly, it is an oversimplification to put the blame for all of the trouble spots in the world on hunger and its twin, poverty. But for those who doubt or who would reject the fundamental importance of these malignancies to the torment plaguing country after country, a systematic field examination is in order. Forget books and articles and speeches. Go see! The evidence is incontrovertible; the prospect is frightening.

Investment Opportunity

The opportunity is less apparent. The idea of investing for profit in areas of hunger at first may seem macabre. Why is it so important and defensible? Three facts stand out:

(1) There is enough knowledge, and there are enough physical inputs (e.g., better seed, fertilizer, pesticides, power equipment, implements, storage and processing methods, and transportation techniques) to increase output from land and sea and to improve the means of conservation and distribution, *if applied*. Certainly there are shortages on site, particularly of fertilizers. Certainly more research is needed, particularly in adapting high-yielding varieties to local ecology. But on millions of acres of land and over large areas of water, now farmed and fished inefficiently, the know-how and critical materiel are at hand today to boost production sharply, fast, and profitably for all concerned.

(2) To bring about the application of know-how and physical inputs fast enough and on a large enough scale, an investment of billions of dollars must be made every year from now on. This investment must be made largely on the land and in partnership with millions of small farmers who dominate both agricultural activity and political thought in the hungry nations. And there is not enough money or skilled management in government institutions to handle all this investment. Much of the capital and direction must come from private investors.

(3) In dealing with millions of small farmers, the introduction of credit to finance new practices and to decrease the cost and risk attendant on change is as important in the use of investment capital as bringing in the know-how, the materiel, and the management. In years past, the idea of extending billions of dollars in credit to ignorant small farmers, few of whom were (or are) able to offer traditional collateral security, would alone have killed an investment program in world agriculture. Today the picture is changing. Experiences in many countries with directed and supervised credit are proving that small farmers will repay loans promptly and fully, and "that in the great majority of cases no other securities than trust and potential for increasing agricultural production and income (based on farm planning, supervision and follow-up) are required to ensure repayment of loans by small farmers."¹

Public vs. Private Funds

A more detailed analysis of the agricultural development process reveals that two distinctly different types of investment are required. First, there is investment in the economic infrastructure — the roads, dams, harbors, schools, security forces, legal institutions, research stations, communications networks, and other physical and institutional requirements prerequisite to establishing an environment in which production can flourish. Second, there are investments in actual production facilities — in farms and factories and related marketing organizations.

Investment in the infrastructure is a public function. No one seriously argues this point. Rarely are private capital and profit involved, except in some instances of contracts with private builders or in the generation and distribution of power or in communications. However, the reality facing every developing nation, no matter what its political predilections, is that there just is not enough money in the public till to satisfy the demands for infrastructure development. This being the case, what chance is there for ample public investment in production? Politicians might wish it otherwise, but the governments of underdeveloped countries cannot do the whole job for agriculture without giving up many of the symbols of power and prestige so dearly cherished. While this sacrifice can be argued as being thrifty and wise, it simply will not happen in the foreseeable future.

¹ An interesting summary of credit experiences in Brazil, Mexico, and India is presented in *New Approaches to Agricultural Credit*, FAO Agricultural Development Paper No. 77 (Rome, 1964).

In addition, it is being learned the hard way that it is costly and inefficient for governments to own and operate production facilities, whether collective farms or fertilizer plants. Again and again, lack of production incentives and lack of real purchasing power have combined with bureaucratic rigidity to yield minimum results, often with extravagant financial losses, high prices, and low quality.

This is not a politically directed exposition. *It is an observed fact that pressure now exists in all countries to find new means, consistent with social and political aspirations, to encourage the private sector to take greater responsibility for agricultural production.*

Foreign Capital — A Must

The question is: How can such investment be achieved? Any probe of the economics of the nations needing the most money reveals three additional facts:

(1) There is not enough private capital to affect agriculture significantly.

(2) Those who control what private capital there is generally are not interested in agriculture, even though they may have been or are landowners. In their eyes the risk is too high, politics too central, and the return too low in comparison, for example, to money put into real estate speculation or into the operation of protected industries.

(3) The private sector of most of these countries, where there is one, is traditionally not philosophically motivated to help the myriad of poor small farmers in a direct, partially altruistic way. So, with private capital required and little internally available, the resort must be to foreign capital and the management which comes along — and much more of both than is now being supplied.

This is not to say that private capital from international sources and even a sprinkling of local money are entirely absent in backing improvements in farming practice in underdeveloped countries. U.S. companies such as Anderson-Clayton and Company, California Packing Corporation, Campbell Soup Company, H. J. Heinz Company, International Milling Company, Dole Corporation, United Fruit Company, and Ralston-Purina Co., as well as a number of agricultural chemical, fertilizer, and farm machinery companies, have broken new ground around the world in encouraging increased production of superior quality. They have introduced modified plantation schemes, directed and supervised credit, technical services, and mar-

keting agreements, among other techniques. Individual entrepreneurs from the United States have done wonders here and there in bringing poultry and egg production up to commercial scale, as they have also done with specialty crops like shrimp, strawberries, and tree fruits. Indeed, it is from the history of such investments by American, English, and other West European businessmen that this article takes a large part of its inspiration.

But what has been done is not sufficient in magnitude or diversity. It does not go far enough in overcoming the limiting role of the small farmer or in supplying pressing local needs for basic foodstuffs like grain, oilseeds, fish and meat, eggs and milk, and others. (Note the difference between these foodstuffs and the so-called commercial crops. The latter — e.g., rubber, cocoa, tea, cotton, other fibers, citrus fruit, pineapple, sugar — have absorbed most foreign investment in the past and have usually been produced for shipment abroad or to the cities.)

During the next two decades foreign investments in agriculture must generate far more production for consumption where the hungry and depressed people live; it must catalyze far more capital formation in rural sectors among those presently impoverished and ignorant who are working tiny parcels of land; and, ultimately, it must be the stimulant encouraging the flow of local private capital into farming and related production facilities.

What all of this really means is that large amounts of private money from the United States *must* lead the way. It is only in the United States that private capital, skilled management, dedicated foreign policy, and personal conscience combine in the proper mixture and in sufficiently large quantity to give hope to the hungry world — and to ourselves. It would be comfortable if foreign aid via the government had done or could do the job. It has helped, but it cannot be the prime mover. It would be nice if more free enterprisers from Western Europe and from Japan or other centers of private wealth, advanced education, and technical know-how would carry a large share of the burden. But there is *no* evidence that they *will* take the initiative or share the risk attendant on the pioneering role.

Overcoming the Obstacles

There are two obstacles to private investment action in world agriculture:

(1) The use of U.S. capital and management, operating for profit and as free enterprise on the land, will be totally alien to the public commitment of leaders of most countries in Latin America, Asia, and Africa, where agrarian reform and social justice have been stated as goals achievable only through public institutions.

(2) Investment in farming in the hinterlands of remote countries, in partnership with large numbers of small farmers speaking another language, will be totally alien to the thinking and structure of most U.S. corporations.

It is a strange modern paradox that the needy nations must be sold a means of helping themselves even though it will not cost them a cent. Yet this is the way it is. Widely preached social ideologies, often embedded in newly enacted laws, are hard to change. Memories of colonial exploitation are recent and alive and a danger to politicians. The tactics of machine salesmen and promoters from East and West have not helped, for they have flooded these countries with a number of so-called development projects which have been very costly mistakes. Ignorance, pride, and arrogance go hand in hand with newly found power, diffusing the impact of intelligence, sincerity, and training.

It is a truism that to gain acceptance of any project involving outside technical and financial assistance, no matter how well motivated, requires a great deal of persuasion applied gracefully, skillfully, and persistently. A decision to invest in world agriculture will bring with it full responsibility for management to persuade the foreign government to allow the project to proceed and even to give it policy blessings from on top.

What is the selling point? How can U.S. capital and management be made acceptable partners in land-use reform? In my opinion, there is only one way: *in the hungry nations, every one of which regards itself in the midst of a truly revolutionary movement toward freedom and justice for all, profit and free enterprise must be made recognizable as revolutionary instruments with which national aspirations are achieved.*

It is one thing to say this. It is another to do it. After looking intensively at the state of agriculture throughout the world, I am convinced that if every project adheres to certain ground rules governing political and social as well as economic feasibility, private U.S. investment can be made acceptable to the government of

any country which is open to Western capital, no matter what its institutional and philosophical form.

Ground Rules

What are the ground rules for private investors? What purposes do they serve?

1. *Accept lower returns and higher risks.*

The decision to invest must be motivated primarily by the desire to increase food supplies and to stimulate rural economic development. Profit should be considered as the key unlocking the treasury rather than the superior goal -- as justification for the use of corporate funds but secondary to the technical and financial assistance provided. The importance of this policy, which at first glance may seem a semantic quibble, is that it permits an investment decision based on lower profit and higher risk than would otherwise be true. Further, this policy allows real value to be attached to gains in worldwide economic and social stability. In this sense, investment in agriculture becomes a down payment on an insurance policy that "business as usual" will proceed in the future.

2. *Withdraw in 20 years.*

Investments in agriculture must be thought of as short-term, e.g., 20 years, by which time the enterprise becomes wholly owned by the farmers involved in the changed practice. In 20 years, the original equity capital should be fully recovered (actually recovery should require a much shorter time), and a substantial profit earned per year in addition. In 20 years, there is time to deal with one generation of children and to help train a cadre of local talent quite capable of taking over. This takeover is fundamental to the revolutionary use of outside capital. It is basic to making the case believable and acceptable. The goal must be seen as building a peaceful, lively, and viable economy for the nationals; it is not to buy a permanent position from which to extract profit endlessly from the labor and land of the masses.

3. *Avoid land ownership.*

Projects must avoid land ownership and taking a position vis-à-vis patterns of land tenure. Rather, the effort must be to bring groups of small holdings into large, unified operations. That is, based on the crop, the market, the

topography, the nature of the new practice, and other related factors, a given number of farmers cultivating a given area must be organized into a corporate body whose ownership they share through stock purchase bought on credit and paid out of newly created surpluses. Each farmer remains in control of his land, as before; yet he yields sovereignty over his practice in return for credit, technical guidance, and increased income (both from extra yield and from corporation dividends).

4. Increase cash flow substantially.

The immediate improvements to be achieved by an investment must be great. They must support an increase in cash flow large enough to:

- Earn a net profit per year on equity in the order of 20%.
- Triple farmer income when the practice is in full force.
- Support a technical staff large enough for daily contact with every farmer during the crop season.
- Permit the creation of a capital fund which will have become large enough by the time the U.S. partners withdraw to provide a sound financial basis for future operations.
- Support a depreciation schedule ensuring repayment of investments in fixed assets by the time the U.S. investors withdraw.
- Support an educational program aimed at the children with the objective of creating the future management organization. Actually, *full* support of this ambitious program will not be feasible, but *enough* money should be spent on it to be significant and to attract the further support of other agencies interested in education.

Clearly, increases in cash flow even of 50% to 100% will not be enough. This is of no concern. There are millions of acres now producing one fourth to one twentieth of their known capability. There are plenty of places to begin where cash flow predictions would be adequate to meet the ground rules set up here and where the results would be important to the entire world. To illustrate:

• I have analyzed the feasibility of several farming projects scattered around the world from Central America to the Philippines. On one advanced project in Latin America, being developed as a model for presentation to the U.S. investment community, cash flow projections indicate that a new practice for growing corn, predicting a fourfold increase in yield, can bring about an increase in

farmers' income by a factor larger than three, yield a return of 23% on equity capital per year, and return equity investment in five years.

• Investments in horizontal diversification (e.g., adding other field and animal production to corn) and vertical integration (e.g., dry milling) promise the same net return to outside investors, and at the same time can increase farm family income as much as tenfold over the original base, even while generating off-farm employment and dropping consumer food prices. After studying the possibilities, I envisage an investment scheme featuring partnership with roughly 1,000 small farmers; equity capital may reach \$3 million to \$5 million in ten years; working capital, largely for credit and accounts receivable during the marketing season, would be of similar magnitude.

5. Eliminate the risk for farmers.

Management must be deliberately paternal with the farmers *at the outset*. It must take into account their ignorance, fear, and total lack of resources other than a little land and a little labor. The technical staff must substitute for ignorance. Action must come before understanding if speedy conversion to new procedures is to take place. Fear of change must be overcome by a direct appeal to the pocketbook. Initial participation by farmers must be guaranteed free of risk, which means that the U.S. investors must take all the risk until the new practice is launched and proven. Lack of resources must be overcome by extending the full range of credit required.

For many ardent free enterprisers, this demand for patient paternalism may seem a contradiction. But the facts dispel appearances. The poor and hungry rural families of this world are intent on survival. Change in practice has been eliminated from their cultural style because in time they have learned that what they do and the crops they grow come closer to guaranteeing life than anything else in their ken. They are in bondage to subsistence. And until the bonds are broken, there can be no freedom of choice conceivable, no entrepreneurship demonstrated, no idea of risk entertained, no time or motive to learn. Anyone who has observed the small farmers on all continents knows they are intelligent, thrifty, independent, and basically free enterprise oriented. They just need a moment in time free of sickness and uncertainty. Giving them this is another part of the revolutionary use of U.S. capital.

6. *Protect farmers against usury.*

One of the ingrained evils of agriculture in the underdeveloped countries is the system of money lending at excessively high rates of interest. This has helped keep farmers in perpetual debt. It has forced crop prices down and food prices up. It has deadened hope that surpluses mean a real gain in income.

During the years of partnership between small farmers and U.S. investors, this system must be fought by every means. One method is to make it legally impossible for farmers to sell or to use their shares of corporation stock as collateral for loans. Another means is a sustained adult education program which brings the beneficial results of corporate effort into focus.

7. *Keep the investment door open.*

Even while protecting farmers from the usurers, it is important to keep the door open to equity capital from *national* sources. It has been observed earlier that such capital will be limited in amount and reluctantly invested. However, the sooner some of this money can be encouraged to flow alongside that of the U.S. investor, the better. A deliberate attempt to induce even token investment by local management must be a part of the long-range policy of the pioneering American. Even very limited joint participation at the outset can be critically important in winning policy support from the government and, later on, be the means through which local private resources take increasing initiative.

8. *Make benefits proportionate to the yield.*

Investments in farming actually mean investments in marketing, and perhaps in manufacturing in due course of time, since the farmers still own or control their land. The farmers and the investor profit from the sale of surpluses and processed commodities. Shares in the corporation, therefore, must be based on the yield of each farmer, the truest measure of his contribution to total earnings. Since every investment will concentrate first on a new practice aimed at increasing yield without basic change in traditional use of labor, the first shares distributed on credit and paid for out of surplus must be distributed in direct proportion to what each farmer delivers for marketing.

In time, the first stages of mechanization will call for farmers to begin to share their labor. In such a case, the share of each farmer in the combined yield must be adjusted for his labor

input and an agreed-upon scale of value attached to different skills. Finally, when mechanization is completed, further shares must be distributed in proportion to the percentage of ownership accumulated by each farmer.

Understanding of this increasingly sophisticated sharing scheme will not come easily. In the early years there will be less of a problem, since farmers have always understood the balance between the surplus produced and income. Full advantage must be taken of the time so gained to build understanding of future cash flow distribution. This will be a real challenge to the investment field staff.

9. *Stay with existing demand.*

Private investors must deal first with foodstuffs for which there is a demand. Shifts in current patterns of crop production and food consumption are needed throughout the world. Some of the most exciting gains in land productivity have been achieved on research-and-demonstration farms with exotic crops. But introducing a new taste, getting acceptance for a different texture, odor, color, or method of cooking — even in the face of dire hunger and malnutrition — has been shown to be a costly, often baffling process among tradition-bound rural peoples on all continents. The need is greater to increase production of foods that will be readily consumed. First things must come first, even though the temptation to tackle the minds of men and the evils of malnutrition will often be great indeed.

10. *Go slow with mechanization.*

The first new practice or process developed by investment must be applicable *without significant displacement of labor*. If it is strategically possible to generate an early increase in human labor demand, as, for example, by extending the use of the land to more days per year (multiple cropping), so much the better in gaining acceptance. There is no question that to feed 6 billion people 35 years from now, capital in the form of better seed, fertilizer, pest control, and mechanical sources of power is going to replace manpower. It must. But population pressure is most onerous in rural areas. And officials working on national development plans everywhere insist it is possible to increase agricultural output even while increasing farm employment.

The issue is tricky and not subject to direct

negation. Until it can be proved that agricultural output can best be increased in the underdeveloped countries by replacing human labor, and that the extra wealth produced can be shared justly, the point will remain moot. Fortunately, spectacular initial increases in production are possible over large areas of the world by the use of inputs which do not require a basic change in the tools or the labor applied by the farmer. Investing in such practices, to begin with, provides the time for transition to mechanization — the time to create alternative uses of displaced labor and to promote ownership by the farmer of the machines which replace him, guaranteeing him income, if not work.

11. *Diversify, diversify!*

As noted, solving the problem of world hunger is not merely a matter of increasing yield. When capital becomes more important than people for maximum production of a given crop, the income of the people displaced must be protected. One way to achieve this is to use U.S. capital to put ownership in the hands of the laborers displaced. The rules of investment already urged for sale of stock and restriction of benefits to farmer stockholders are intended to bring about just such a "capitalist" revolution.

To complement such a revolution, investment in world agriculture must be aimed at diversifying the rural wealth-producing system, both to generate off-farm employment and to bring the rural sector more fully into the total economy as a hedge against inflation, price fluctuations, and general depression. There are few areas in the world where dependence on one crop, produced once a year, is absolutely necessary. Multiple cropping and horizontal diversification into other products are often a real possibility, if explored carefully, and evidence is available to guide the way. Also, it is apparent in many places that when the quality and quantity of raw material can be guaranteed, vertical integration with the manufacture of semiprocessed or fully processed foodstuffs is highly profitable.

The best proof of the feasibility of vertical diversification is the fact that during the past ten years investment in fruit and vegetable canning, in wet and dry milling grain, and in sugar refining, among other forms of food processing, has sharply increased on all continents. In many cases investment has involved foreign private capital. The usual plan is to enter into purchasing contracts with farmers who are helped by

the extension of technical services, and to grant credit often in the form of seed, fertilizer, and pest control chemicals rather than in cash).

12. *Use local technicians and trainees.*

One key to a successful agricultural investment in backward areas is the use of a native technical staff, speaking the same language and arising out of the same, or at least a closely related, culture as the farmers. This staff must be used at the outset to sell the idea of participation on a voluntary basis; thereafter, daily contact will be required to introduce and supervise new practices. U.S. personnel should be at a minimum both for practical and psychological reasons; when possible, only critical background control should be in the hands of Americans.

This twelfth rule may be the most difficult of all to follow. In some parts of the world, for example, in Africa, the rule may require considerable modification if the game is to be played at all. There is a serious shortage of trained agronomists, in quantity and in quality, throughout Latin America, Asia, and Africa. There is practically a total lack of farm management personnel. There is an absolute lack of local talent to administer complex agro-industry enterprises.

Still, the situation is far from hopeless, and much can be done to approximate or even match the demand for talent. Newly created agricultural colleges and technical institutes are springing up around the world. Overseas training also is being made available to larger numbers of students from underdeveloped countries. In some countries — for instance, Mexico, Colombia, Brazil, Chile, Pakistan, India, and the Philippines, among others — a modest but substantial reservoir of newly trained agronomists exists which is not being used most effectively. This, too, is a prospective resource.

In planning staff recruitment, shortages of native personnel can be relieved in these ways:

• Concentrate on the employment of new graduates, and invest in highly specialized crash training programs to develop skills closely related to the new practices being introduced. In a situation in Brazil, for example, one American company was intent on increasing cotton production among the multitude of small-scale suppliers to its gins. It hired 40 new college graduates in agronomy and put them on a farm to grow a crop of cotton, which was up to then a purely abstract exercise for all of them. By farming one season under supervision, these young men became reasonably expert, far

more so than the farmers they were to deal with. In the second season, 25 of the best men were at work in the field. In five years, cotton production was doubled over a wide area. Inexperience was largely overcome; salary incentives overcame initial reluctance to go into the field; and career opportunities outside of the government were opened up.

• Work closely with the research institution which supplies the data for appraising the investment risk. A new form of dynamic interaction between public research agencies and private investors is highly desirable. This can take the form of technical guidance of inexperienced staff; it can also substitute directly for lack of seniority and authority in the early stages of development.

• Provide the incentives needed to attract staff people. Such incentives are salaries competitive with industry; titles which carry the symbol of prestige; defined career opportunities which may include managing enterprises created through diversification; and in-service training opportunities, particularly those leading to management skills.

• Reach out beyond country borders into related cultures, where unique opportunities exist to do so. A classical demonstration of this possibility has resulted from the exodus of technical personnel from Cuba. Now scattered throughout Latin America, many Cubans are making vital contributions to education, research, public administration, industrial management, and agricultural growth. It is doubtful that all Cuban refugee talent has been effectively absorbed into the developmental process in Spanish-speaking countries.

When language and culture cannot be closely matched, careful study may reveal other means of using foreign personnel having a high level of acceptance. For instance, Israelis are warmly accepted in parts of Africa; Taiwanese have been effective in other parts of Asia; a Mexican wheat agronomist is being eagerly welcomed into Pakistan.

I do not mean to minimize the staffing problem. I do argue, however, that world shortages of trained manpower are no cause to freeze investment action in agriculture at present levels. There is plenty to be done with the human resources in hand; in the doing, a universal stimulant to more and better training will result.

13. *Yield the glory and take the blame.*

Profit, free enterprise, capitalism — these and other terms inevitably associated with a program of international private investment in agriculture originating in the United States will arouse passionate debate and touch many governments at their sensitive political hearts. It is a must,

therefore, that the first projects in each country emerge quietly. Moreover, even though it is necessary to get government approval, as a matter of policy, every effort must be made by the investor to keep political leaders from being identified publicly with sweeping agreements or promises, if that is their wish. When success is clear, then these leaders should be given the opportunity to "point with pride." Conversely, management must be prepared to take the brunt of any criticism.

Naturally, this neat division of reward and penalty is easier to promise than achieve, where there is a free press. However, when the investor expresses an understanding and willingness to do whatever is possible in dealing with subtle but real political problems, he will find it easier to win approval.

Education for Action

While the rules I have described arise logically out of the successes and failures in innumerable attempts to change agricultural practice, and while they reflect the content of hundreds of interviews with agricultural authorities in many countries, the first investments designed to incorporate all of these rules have yet to be made. It is likely that few such investments will be made until the barrier of the unknown is removed. How is the U.S. corporation to learn to accept the alien nature of investment in farming in far-off places with strange customs and language and in close relationship with ignorant, often primitive small landholders?

One might assume that experts in agriculture should take leadership here. Indeed, some experts, particularly those within the Food and Agricultural Organization of the United Nations, are trying. Unfortunately, the training and experience required to do the job are not adequate. This is not to say that among the fine talented people who know the promise and the needs of world agriculture one cannot find men who are eloquent and assured; men who can persuade the most reluctant and disbelieving that social customs, language barriers, and other alien characteristics in the final analysis find a common denominator in man himself; men who have learned that in trust and respect, in tears and laughter, in shared failure and success, one finds a way to relate closely with small farmers everywhere. However, these men lack a background in private enterprise.

Most specialists in the agriculture of underdeveloped countries, whether from the United States or not, come from government agencies and universities. They have had little reason to wrestle with the attractions of risk capital; they have rarely organized their data into economic and technical feasibility reports with cash flow projections, such as are prerequisite to a management decision to invest. The prospect of taking responsibility for investment promotion on an international scale is frankly baffling to these people. Whatever their growing awareness of the need for investment, the agriculturists of the world are a long way from being able to do anything about it. This is not a criticism. It is a fact, stemming from the historic position of agriculture as a public-sector problem.

If U.S. management is going to learn about world agriculture and if the necessary facts are to be put at its disposal, self-help is demanded. Many ways can be imagined to facilitate this educational process. Four stand out as having universal applicability. In combination their preinvestment cost would be low.

Better Focused Discussion

The population explosion and world hunger are being discussed more widely, by more top managers, than ever before. However, much of what is talked about is too general; too many projects put to management for support call for charity, not entrepreneurship. The problems are being more elegantly described each passing year, but little attention is focused on the real possibilities for action, in specific terms, consistent with management's primary task of earning a profit.

It is time, therefore, for management to introduce new content into the discourse. Country by country, the particulars of agricultural research and development need to be brought into focus. It is certain that, given a hearing, authorities on every aspect of the food problem of each nation will come to management and abstract out of their lifetimes of study and work the essence of what is meaningful to agricultural development. But it will remain up to management, most of the time, to put the pieces together into a picture of investment potential.

U.S. management is in a magnificent position to learn fast — faster than any other segment of our society. Already corporations are spending millions of dollars and countless precious man-days each year attending and sponsoring

meetings. It has been clearly demonstrated that the prestige of our major companies combined with their willingness and ability to cover costs can command an audience with leaders from anywhere. This is a unique privilege vested in management; it calls for a thoughtful response. I suggest that in the exercise of this privilege, highest priority be given to the means of moving private investment into farming enterprises throughout the underdeveloped parts of the world.

Initiative in Research

Corporations with international divisions and overseas operations have a special opportunity both to learn and to help build a communications bridge between U.S. investors and agriculturalists. By seizing the initiative in making contact with research centers, two things can be accomplished. For one thing, access is gained to what is known, and this knowledge can be interpreted and fed back in light of the current economic and political situation. Food, fertilizer, and agricultural chemicals and implements companies do this now and can testify to the advantages gained. A less obvious but vitally significant result of going to the research centers is the contribution which can be made in guiding the reorganization of existing data into a form usable by a potential investor. This guidance, if patiently and persistently applied, can have important long-range effects. It can:

- Accelerate the output of good investment prospectuses.
- Call the attention of directors of research to investment aspects of a research program.
- Call the attention of scientists to the critical gaps in the data that must be closed before investors can be interested in a particular new practice.
- Contribute to the training of specialists in the preparation of feasibility reports.

Investment Promotion

Another way to influence agricultural research institutions around the world to formalize investment promotion, and so put useful data into the hands of management, is to deal with them indirectly.

Technical and financial assistance to these institutions, originating in the United States, is all-pervasive. The U.S. government, directly through the Agency for International Development and indirectly through large-scale support

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given to the World Bank, to the Inter-American Development Bank, and to the United Nations; almost every land grant university in the country (with and without sponsorship by the government); and the foundations, such as Ford and Rockefeller -- these, among others, have been pouring a constant flow of men, know-how, and money into the design, construction, organization, operation, and staff training of research and educational systems throughout Latin America, Asia, and Africa.

The moment is right to push for a better job of investment promotion. To push effectively, the first and continuing need is for liaison between the minds of leaders in the private sector and leaders of our technical and financial assistance programs. When these two groups have interchanges of ideas and information, management must do more teaching, less learning. The needs of a private investor in agriculture prior to making a decision have to be spelled out in detail. The kinds of skills important to competence in feasibility analysis must be categorized. The help that can be extended by management in training personnel and in assembling data (e.g., its ability to release staff men for short-term assignments to research and educational institutions overseas) will have to be made clear, or there will be no tangible way to begin to implement the plea for change. Above all, the serious intent of management to take a hand in efforts to improve world agriculture must be stated unequivocally.

More Contacts & Interaction

If all the lines of action described in this article are pursued, the next decade will see a stream of good, solid, professionally prepared investment project proposals in agriculture flowing out of every continent to the United States. While some proposals will move directly to management as a result of interrelationships between individuals, far more will need an organized channel to facilitate prompt presentation and follow-up. This is the lesson learned from the recent history of technical assistance in the field of industrial development. It is safe to say that during the past 20 years, thousands of feasibility studies have been completed in the underdeveloped countries by U.S. technicians. In the non-agricultural field, these countries have been studied to death.

Yet what has happened is that the majority of reports have gathered dust rather than invest-

ment. They remain in the offices of government agencies. Few people know what to do with them; the few that do rarely have the money to pursue a systematic program of investment promotion. This situation must be avoided in agricultural development. The world cannot afford such extravagance.

A forum is needed where investor and promoter can meet, each seeking the other out eagerly and with warmth, making the finding easy and graceful. It is doubtful that the proper forum is to be found in the thousand and one board rooms scattered over the United States, although final action will take place there. If board rooms were the forum, each presentation would have to be made so many times that the selling cost would be prohibitive; also, for the promoter, telling the tale too often can deaden enthusiasm. It is also doubtful that any existing organization of American business interests provides a suitable forum. The purposes of present organizations are already self-engrossing, and none is concerned with the search for overseas investment, let alone investment in agriculture in underdeveloped countries.

I suggest that a wholly new organization is needed, solely concerned with the promotion of private investment from the United States in world agriculture. The ideal structure for such an activity still needs a lot of design work, but one concept is emerging. The reasoning underlying this concept is as follows:

Since investment in farming overseas will be new to most U.S. companies, the need is for a separate investment corporation, the shares of which would be owned by companies wishing to participate in the development of world agriculture along lines suggested in this article. Establishment of this organization would free the primary investor from administrative responsibility.

The investment corporation would be the instrument both to bring the opportunity into view and to follow up with investment itself. It would serve to pre-screen proposals. When a proposal seemed worthwhile, it would bring together stockholders for a hearing. Depending on the type of project, selected stockholders or all stockholders could be invited to a presentation. The investment corporation, in following up, could use paid-in capital or could turn to its membership for additional funds; also, it could turn to particular members for know-how, management assistance, or other resources.

Such a holding company representing the intent as well as the resources of the U.S. private sector to accelerate agricultural development would be the

ideal forum for investment promotion, especially during the early years of an investment program. Enough working capital should be made available at the outset so that experts with prepared proposals could be brought as guests to the United States.

Conclusion

It is often argued that agriculture in the hungry depressed countries will never develop as fast as is necessary until their leaders commit themselves to expanding it. Without this commitment, it is true, the allocation of strategic resources, already meagre, tends to spread out in so many directions that little progress is made toward any important goal.

Despite the fact that agriculture is usually the largest producer of wealth and engages the majority of people in Latin America, Asia, and Africa, it has proved hard to get strong commitments from national leaders. Rural problems are big, complex, and seemingly intransigent; rural people are the easiest to disregard, despite vehement protestations to the contrary and despite a torrent of corrective laws that are elegant in theory and almost impossible to implement. In the first flush of national planning, industrialization seemed a quicker, more manageable route to riches, full employment, self-determination, and international prestige.

Not until lately have the limits and dangers of an all-out thrust to industrialize at any cost, in the face of sharply limited markets and widespread inexperience, become generally recognized. The validity of arguments which give agricultural development the highest priority in national planning is beginning to take hold among political leaders around the world. Recent national plans are giving agriculture a greater share of both public funds and the anticipated input of private capital. In terms of commitments by politicians, therefore, there is more reason to be hopeful for agriculture than in many a year.

But political commitment to improve agriculture will be meaningful only if the means of doing the job are available. Internally generated

resources are going to be inadequate for a long time to come. International public sources of funds are also going to be inadequate; debt-servicing alone is already becoming a back-breaking burden among the depressed nations, despite very low interest rates. Public funds from all sources will be inadequate not just in quantity but also in quality; that is, they will not supply the experience, the motivation, or the competence that can put capital to work to make more wealth.

This means one thing: A commitment to help must come from those who control the great private capital resources of the world. It must come from those who have the money, the patented and secret know-how, the productive capacity, the technical talent, and the management skills. Unless these people and companies commit themselves and follow up with action, one of two events seems inevitable: either mankind will fail in its efforts to feed itself and chaos will result in the scramble for survival; or privately held resources will be expropriated, legally or otherwise, as a stopgap measure hiding public bankruptcy.

As I have tried to show, a commitment by private investors to devote part of their resources to world agriculture is really far easier to make and act on than might at first seem. It can be done entirely within the context of profit and free enterprise. It can be done by reducing the vast whole to manageable parts. It can be done in steps which lead logically to expansion. It can be done in the context of any political and social system. The elements which are strange and forbidding can become familiar and homely, if not by direct contact, then by seeing them through the eyes of men who can be understood and trusted.

Investing in world agriculture is the greatest, most implacable, and probably the most exciting challenge ever issued to U.S. management. Meeting it will result in the most magnificent demonstration yet made, far grander even than the almost unbelievable story of the United States itself, of the revolutionary concept of modern capitalism.

. . . . Every man shall eat in safety
Under his own vine what he plants; and sing
The merry songs of peace to all his neighbours.

— William Shakespeare, *King Henry VIII*

APPENDIX B

ACCELERATING NATIONAL AGRICULTURAL
AND RURAL DEVELOPMENT



An International Seminar arranged for the
International Agricultural Development Service

University of Reading, England
5-18 September 1976

COORDINACION RURAL A.C. (CRAC)

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ultural and Rural Development (a division of the
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(IDEAS Inc.), Fort Collins, Colorado and Washington, D.C.,
U.S.A.).

Coordinacion Rural A.C. (CRAC) is offered as a model
of integrated rural development. Though it is located in
Mexico, it is intended to be replicated throughout Latin
America, and perhaps elsewhere. It is designed to generat
dynamic economic self-sufficiency and social change among
small-scale, traditional and truly poor agriculturalists.
It is based on the use of investment and loan capital
derived from the private sector, alone or in joint venture
with national or international public institutions for
development.

CRAC has its beginnings in 1963. At that time,
sponsored by the International Chemical and Minerals
Corporation (of Skokie, Illinois, USA), the author began
a world wide study of the obstacles to the application of
known technology to the lands of the small-scale agric-
ulturalists of the world. The study was designed to find
out how to attract the resources of technology, research
capacity, money and management skills, which are held
within the private, profit-making sector of the western
world, into the processes of agricultural and rural
development. This study went on until mid 1966. A
tentative solution was outlined in an article by the
sponsors of the study, The Role of Private Investment
in World Agriculture, which appeared in the November-
December, 1965 issue of the Harvard Business Review.

In October 1966 an attempt (funded by USAID) began in Mexico to derive a practice and then a methodology from the concepts of the report published in the Harvard Business Review. In mid 1969, the work was being privately financed; by 1971, financing was almost exclusively derived from Mexican sources.

This study describes the structure of the CRAC model, but it cannot represent the detail and wealth of the human experience, derived from close contact with Mexican campesinos, which has been so significant for the evolution of concepts and modes of action.

WHAT IS CRAC?

CRAC is a non-profit (Asociación Civil) corporation, devoted exclusively to rural development in Mexico. Within Mexico, there are no geographical constraints. CRAC may base its projects in agriculture, mining or forestry; it may relate to the production of raw materials alone or it may concern itself with marketing alone or with processing alone; and it may seek to integrate these several levels of economic activity.

CRAC receives all of its operating budget from Ingenieros Civiles Asociados, S.A. (the ICA Group), a wholly Mexican-owned civil engineering enterprise. CRAC is a subsidiary of ICA. On occasion, CRAC has received grants-in-aid from several foundations in the United States. These donations, over the past five years, have amounted to less than 6% of available operating funds. CRAC is a cost to ICA; but at the same time it represents an investment by ICA in the future of Mexico.

In 1976, CRAC is a team of seven professionals, five of whom are Mexican. There is a generalist/manager/planner/promoter and a marketing/financial specialist/Assistant Manager. Both are from the US and both have worked in this endeavour in Mexico for ten years. There are two agronomists and three humanists who are charged with organisation and training, in the villages. By 1977, it is hoped to add five additional Mexican professionals; in 1978, a further five additions are projected.

The CRAC experiment is intended to lead the way for private enterprise, off the farm and the center of wealth, to share with government in the general attack on poverty, insufficient productivity, and their attendant miseries, which plague the world. In this sense, CRAC is the symbol of a policy intended to help diffuse the ownership and effective management of capital, on a large scale, into heretofore poor and foundering, or even abandoned rural areas.

CRAC seeks first to maximise the income from unused and/or underutilised resources (capital) of land and labour already possessed by the rural poor; second, to bring new capital into play which helps to diversify the sources of income and jobs at a chosen site; third, to recover investment capital and then gradually transfer the ownership of this new capital to the rural people, while the rural beneficiaries are being organised and trained for management and operations; and fourth, to encourage the use of newly created wealth, which may not initially be shared by all, to enhance the quality of life for all members of the community.

HOW DOES CRAC WORK?

CRAC develops projects in this way:

Without detailed study, CRAC seeks out (and, increasingly is asked to consider) promising opportunities for investment in rural areas. If technology exists through which to increase productivity or to increase the value to the producer of raw material through processing; if a market can be detected where price and demand seem positively related to production/distribution costs; and, if prior public investment has produced infrastructure (even if it is imperfect) which encourages commercial activity, CRAC goes on to step 2.

Next, and again without detailed study, CRAC reacts to the human resource at the potential project site. If, within some days or weeks of discussion and observation in the community (or communities) which may be involved, no reason is discovered to reject the site, CRAC goes on to the third step, even though the precise method of working with the people has yet to be worked out in the course of project development.

An important aspect of method must be noted at this point. Our experience encourages us to take risks, and to encourage investors to do the same, to establish a close, collaborative relationship with any community, unless, after the investment committed in the fourth step, we find a very potent reason (such as violent political turmoil) to withdraw. In other words, if our impression of the people is favourable, we believe that the investment provides the critical means of winning confidence and entering into organisational and collaborative efforts.

As the third step, CRAC then makes a careful, classically-organised investment feasibility study to determine the financial viability of the project, that is, its ability to generate enough profit to increase local net income sharply and rapidly; to protect and then recover at a modest return the equity capital at risk; and to satisfy government that the benefits claimed can be achieved. If the feasibility study is favourable, CRAC goes on to the fourth step.

In this step, CRAC promotes the investment of the necessary equity and loan capital, from the private sector wherever possible. Nowadays, it also takes advantage of development institutions in the public sector, though in the early years, it excluded public participation. At present, however, we regard the source of money as less important than the attitude of investors towards such policies as transfer of ownership to rural people and long range (10-20 years) recovery of equity.

If CRAC is successful in promoting the financing of a project, it then proceeds, as a fifth step, to form a stock corporation (such as FORUSA, described below), operating for profit. The corporation, an appealing and familiar type of enterprise to investors, then becomes independent of CRAC and takes full responsibility for the development program. At first, its Board of Directors does not include rural people from the project site; we intend, however, to invite such participation as part of the long range educational process which leads to full self-sufficiency on the part of the "campesinos".

Finally, CRAC serves as a consultant to each operating company it creates. Ultimately, CRAC hopes to become self-sufficient financially, through payments for services from every company it forms. If we achieve this goal, newly-created income at each project site will, in part, help to extend service to additional sites.

To summarise, the private sector of Mexico, in this case represented by the ICA Group, agrees to experiment on ways to use private sector risk investment as an instrument of rural development. The ICA Group creates and finances the operations of a specialised company, exclusively concerned to direct and carry out the experiment. This specialised company is CRAC. CRAC seeks out, evaluates, determines the feasibility of, promotes, forms and advises profit-making rural development companies (such as FORUSA (below)) which, out of profit, recover equity over time; earn an interest on risk capital; and pay for the professional staff necessary to run the company and to organise and train local people to become owners and operators of everything created for them.

HOW DOES A COMPANY CREATED BY CRAC WORK?

I can illustrate a specific project in operation by describing the origin and work of Fomentadora Rural, S.A. de C.V. (FORUSA). This was organised in 1971 in the State of Jalisco, at a site about 60 km south of Guadalajara. It now manages 3,000 hectares, in ten communities, through collaboration with 450 farmers.

Preparatory stage

From October 1966 until 1971, the field work was in a preparatory stage. Contacts with people in political, legal, scientific, technological and sociological circles were being established. The general locality was selected on technical considerations and three sites were identified for further investigation. At each of these sites, the 'high-yield' corn (maize) technology which was to be the basis of the first stage of economic change was tested, with the cooperation of a very small number of farmers. These test/demonstrations were used as a point of entry into the several communities involved and a start toward gaining recognition and confidence. This stage took three years, in part, because it takes time to win a position of leadership, and in part because we had never before attempted such a project and had much to learn, to rethink and to do again. The cost to USAID and several foundations of this preliminary stage was \$300,000.

CRAC, FORUSA and the Sociedades

In 1971, CRAC organised FORUSA. Five investors from the industrial sector of Mexico risked \$3200 as equity; in 1976, equity has increased to \$48,000 and the investor group has grown to nine. In the same year, FORUSA organised a group of 23 farmers, who voluntarily placed their lands (roughly 100 hectares) under management, into the Sociedad del Valle, S.C. (Sociedad Civil - an enterprise which can engage in profit-making businesses, yet pays no income tax, which maximises the benefits to members). In 1976, 450 farmers have placed 3000 hectares under FORUSA's management.

The Sociedad del Valle, S.C. is a legally constituted body and is self-governing. It is not a true cooperative. While all members have one vote on matters of governance, each member shares income in proportion to the amount of land he has placed under management and the shares he has purchased in the Sociedad. However, no member may own more than twice as many shares as any other. At death, shares pass to the heirs at current audited value. Shares may not be sold to outsiders.

With regard to credit, the Sociedad is the borrower and distributes funds to its members in accordance with a system of control introduced by FORUSA. The Sociedad is responsible for repayment of loans and all members are mutually responsible for each other's debts. Every farmer who voluntarily solicits membership, and who is accepted, agrees to forego dividends for 5 years as his contribution to the financial stability of the organisation, although these dividends accrue to his account, in estate terms. This policy, which took some time to be understood and accepted, recognises a) that crop disasters can occur and must be provided for; and b) that it is through savings that funds, and the ability to borrow, evolve for reinvestment in new and diverse means of generating income and reducing dependence on the land.

In 1970 and before, the average net income from farming corn and sorghum, per hectare, was about \$50; in 1975, net income per hectare averaged about \$500. Yields of corn had increased fivefold; yields of sorghum had quadrupled. At present, crops in the area are rain-grown; irrigation, from wells, will be introduced in 1977. The average land holding in the area is 8 hectares, divided into two sections, one usually of much poorer quality than the other.

Larger yields are not the only reasons for larger incomes. Government support prices for grain have doubled since FORUSA began operations. Crop insurance, offered through a federal agency, has been extended to all members of the Sociedad del Valle and covers about 70% of the investment per hectare. Money-lenders have been eliminated and interest rates for production credit have been decreased from an average of 4 to 5% per month to 5% per year. Agricultural inputs are now purchased in bulk, at prices smaller than ever before.

Credit and the banks

Before 1971, very limited amounts of agricultural credit flowed into the area from federal banks and essentially there was no supervision. In 1971, FORUSA induced private banks to provide \$16,000 of crop cycle credit for the Sociedad and also began its program of resident technical supervision and training, with a staff of two. In 1976, FORUSA supports a staff of seven professionals, including two humanists who work full-time to strengthen local organisations through training for both technical tasks and organisational responsibility. In 1976, crop credit from private banks to the Sociedad is more than \$1,000,000; in addition, these same banks have provided \$240,000 in medium-term credit for the purchase of trucks, tractors and auxiliary equipment.

In 1971, FORUSA was related to one village; in 1976, it supervises activities in 10 communities. In 1971, only one Sociedad existed; in 1976, there are three Sociedades, all collaborating with FORUSA.

The extension of interest, and the replication of the FORUSA system, now proceed very rapidly. It is no longer necessary to invest years of time and money to build acceptance and to motivate a new community to collaborate. When either FORUSA or CRAC staff contact the leaders of a village we would like to include, these leaders are invited to send a delegation to Zapotitan, the site of the first and most dynamic of the Sociedades, for a visit of as many days as they wish. These visits are made without any presence or intervention on the part of FORUSA or CRAC personnel. So far, every such delegation has left with an expressed desire to participate. There is now no restriction on the replication of the CRAC/FORUSA method, anywhere in Mexico, other than funding the pre-operational stage (feasibility analysis, financial promotion and staffing at the FORUSA level).

Not only has the original FORUSA in Jalisco expanded to become a statewide program but a FORUSA has been put into operation in the States of Puebla and Tamaulipas, where climate, crop and marketing patterns and social and cultural background are very different. Areas so different have been deliberately chosen, so as to test both the adaptability of the method and the appeal of the system to private and public sector investors. A variety of other statewide programs is under investigation and we are also considering the extension of the CRAC experience in Mexico into Central America and to zones of agricultural poverty within the United States, for example to the lands of US Indians embraced within reservations.

STAGES OF DEVELOPMENT

FORUSA attempts to move through three logically related stages, all now in evidence in Jalisco:

First, it concentrates on increasing the return from the capital already in the hands of the rural poor, mainly their land and their labour. This provides the most rapid means of increasing income, a vital consideration in gaining confidence and establishing the professional authority of the FORUSA staff. The tangible results so obtained encourage farmers to participate in growing numbers. Since the activity is concrete, it simplifies the early aspects of training which concentrate on technical and financial matters and only later on begin to attack more subtle and complex issues such as responsibility to the group and to the community, or concepts of political action.

Second, as existing resources begin to yield substantially larger net income, and as participation by local people grows significantly, FORUSA seeks to identify and promote new types of economic activity which form other wealth-producing capital assets than land, such as a store, an agricultural machinery service center, a dairy, a feed mill, an oil extractor plant (for example, to process soy bean and safflower), a textile enterprise based on local raw material such as wool, or one to fabricate parts for nearby large-scale industry, among many others. The long range aspects of this second stage turn on four main policies: a) all of the risk, until success is demonstrated, is taken by FORUSA; b) all of the equity capital at risk

is intended to be recovered from profit, over a period which may be as long as twenty years or even more, with a modest rate of return intended more to symbolise the meaning of "investment" than to enrich the already advantaged investor; c) all enterprises created by FORUSA are to be transferred to the ownership of the Sociedad or another local entity formed for the purpose; and, d) no transfer of ownership is to take place until the local people are trained for effective management and responsible ownership.

For the process of rural development, it is considered essential to diffuse the ownership of wealth-producing capital instruments. In the first place, there can never again be land enough for all rural people who wish to remain on the land and who have rights to land under national law and constitutional thrust. More and more in the future, rural people must have access to sources of income other than land, if they are to stay and survive in rural areas at an acceptable level of social cost.

In addition, the land area held or controlled by the multitude of rural poor, no matter how efficiently managed, simply cannot yield the income we might agree is necessary to satisfy the desires of a family of 8 to 10 (a size very common among the rural poor of all continents). Only by integrating income generated from the land with income otherwise derived, can the return to rural families continue to grow over time.

Finally, we believe that no combination of improved agricultural practice with jobs created through non-agricultural enterprise can provide income for all rural people. There are too many now; and their numbers are increasing too fast. While it is obviously not a total solution to what may well be an insoluble problem, it is nonetheless imperative that more rural people own shares in wealth-producing enterprises which yield income, even if they do not yield work.

In the third stage, as total income at the project site grows, from a more and more diversified base, FORUSA deliberately fosters a dynamic program of community development in a social and cultural sense. Here roads, schools and homes are improved, a supply of potable water is assured, and other projects are introduced, concerned with other aspects of health, family planning, entertainment and recreation, making the physical

political whimsy which characterises shifts in public power. Beyond this, each FORUSA is intended to become financially self-sufficient, that is, to earn enough to support its costs. Thus, like any other business enterprise which succeeds, FORUSA self-finances its existence and its growth.

GENERAL CONSIDERATIONS

This leads to a final operational point about FORUSA.

The entire concept of CRAC takes its form from a consideration that every resource applied to rural development must be managed as an investment, not as an expense, that is, the application of resources must yield a new increment of wealth. The management of investment capital we think of as a business. When applied to rural development, we think of a product called "development" which, for all of its fuzziness as perceived through different eyes, is, nonetheless a clearly definable end product.

Within this view, then, we perceive a FORUSA to be feasible if it can generate its own capability to cover costs, as well as making a symbolic profit (which may be reinvested). Since each FORUSA begins with stage 1, which calls for management services rather than the formation of new capital, the first income generated by FORUSA is through a management contract with the Sociedad. According to the area of his land, each member pays a fee for an integrated service package which includes, over time, technical assistance; training of all kinds; liaison with external agencies such as banks and regulatory bodies; and development of new investments, which include, among others, those which affect social and economic life in the rural community.

Initially, the members are motivated to pay the fee by the banks which provide credit at small interest. The banks include this charge in the production credit allowed per member/per hectare and give preference to the system because it guarantees supervision which is resident, highly competent and responsible. Once the ~~income~~ benefits of FORUSA management start to give a return as income, it is no longer difficult to get farmers to pay the fee.

Over time, FORUSA also derives income from the profit made by non-farming enterprises, during the years before these properties are turned over to the ownership of the Sociedad.

environment of the community more attractive, political action, formation of exportable skills among youth (some of whom simply must emigrate in the future), and other concerns. This aspect of the CRAC/FORUSA program is the most basic of all and symbolises the ultimate goal of the effort. It attempts to make income a tool of service. It is through this stage that we combat the tendency for a Sociedad, where concerns are economic, to form an elite, inwardly-turned group and through it we also try to substitute the classical objective of work for a wage by the concept of work without a wage in service of the community, so that the natural urge to use one's intelligence and skills finds an outlet.

During the early years of a FORUSA project, most ideas for change in stages 1 and 2 tend to derive from FORUSA's staff. This is a natural result of the ignorance (not the lack of intelligence) and inexperience of the local participants. On the other hand, the goals of community development implied in the third stage are, for the most part, perceived by members of the community, and FORUSA staff, while encouraging discussion, tend to respond with technical and, sometimes, financial help (loans from FORUSA or negotiated from the banks).

While the first two stages are obviously long range activities (indeed they are never-ending) it is the third stage which demands the presence of FORUSA (or an equivalent catalytic force) over a period of many, many years, perhaps decades. To change the ground rules of a local culture so that the changes themselves become rules governing behaviour, is perhaps the most ambitious of goals. To undertake the task, change agents must be continuously present for decades if necessary.

All this illustrates two fundamental weaknesses in development planning and financing which the CRAC/FORUSA model is attempting to overcome. One is the tendency to introduce agents of change for relatively short periods of time, usually defined by an agency supplying funds and/or by the lack of permanent political support. CRAC takes as a constant the demand for long-range participation at a project site and hence has attempted to free itself from dependence either on grants or on political support.

Of course, no rural development programme in the underdeveloped nations can be independent of political support in the sense of policy. But by giving priority to private sector backing, CRAC eases away from the impact of

I think it will be useful to discuss, in the Seminar, a number of topics for which there is no room in this summarised study. These include the optimum size of a project at the level of FORUSA; the training of people to function in a CRAC or a FORUSA; the nature of leadership and authority which comes from "outside"; and the concept of "long range" as it applies to rural development. In addition we might take up many other matters which directly and indirectly, affect success or failure and the rate at which rural development takes place and becomes a permanent part of the scene when those who start things going at length withdraw.

APPENDIX C

Managing a Rural Development Enterprise--

Query: How To Train for the Job¹

Simon Williams²

Introduction

Throughout the world, policy and financial support directed toward the rural sector is shifting emphasis from purely agricultural to what is generally designated as "integrated rural development." To quote from an informal memorandum on "Human Resource Training for Rural Development in Latin American Countries," prepared for discussion within the Interamerican Development Bank:

"In recent years, both Latin American governments and aid agencies have become increasingly interested in the multi-dimensional, integrated type of rural investment projects. Such projects, generally designated as "integral rural development" or simply rural development (R.D.) differ in a number of respects from the usual type of agricultural projects. The latter have typically focused on a single aspect, (i.e., credit, irrigation, crop technology) while R.D. projects tend to be more complex or ("systemic") and attempt to cover simultaneously a number of aspects. Furthermore, R.D. deals not only with farm production, but is concerned with upgrading the economic performance and social well-being of rural people. In this sense, R.D. projects tend to be spatially-oriented, by concentrating on the incomes, employment and welfare of a given population in specific rural areas. Virtually all the multi-lateral and bi-lateral assistance agencies have strong policy mandates related to a comprehensive attack on rural poverty, which favor this sort of an approach.

¹Prepared for Presentation at the Conference on Appropriate Management, Graduate School of International Studies, University of Denver, Denver, Colorado, May 8-9, 1978.

²Director, Center for Agricultural and Rural Development, a division of IDEAS, Inc., Ft. Collins, Colorado; Advisor to and Founder of Coordinacion Rural, A.C., a subsidiary of the Grupo ICA, Mexico City, Mexico; and, Affiliate, Department of Economics, Colorado State University.

Initially, such projects focussed on integrated agricultural promotion by providing several of the essential components on an interrelated set of farm development (i.e., land development, credit, marketing, research, extension), but more recently the set of activities which make up the R.D. package expanded beyond farm production to encompass other needs of the rural population, such as social services (health, education, nutrition, water supply); economic infrastructure (feeder roads, electricity) and even linkages to the smaller urban centers (rural industries, service centers, storage and supply facilities, etc.). If the area in question is a watershed or another type of eco-system, R.D. investments may also include conservation measures and other ecological components.

The majority of such R.D. projects have also become concerned with new institutional arrangements: the strategy generally calls, on one hand, for strong peasant and village associations to insure grass roots support and self-help, while on the other, for decentralized administrative mechanisms, in which the work of the various governmental agencies can be suitably coordinated at the action level and made more responsible to local needs."

The single most dominant obstacle to accelerating rural development the world over is the lack of managerial talent capable of and committed to the administration of rural enterprise.

The single, outstanding cause of waste and project failure in rural development has been and remains the assignment of top management responsibility to those without training in management. Everywhere in the world there is an awakening to the fact that agronomists or other technicians...economists or other social scientists...or politicians, however skilled in their fields, do not necessarily make good managers of rural enterprise. Productivity increases tend to become ends unto themselves and are equated to rural development. Planning tends to become an end unto itself and a "good" plan thought to be automatically catalytic in the development process. National goals, fervently expressed, are assumed to generate progress among the rural poor and disadvantaged. So, individual elements of the process of rural development take on the image of the whole. At great cost, projects are implemented. At great

loss, resources are wasted and hope is dimmed. In the sum total of cost/benefit calculations, there remains a negative quantity, expressed as the perpetuation and growth of human misery.

Recognition is growing that rural development is a subtle, complex, long term process, subsuming technology, marketing, finance, training, organization, human motivation, cultural form, political thrust, among other facets of individual and societal behavior and structure. Recognition is growing that the management of rural development enterprises calls for professional managers, with skills which are at once generalized and specific in their application, e.g. ability to understand and appreciate the nature of all the constituencies inextricably involved, including the rural people at a project site, representatives of government, technologists, industrialists, merchants, bankers, lawyers, accountants, teachers, humanists, unionizers, revolutionaries, reactionaries, among other categories whose representatives overlap and shift in time and place and importance; ability to handle inputs as investments for profit and to turn profit as money into gain for the rural beneficiary of the enterprise; ability to relegate responsibility without loss of authority...to balance prudence and risk...to bear up under failure...to admit to error...to make decisions...to plan for continuity beyond personal tenure; among the myriad of other skills which have been described as being basic attributes of the ideal manager.

An Illustrative Case from Mexico³

For the purpose of the Conference, this paper will refer to rural development as an "enterprise," essentially a business enterprise. Since it is impossible to define precisely what is meant by the term "integrated rural development enterprise," the best definition is likely to be but a clear image, perceived from a description of an actual operating project which may then serve as a prototype.

As stated, the enterprise is considered as a business, entered into for a profit, the product of which is rural development. The business creates jobs within itself and jobs for some of the rural poor. It catalyzes the creation of new wealth, from which it draws the income necessary to support its cost. The major portion of this new wealth, in the form of income and in the form of a growing body of capital assets, passes to the people at the project site.

The new wealth generated derives, in part, from increasing the return on the capital normally found in rural areas, e.g. the land and skills of the people, but which are underutilized. As well, wealth is formed as a result of inputs of fresh capital, invested in appropriately sized businesses which were not there beforehand. Such businesses may be commercial, manufacturing or service in nature; they may or may not be based on upgrading the value of agricultural raw materials. No matter what its original source, all new capital formed at the rural site becomes the property of the local people over the time necessary to

³The case described is taken from work which began in Mexico in 1965 and is illustrative of a process of rural development now being replicated throughout Mexico under the aegis of Coordinacion Rural, A.C. Too, current efforts to extend the application of the method into Central America, as a test of the general utility of the scheme, are being directed by IDEAS-Center for Agricultural and Rural Development, under the terms of a Development Program Grant from U.S.A.I.D.

recover equity from payments out of profit and to train the beneficiaries in the arts and skills of management and ownership. The enterprise has the formal responsibility for training and to bear the cost of training.

The model rural development enterprise is a small to medium-sized operation, with less than 20 employees, even though it may involve itself with thousands of people (hundreds of families) and with quite large land areas, e.g. in Jalisco, Mexico, the model manages approximately 7,500 acres of land controlled by over 400 farmers in ten separate villages. To appreciate the play of problems and, hence, the range of management capability required, the model enterprise must be seen as being based on the following generalized characterizations of underdeveloped rural areas which, while very specific to the Mexican ambience, are believed to hold throughout Latin America, Africa, and Asia.

1. Every rural area selected by agents of change for a development project exhibits two distinctly different but absolutely inter-related features. One, is that in the opinion of such agents, based upon knowledge not common at the project site, ~~that~~ the physical and human resources in evidence hold out the promise of increased productivity and profit, if only what is known to do can be done. Two, is that rural people simply do not know how to deal with--to compete with--fight back against--forces external to the community which oppress and constrain.

The management of a rural development enterprise must recognize both features and must relate to the changes necessary with great sensitivity and dexterity. For one thing, the introduction of new

techniques with which to increase productivity requires the acceptance of changes in traditional ways, by itself a subtle and complex cultural shift, even if no other consideration than productivity and net income were involved. But more is involved. The net beneficial effect of agricultural development, for example, depends in no small way upon the management of the external forces referred to above. These forces include the demands of the law, bureaucratic implementation of the law, financial arrangements, marketing systems, changing technology, centralized control of education, political power, national objectives, among others. Managing these forces in the interest of the rural people is far more difficult than introducing productivity measures. The two together demand of the rural development enterprise a level of managerial talent and a longevity of presence beyond anything heretofore conceived among the donors and receivers of development assistance. Without doubt, the management skills required are different from and go far beyond the technical skills which are so often the context of management training programs, such as fiscal control, marketing, feasibility analysis, purchasing, personnel relations, among others.

2. Every rural site selected for a development project suffers from one physical handicap beyond correction, namely, the small size of the land holdings. No matter if in time the land is brought to its optimum productivity and maximum yield of income, the net result will still fall short of the goals of rural development, in the sense of bringing to a family of six or eight the means of so enhancing the quality of life as to have cherished hopes touch upon reality. So it is that the enterprise must have the capability of creating new and different sources of wealth, that is, new forms of productive businesses

which become owned and shared by the local people. This imposes on management an intellectual outreach far beyond the demands of agricultural development. This is not to say that the manager must himself be sufficiently expert in an almost infinitely varied range of technology. Rather, he must know of the need and have the capability of seeking for and recognizing the utility of new ideas...where to turn, how to evaluate, when to act.

3. Every rural site selected for development suffers from yet another physical constraint beyond correction, namely, there is never enough land or other physical source of income, to go around, especially as the years go by and population growth accelerates. How can the rural development enterprise deal with family planning? What can be done for the landless? Perhaps there are no satisfactory answers to these questions but management cannot put them aside as matters of no concern. If concerned, what is there to do? Action may call for innovations at the frontiers of social revolution and beyond the pale of accepted economic theory. For example, in our needed rural development enterprise, consideration is given to diffusing the ownership of newly formed capital in such a way that the landless, the most poverty-stricken, receive shares in excess of those with land.

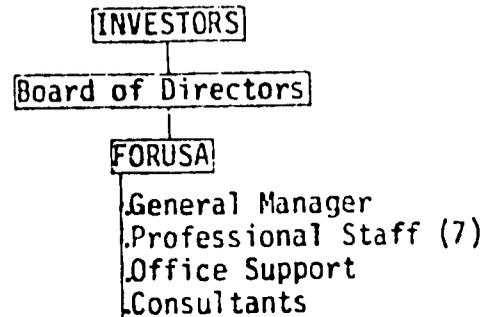
4. Rural people needing the help of a development enterprise are normally traditional in their values and social relationships, in such a way as to restrain change. Historically, change agents have dealt with local mores in one of two ways. The romanticists, working as they say "from the bottom up," have insisted that people know what they want and, really, know how to get where they want if only given the economic means. This school of operations teaches that outsiders, e.g. the

managers of rural development, have neither right nor should they maintain the effort to induce social change...that is "up to the people to help themselves." The authoritarians, to the contrary, claim that "top down" control is an absolute necessity if economic and social change is to take place when confronted with the tenacity of custom and the vagaries of human behavior. However, experience in the field, worldwide, indicates that most rural people need help, sustained and formal help, to help themselves; that while such people can and do articulate their hopes with clarity and passion, they must be encouraged, directly helped and often, at least at the outset of change, be "managed." As well, it has been demonstrated beyond doubt that people in desperate need will often resist at all costs a dictation of social change. Authoritarianism, usually expressed with arrogance and intolerance, fails in the rural development context. Thus, given the need for management to relate operationally to social change as the ultimate, priority goal of the rural development enterprise, the demand on the manager is further extended. He must reckon with the needs and desires of the local people, be sensitive to their values and traditions, and resistance to force, yet understanding of their incapacity to induce the changes so necessary to the achievement of their personal, family and community aspirations.

Without going more deeply into these four elements from which the design of our model rural development enterprise takes its form,⁴ the form itself is built up in the following sequence:

⁴The implications of what is covered by each of the four points are both profound and complex in their inter-relationships. Space does not permit a further elaboration. Hopefully, a book on these implications, now being started, will reveal them all and demonstrate more clearly the necessary design of rural development and the full scope of the demand on management.

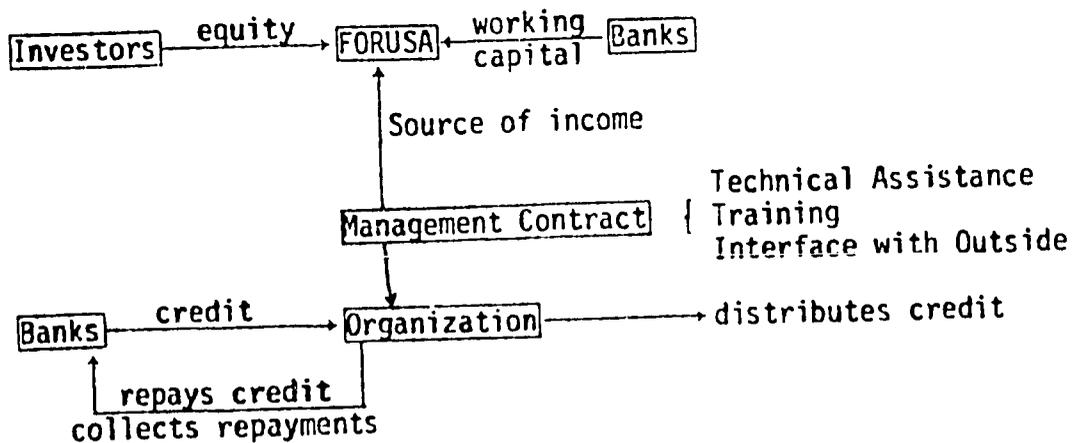
First, a development company is formed, intended to operate at a profit as a producer of integrated rural development. This company, called FORUSA, attracts its equity and loan capital from private and public sources, outside of the rural area to be helped. Diagrammatically, the first step looks like this:



FORUSA is considered to represent the manager or promotor of rural development whose function is thought of as permanent. Initially and for any necessary period of time, the General Manager and his technical staff come from outside the rural site. Whether or not this staff is eventually replaced by local people is not a priority consideration. What is vital is that FORUSA and its staff become a living part of the rural community...an everyday presence which is neither "top down" or "bottom-up" in its relationships and which immediately as it is formed extends the capability of the community to deal with the world around it.

Second, FORUSA organizes the first group of farmers who volunteer to place their capital (land and themselves) under management. This organization is vital to the process of development. Governance within the organization is under full control of the farmers. However, land of the members is aggregated for management by FORUSA. While land tenure relationships are untouched, farmers under contract yield control

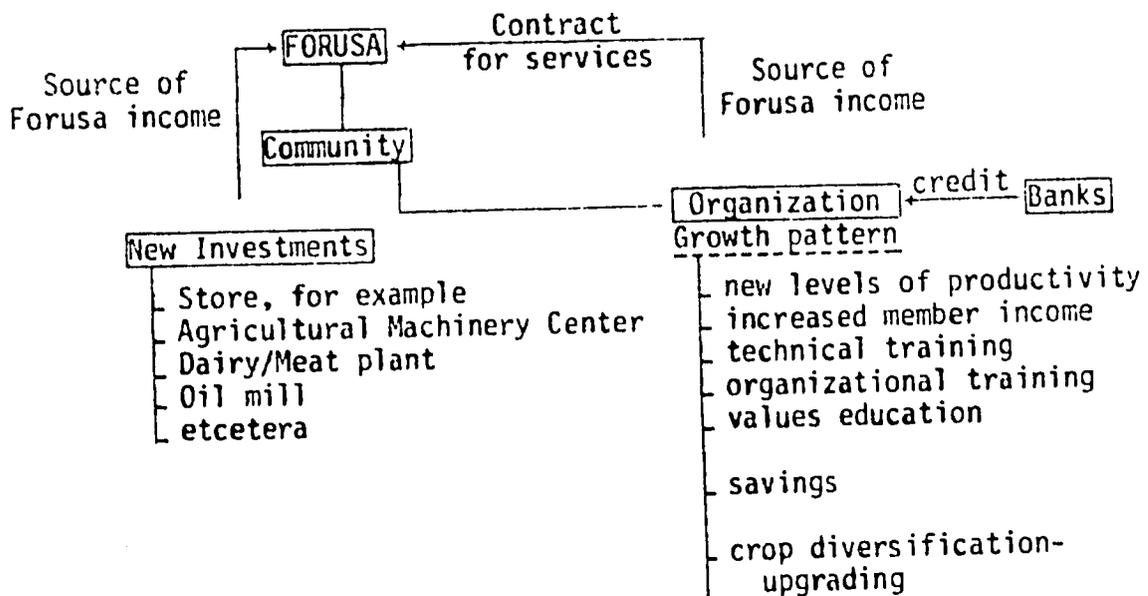
of their agricultural practices to FORUSA. The management contract provides for three services. One, is technical assistance or farm management covering new technology, credit and marketing. Two, is training, so that each member of the organization learns about the new technology, about organization, savings, profit and, as time goes on, about political action, the use of wealth for long term investment in diverse sources of profit and, the use of wealth, rather than its simple accumulation, for enhancing the quality of life in the community. Three, is contact with outside influences which restrain or encourage integrated rural development. The members of the organization, pay for the services and, in so doing, start FORUSA on the road to self-sufficiency, in terms of income to cover costs. The farmer organization itself is profit-making, with the members as shareholders and no shares may be sold to non-members. The organization receives, distributes, controls and is responsible for credit, derived from private and/or public banks. The banks must be persuaded to provide the credit, since no collateral other than crop insurance is available. Diagrammatically, the build-up by now may be shown this way:



The banks give credit because FORUSA provides skilled technical supervision on a constant basis. The farmers pay for the services because the line of credit includes the contract cost and because without FORUSA supervision, the banks will not provide the credit. FORUSA must charge for its services in order to earn income, a necessary part of self-sufficiency and the only way to ensure FORUSA presence over the long term.

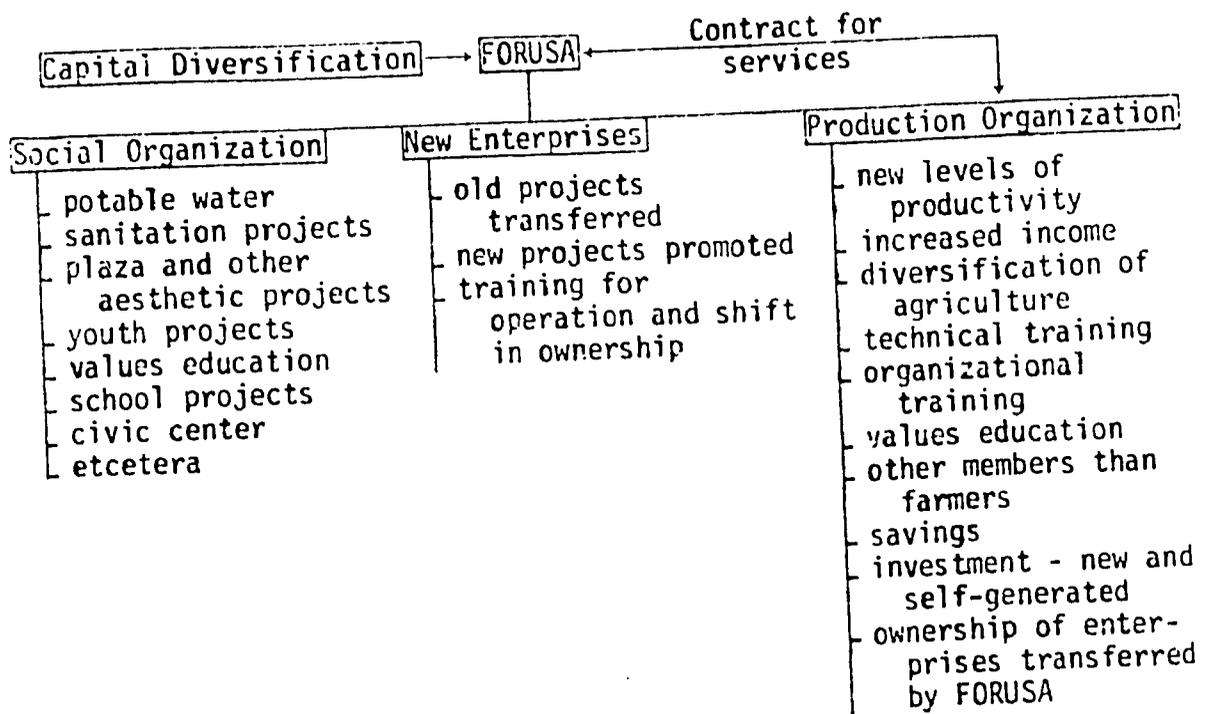
Once the FORUSA-FARMER ORGANIZATION-BANK relationships are established and new levels of productivity and income are attained, more farmers tend to join the organization and a dynamic element of enterprise growth is set in place.

Third, FORUSA enters the stage of new capital formation. Feasibility studies are undertaken. If the studies are interesting in terms of investment, FORUSA management proposes to the Board of Directors that new capital and loans be obtained to support the businesses to be introduced. If financed, 100 percent of the risk during the early years of development is taken by the outside investors since neither money at risk nor the concept of long term investment exist, as a rule, among the people at the rural site. Diagrammatically, the growth of the FORUSA enterprise may now be shown to be --



In plan, all new investments, once they are profitable, are bought from FORUSA out of profit, in the name of the farmer organization. These new investments are intended to provide a source of income for the landless; to diversify the income base of the farmers; and, to provide jobs.

Finally, as the economic activity of the community is stimulated, as people are excited and can begin to take the necessary time to think of alternative ways of shaping their lives, the enterprise fosters organization for social development. Whereas FORUSA itself is the prime source of ideas for economic growth, the community is the prime source of ideas for social change and FORUSA responds with technical help, financial help and formal efforts to use the change process as an experiential base for values education. Diagrammatically, then, FORUSA in all its complexities, looks like this --



The Characteristics of Management

Given the foregoing model of a rural development enterprise from Mexico and, assuming this model or something analogous is what must be managed anywhere in the world, what characteristics should the manager have, ideally, in order to be effective?

For two years, in Mexico, a committee of rural developers, meeting with representatives of the Graduate Faculty of Business Administration, National University of Mexico, tried to confront this question. Currently, in Colorado, the IDEAS Center for Agricultural and Rural Development is conducting a seminar with staff and consultants from the fields of learning dynamics and business management education, again seeking an answer which might contain both an adequate description and guidelines for a training program. The result of all this, to date, has been enlightening, amusing and confusing. For example, some of the "basic" characteristics so far listed are these:

Controller	Organizer	Planner	Sensitiveness
Creative	Humanistic	Articulate	Openness
Systematic	Leader	Decision Maker	Resilient/Elastic/ Tough
Charismatic	Pragmatic	Sense of Humor	Sound in judgement
Problem solver	Realistic	Accountable	Broadly interested and knowledgeable
Facilitator	Optimistic	Healthy	Supportive
Coordinator	Entrepreneurial	Toughness	Loving

Some of the tasks of management have been described in these terms --

Increase farmer income
 Increase FORUSA income
 Increase local participation/increase national participation
 Change values
 Improve utilization and conservation of resources
 Increase skills of political participation of others
 Skilled political participation by management
 Increase competence in dealing with outside forces
 Rationalize conflict
 Bring about new investments
 Effect the transfer of ownership/diffuse the ownership of capital
 Create farmer organizations
 Train in relevant technical areas
 Train in organization
 Develop new managerial talent
 Enlarge participation in decision making
 Motive staff, farmers and others
 Catalyze community interest in social goals
 Involve youth
 Relate the rural areas to regional and national activities and goals
 Inspire hope
 Eliminate fear of change
 Demonstrate value of the FORUSA system and obtain public support
 Encourage replication

Where in the world are managers, ideal or even a rough approximation of the ideal, to come from? Can people be found and can a training program be designed for them to the end of creating a pool of managers capable of forging a systematic and dynamic interaction of personal, cultural, social, political, legal, technical, financial and other economic factors? Obviously, practical considerations dictate some compromise in defining both job and the necessary minimum set of characteristics of the manager.

Yet...caveat emptor, let the buyer of compromise beware! To the extent that a project or program of rural development fails to take into account all the factors involved, as well as the manner in which their interdependency may shift with time, the risk of failure and wasted resources increases. Further, even if the system is taken into account and brilliantly integrated into a plan of action, the quality of management remains the critical variable affecting success. Intellectual brilliance combined with emotional instability; competence without the ability to communicate; moral commitment without tenacity of purpose; success orientation so strong that fear of failure becomes obsessive; orthodoxy which constrains flexible responses to unpredictable events; these and other qualitative aspects of human behavior can dominate the odds that a project succeeds or fails.

The Training Problem

The traditional and essentially correct answers to the question-- where are the managers of rural development enterprise to come from?-- is: from training institutions devoted to the purpose. The fact is that there is no such institution in the world, today.

True, there are bits and pieces of such training manifest everywhere. Schools of Business, Agriculture and Engineering, as well as Departments of Economics, Sociology, Anthropology and Psychology, all, to a greater or lesser degree provide skill and sensitivity training which could be basic elements in the equipment of a manager of an integrated rural development enterprise. The Commonwealth Development Corporation (England) offers some relevant training in its center in Swaziland. The U.S.D.A. includes some material in the courses offered

by its Foreign Development Division. The Project Planning Centre for Developing Countries of the University of Bradford, Bradford, England, does the same in special short courses...and so does the World Bank, in Washington, D.C. The Central America School of Business Administration in Honduras; the Ph.D. program in rural development at the Davis campus of the University of California; the bachelor's degree program in the "management of agribusiness" at Monterrey, Mexico, Institute of Technology; occasional courses set up by ORT of Geneva, Switzerland; among others, also touch upon the training required. The Israeli Settlement Center in Rehovot; the Centro de Capacitación del Desarrollo (CECADE) in Mexico; the Instituto Colombiano Agropecuario (ICA) in Colombia; the Catholic University in Ecuador; the College of Agriculture in La Molina, Peru; the University of Costa Rica; the Universidad del Valle, Cali, Colombia; these and no doubt other institutions in Latin America, Africa and Asia have all made course and program adjustments which approach the training of administrators of integrated rural development enterprises.

However, nowhere is to be found a relevant academic content, brought together solely with the objective of training the managers-to-be or upgrading the performance of current managers of integrated rural development. Such a curriculum, if it is even thought reasonable to bring one together, has yet do be invented. In any event, adaptations to the trend away from purely agricultural development toward the more complex and demanding field of integrated rural development seem to have been largely ad hoc rearrangements of standard academic fare and, for good reason. To date, the necessary time, talent and financial support has not been committed to the task.

Looking back at the list of the characteristics and tasks of a manager of rural development, a first demand on a training program is obviously care in selection of students. Many of the traits listed must come already packaged in the personality of the candidate. While something may be known about heightening awareness of many basic human virtues and weakness, there is little known about how to develop such characteristics through formal substantive courses. No field of work could possibly call for a better balance of personality than the management of rural development and, hence, no training institution devoted to training in this field can turn its back on weaknesses in the process of selection of students. It is agreed that selection techniques are notoriously inexact even when used; it is equally notorious that in education devoted to the objectives of economic and social development even the techniques available have not been systematically used. Training for managerial responsibility in rural development clearly calls for: a) the best selection possible, now; and, b) a serious commitment to research leading to better methods.

Beyond selection, a second demand not yet met is the call for novel content in the training program. Because so little research has gone into the justification of course design, we have little cumulative stock of knowledge about what to teach or skill at teaching classical content, e.g. decision making in organizations, group behavior, leadership and motivation, human resource management, economic development, development issues, politics and power, the nature and management of conflict, sociology, anthropology, among others found in the outlines of program after program, in a manner both relevant to the unique

management tasks of the rural developer and unforgettable in the future operational setting.

Given weakness in the selection process, inexactness in the determination of course content and inexperience in teaching or adapting traditional courses to the particular needs of rural development administration...and, given the widespread lack of support for the necessary research on method, our own approach to training is taking the following steps:

1. Candidates for managerial posts will have as a prerequisite for the job at least a college degree which reflects a reasonable blend of courses in the social and physical sciences; "reasonable" in the sense of satisfying the selection committee (itself a reflection of broad educational inputs and a wide range of experience) that the base of an "educated man," has been forged, if not tempered. We are working to establish a clear image of such a man, in the end with the intention of trusting our judgement rather than seeking for quantitative measures.

2. Candidates will also be required to have at least two years of work experience, not necessarily in an administrative post. Favor will be given to those with more experience. However, it is in the revelation of what the experience has meant in terms of the integration and utility of formal education as a tool for performance on the job, that we shall be searching for relevance to the job of manager of a rural development enterprise.

3. Other than using education and experience as criteria of selection, we will base selection techniques, e.g. tests and interviews, on their value in identifying the personality traits we already have identified (together with others that may suggest themselves). Our

search for techniques of proven value, however careful one must be in their use, will go on for some time yet; in any event, tests for knowledge will not be used, except indirectly and, possibly, in the course of interviews.

4. Our "course" will have as its goal the attainment of a clear appreciation of the total process of managed change as all that any training effort can aspire to achieve. It is true and undeniable that methods of effecting change should always be sought out, defined and transferred to new situations when possible. However, a unique set of variables, which can confound the application of a preset formula for change, is always at work, as is demonstrated conclusively by experience in the field world over. Any training program (and particularly one of short duration) which concentrates on providing a how-to-do-it handbook to cover every contingency in the field, is simply doomed to frustrate teacher and student alike, and in design lacks integrity. Its goals are unattainable and should not be allowed to go unchallenged. Thus, a training program such as is envisioned must focus on achieving a clear, sensitive, unforgettable appreciation of what must be taken into account, but leave it to the adaptive intelligence of the learner to guide him toward greater effectiveness in his particular assignment.

The "adaptive intelligence" referred to is most liable to see through to a new level of understanding and to more efficiently apply new knowledge when generalizing from the specifics of real projects analogous to those in which the learner will find himself. Thus, in one form or another, experiential educational techniques will be used to highlight understanding. Most obviously, this will call for a mixture of vicarious contact with reality, through case studies and actual

contact with reality through field work. Case studies in the classroom will serve to illustrate a much wider variety of site conditions than is practical to introduce through field activity but, in practice, the intent is to alternate exposure to ensure that the meaning of each type of learning contributes to the other to form a whole. Our way to help this process of emotional and intellectual integration will be to have field work take place at the actual sites from which cases used in the classroom have been extracted.

However, case studies in the classroom, supported by field experience, is not the only kind of experience judged important to attainment of the goal of a clear understanding of the managerial role in rural development enterprises. At least two other components of the training experience are thought important and will be built in to the experimental short course (time yet undecided) being worked out, namely:

- a. observation of and interaction with "the art of management" as practiced in complex, successful enterprises which may or may not be located in the Third World, to the end of establishing an appreciation of management as a quality in the organization of human endeavor which can be understood and felt even though its essence may at times defy precise definition; and,
- b. contact with the totality of the rural environment in an inspirational way...in a way which attracts to rather than causes rejection of life in the country. This phase of experiential learning is concerned to help overcome two obstacles to the acceleration of rural development everywhere, namely--one, is the difficulty of drawing educated, intelligent and sensitive people into rural areas with a commitment to stay for enough years to make an impact--two, is the breakdown of family life or the failure to make life sufficiently satisfying so that the man, the woman and their children make light of their deprivation and take joy out of the poetry and endless creative opportunity for them all provided by nature and aspiring mankind.

In Conclusion

The procedures through which we are working to establish a training program aimed at improving the odds that candidates for managerial posts in rural development enterprises will succeed, is, at best, a compromise. We have no doubt that what the world really needs are educational institutions with a broad spectrum of knowledge about and experience with rural development; with the capability of offering longer term educational experiences, e.g. the more normal undergraduate and gradual requirements; with commitment to and support for research on methods; and, with faculty and physical resources of the richness required in the future for adaptations to the changing world and the shifting needs of rural people, in the diverse settings of everywhere. Our intent is, somewhat selfishly, to serve our needs, now...while interesting successes have crowned our work in Mexico over the past years, we suffer constantly from poor management on existing projects and from the lack of management personnel from which to select for new projects. Our hope is, nonetheless, to contribute something of more general use to the techniques of training and, along the way, to participate in the general attack on the long range problem.

APPENDIX D

RESUMEN Y CONCLUSIONES.

- La producción nacional de guandules enlatados en el período 1972-1977, presenta un comportamiento fluctuante, manteniéndose en el período entre las 404 mil y 592 cajas de 24 latas 303 x 406.
- Los factores principales que afectan la producción de guandules enlatados son: la producción agrícola y las exportaciones, ya que estas últimas representan alrededor del 80% de la producción nacional.
- La exportación de guandules enlatados durante el período 1970-1977 creció a razón de 16.5% acumulativo anual, al pasar de 159,454 cajas a 397,066. Dichas exportaciones, durante ese período han representado aumentos en un 70 y 80% de la producción nacional de guandules enlatados.
- Los principales mercados de guandules para República Dominicana son Estados Unidos y Puerto Rico, quienes adquieren entre un 88 y 99% del volumen exportado total. De esos dos mercados, Estados Unidos adquiere entre el 66 y 77%.
- El consumo aparente local de guandules enlatados durante el período 1972-1977 se ha mantenido prácticamente estático, ya que en el primero de los años mencionados el volumen de consumo se situó en unas 95 mil cajas (equivalente al 17% de la producción nacional) y el 1977 sólo alcanzó las 73 mil cajas (equivalentes a 15.5% de la producción nacional). El año de mayor consumo de guandules enlatados fue el 1975 con un volumen de unas 176 mil cajas. Las razones por las que se considera que el consumo local de guandules enlatados se mantenga en niveles más o menos estáticos son, entre otros, el que el producto encuentra la competencia de otras leguminosas de mayor tradición en la dieta local, la competencia del propio producto fresco y el poco hábito de consumo que tiene la población para productos enlatados. El alto consumo ocurrido en el año 1975 se considera motivado a los altos precios a que se cotizaban las habichuelas en ese año.
- La exportación de guandules enlatados la realizan principalmente empresas clasificadas en la categoría "A" contemplada en la Ley 299 sobre Protección e Incentivo Industrial y, en consecuencia, esas empresas no pueden colocar su producción en el mercado interno. Hasta donde se sabe, sólo una empresa coloca parte de su producción para el mercado local y también realiza exportaciones.

- Durante el período 1972 y 1978, los precios del guandul enlatado para exportación han aumentado de RD\$5.53/caja en el primero de los años hasta RD\$10.45/caja en 1978. Este aumento constante en los precios unitarios, agregado al hecho de que con ello los volúmenes de exportación no se han incrementado proporcionalmente, permiten suponer que los mismos se podrían aumentar sin que se presenten grandes dificultades para ello.

Cabe la observación de que en los factores principales para los incrementos en los precios ha sido que en el país, en los últimos años, la producción agrícola de guandules no ha sido capaz de satisfacer las demandas provenientes, principalmente, de las plantas exportadoras de productos enlatados.

Por otro lado, los aumentos en los precios unitarios de exportación ha hecho atractivo para productores de Puerto Rico el cultivo del grano en ese país, lo que hace suponer que el efecto que habrá de tener en la demanda esa nueva oferta hará que los precios se manten gan alrededor de los niveles actuales.

- De las consideraciones anteriores en cuanto al precio unitario para el producto exportado y las dificultades que en algunos años ha tenido la producción agrícola de guandules para satisfacer la demanda, hacen que la estimación de los volúmenes futuros a exportar se hagan bajo criterios relativamente conservadores. Así, se ha asumido que la exportación habrá de crecer con una tasa media acumulativa anual de un 1%. De esa forma se estima que para 1980 se exportarán unas 400 mil cajas y para 1985 casi 430 mil cajas.

Considerando que el consumo aparente local de guandules enlatados habrá de mantener la misma tasa de crecimiento que en el período 1973-1978, se estima para 1980 un consumo interno equivalente a unas 102,000 cajas y para 1985 será de 208,000 cajas. Los niveles anteriores de consumo aparente local futuro de guandules enlatados implicarían que se mantenga, en los primeros años entre un 20 y 25% de la producción total de guandules enlatados y que para el 1985 llegue a representar cerca de un 33% de esta.

- La producción de guandul fresco durante el período 1973-1978, presenta un comportamiento fluctuante. En el primero de los años representó unos 287 mil quintales y en el último de los años alrededor de 264 mil. El año de mayor producción fue 1976 con un volumen, según las fuentes oficiales, de 320 mil quintales.

El carácter fluctuante y aparentemente estacionario de la serie de producción de guandul fresco, se considera motivado, principalmente, por razones climatológicas ya que tanto los precios a nivel de finca como el aumento en las exportaciones presentan un comportamiento francamente creciente. Cabe indicar que en 1973 la producción de gandules enlatados fue equivalente a un 44% de la producción de guandules

frescos y que en 1978 ya esta producción nacional de guandules enlatados había absorbido un 60% de la producción de guandul fresco.

- La comercialización de guandules frescos se realiza a través de diversas vías. Las principales empacadoras, aunque normalmente compran a acopiadores-camioneros, con frecuencia adquieren el producto directamente en fincas y, en ocasiones, en los mercados tradicionales de la ciudad de Santo Domingo.

Esta situación hace que no sea muy fácil determinar con precisión los precios reales que paga la industria por el guandul fresco. Además la incapacidad de la producción nacional de atender la demanda de las industrias, ha creado situaciones inestables en los precios de compra del producto. Sin embargo, se sabe que a nivel de finca, los precios varían entre RD\$8.50 y RD\$11.00 el quintal y que los precios que pagan las industrias por el producto varían entre RD\$13.00 y RD\$15.00 el quintal, llegando a situarse, en algunos casos en RD\$17.00 las 100 libras.

- El proyecto está previsto para instalarse en el municipio de Monción, zona actualmente productora de guandules y, de acuerdo a estudios realizados por departamentos oficiales, es factible de incrementar su producción significativamente. En tal sentido, se estima la posibilidad de sembrar alrededor de 12 mil tareas de guandules en esa zona, aunque en la actualidad sólo hay sembradas unas 4,500 tareas.
- El programa de producción para la planta en estudio se ha hecho partiendo de que se absorba gran parte de la producción de guandules y que el área cultivada se incremente gradualmente. Así, para 1979 con el área de cultivo actual, se estima que la planta podría disponer de unos 9 mil quintales de guandules que le permitiría producir unas 28,000 cajas. Con este volumen la empresa podría participar en las exportaciones estimadas para el año mencionado con un 7%. Asumiendo que la producción de la planta se incremente a razón de un 20% anual pero, a la vez, sin sobre pasar en más de un 25% su participación en las exportaciones, se ha estimado que para el décimo año de operación la planta estará elaborando unas 120 mil cajas.
- Para cumplir con el programa de producción propuesto se ha considerado la adquisición de una planta con capacidad de procesar unas 120 mil cajas de guandules por día utilizando un turno de 8 horas. La anterior capacidad implicaría la elaboración de 100 mil cajas durante 90 días de operación utilizando solamente un turno de 8 horas. Sin embargo es de indicarse que la anterior capacidad de producción es teórica y que los promotores del proyecto planean la adquisición de equipos usados, situación ésta que reduce considerablemente la eficiencia. Además debe tomarse en cuenta que en la zona se podrían presentar dificultades para disponer de personal especializado para la supervisión que requeriría el trabajar la planta durante más de un turno y que, al tratarse de equipo usado no siempre es posible adquirir equipos con la capacidad de producción ajustada a los programas de producción.

- Dentro de las materias primas, materiales y otros insumos los principales requerimientos están representados por los guan du l e s y las l a t a s. Aunque, como ya se mencionara, el precio a que pagan los acopiadores y las industrias que adquieren el g u a n d u l a nivel de finca varía entre RD\$8.50 y RD\$11.00, con fines de asegurar el abastecimiento del grano a la planta en estudio, se ha fijado un precio promedio de compra equivalente a RD\$12.00 por quintal. En los inicios y términos de la zafra se pagaría un precio de RD\$14.00 por quintal y en el resto de ella, que hay mayor abundancia un precio menor.

Se estima que para el primer año de operación la planta requerirá unos 8 mil quintales de guandules equivalentes a unas 105,300 pesos. Para el décimo año el volumen requerido se habría incrementado a 35 mil quintales con un valor de aproximadamente, 423 mil pesos. Las latas, segundo renglón de importancia en el g a s t o de materia prima y auxiliares, serían requeridas por lo e q u i v a l e n t e a unos 68 mil pesos que representan cerca de 674 mil u n i d a d e s en el primer año y, en el décimo año, las necesidades se habrán situado en 2.7 millones de unidades con un valor a p r o x i m a d o de 273 mil pesos.

- La planta dará ocupación a unas 28 personas de las cuales 8 c o r r e s p o n d e n t e al personal de Administración y Supervisión y las restantes al personal directo de producción. Los sueldos y salarios e s t i m a d o s para ese personal representan poco más de 52 mil pesos para el primer año, incluyéndose en dicha cifra un 30% de prestaciones sociales.
- La inversión total del proyecto, para el primer año de operación se ha estimado en 345 mil pesos correspondiendo un 69% a inversiones fijas y un 31% a capital de trabajo. Dicha inversión total se iría incrementando de un año a otro básicamente debido a los aumentos de capital de trabajo que implica el programa de producción propuesto. Así, para 1979 dicho capital de trabajo se estima en unos 107 mil pesos, llegando a representar en el décimo año de operación, casi 575 mil pesos.
- La inversión inicial del proyecto, considerando los programas a c t u a l e s de fomento, se considera que podría ser financiada con un p r e s t a m o a largo plazo equivalente al 85% de ella y la obtención de una línea de crédito equivalente al 10%, quedando el 5% de las mismas a ser financiadas con recursos propios. A este respecto cabe r e c o r d a r que se trata de un proyecto eminentemente social, ya que se p r e t e n d e agrupar asociaciones campesinas que eventualmente podrían llegar a controlar la empresa.
- Tomando en cuenta los requerimientos de operación para el primer año, se ha estimado que los costos totales anuales ascienden a poco más de 300 mil pesos, lo que implicaría un costo unitario de RD\$10.74

por caja. Ya en el décimo año los costos totales de producción representarían poco más de 850 mil pesos y los costos unitarios se habrían reducido a RD\$7.83 por caja.

- Con un precio de venta promedio equivalente al que se tuvo en el año de 1978 (cerca de RD\$10.50 por caja) se ha estimado que los ingresos por venta en el primer año ascenderían a casi 295 mil pesos. Para el décimo año se ha estimado que dichos ingresos se habrán de incrementar hasta representar cerca de RD\$1.2 millones de pesos.

El anterior precio de venta se considera conservador si se toma en cuenta la tendencia alcista que, desde el inicio de las exportaciones ha mostrado el guandul enlatado.

- Comparando los costos de producción con los ingresos por venta, en el primer año de operación el proyecto tendría pérdidas equivalentes a unos 6,600 pesos. Sin embargo, a partir del segundo año el proyecto comienza a generar utilidades aunque las mismas para ese período sólo se situarán alrededor de 10 mil pesos. En los años siguientes las utilidades que se estiman se consideran aceptables, ya que en el tercer año alcanzarían los 29,400 pesos manteniéndose en forma creciente hasta el décimo año en que ascenderían a más de 196 mil pesos.

Con las utilidades anteriores en el segundo año el proyecto tendría una rentabilidad sobre la inversión total equivalente a un 3% y sobre el capital propio a un 22%. En el tercer año, dicha rentabilidad sería de un 8 y un 35% sobre la inversión total y sobre el capital propio, respectivamente. Para el décimo año los mismos criterios de rentabilidad se situarían en 34 y 40% en cada caso.

- De acuerdo con el estado de fuentes y usos de fondos la empresa sólo podrá repartir dividendos a partir del segundo año de operación ya que se ha previsto que los aumentos de capital de trabajo se realicen con las disponibilidades que genere el propio proyecto. De esa forma, en ese segundo año se repartirían unos 22 mil pesos y los mismos se incrementarían de un año a otro hasta llegar a ser en el noveno año de más de 212 mil pesos.

Cabe indicar que en el mencionado cuadro de fuentes y uso de fondos se han previsto las amortizaciones a los préstamos a corto y largo plazo considerado en el cuadro de financiamiento de las inversiones.

- De acuerdo con el flujo de caja financiero, la tasa interna de retorno asciende a 22.5%. La tasa interna de retorno social, por su parte, es de 66.1%.

INDOTEC

La empresa generará divisas, en el primer año, por un monto de 358 mil dólares en el primer año y, en el décimo año, se habrá generado casi 1.5 millones de dólares.

Cuadro 16Estimación de la inversión fija

<u>Detalle</u>	<u>RD\$</u>
Costo F.O.B. de maquinaria y equipo	77,333.00
Fletes y seguros (10% del costo F.O.B.)	7,733.00
Impuestos aduanales (20% del costo F.O.B.)	23,199.00
Gastos de instalación y puesta en marcha (25% del costo F.O.B.)	<u>19,333.00</u>
	127,598.00
Imprevistos (5% del costo instalado)	<u>6,380.00</u>
Sub-total	133,978.00
Terrenos (5 tareas a RD\$200.00 c/u)	1,000.00
Edificaciones y construcciones	40,000.00
Instalaciones eléctricas	9,000.00
Pozo y sistema de abastecimiento de agua (40 gls/min)	8,000.00
Equipo de generación de vapor (caldera)	<u>20,000.00</u>
Sub-total	78,000.00
Gastos de estudio y otras inversiones fijas	<u>26,298.00</u>
Total inversión fija	<u><u>238,276.00</u></u>

5.2 Capital de trabajo.

Los requerimientos de capital de trabajo para los primeros diez años, fueron calculados de acuerdo con las siguientes consideraciones:

- Efectivo en caja y bancos: Lo equivalente a 15 días de los costos de producción sin incluir gastos no desembolsables ni materias primas y materiales.

- Requerimientos de materias primas y materiales auxiliares, lo equivalente a 15 días de operación.
- Costos de productos en procesos; lo equivalente a un día de los costos de producción sin incluir gastos no desembolsables.
- Financiamiento de ventas; las necesidades de un mes, como netex minadas por los costos de producción sin incluir gastos no desembolsables.
- Producto en almacén; las necesidades de una semana.

En base a lo anterior, el capital de trabajo para los primeros diez años de operación, sería el que se presenta a continuación.

Cuadro 17

Requerimientos de capital de trabajo para los primeros diez años de operación.

- En RD\$ -

<u>Año</u>	<u>Capital de trabajo</u>
1	106,791
2	122,465
3	140,872
4	162,657
5	189,064
6	220,384
7	257,851
8	302,664
9	335,402
10	336,295

5.3 Inversión total

Agrupando las anteriores cifras de inversión fija y de capital de trabajo, se tiene la inversión total del proyecto, según se presenta en el siguiente cuadro.

Cuadro 18

Estimación de la inversión total del proyecto para los primeros diez años de operación.

<u>Año</u>	<u>Inversión fija</u>	<u>Capital de trabajo</u>	<u>Inversión total</u>
1	238,276.00	106,791.00	345,067.00
2	238,276.00	122,465.00	360,741.00
3	238,276.00	140,872.00	379,148.00
4	238,276.00	162,657.00	400,933.00
5	238,276.00	189,064.00	427,340.00
6	238,276.00	220,384.00	458,660.00
7	238,276.00	257,851.00	496,127.00
8	238,276.00	302,664.00	540,940.00
9	238,276.00	335,402.00	573,678.00
10	238,276.00	336,295.00	574,571.00

5.4 Fuentes de financiamientos.

Considerando la política de financiamiento de las instituciones oficiales de fomento, se ha planteado la obtención de un préstamo a largo plazo equivalente al 85% de la inversión total para el primer año, y la obtención de una línea de crédito equivalente al 10% de dicha inversión total. Con las bases, la inversión total anterior, sería financiada de la siguiente manera:

Cuadro 18 A

Posibles financiamientos de la inversión inicial

- En RD\$ -

Préstamo a largo plazo	293,307.00
Préstamo a corto plazo (línea de crédito)	34,507.00
Recursos propios	<u>17,253.00</u>
Inversión total	<u><u>345,067.00</u></u>

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Cuadro 19

Costos de producción para los primeros diez años de operación

- RD\$ -

<u>Detalle</u>	<u>1 año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>	<u>10 año</u>
<u>Costo de Posesión</u>	<u>47,505.00</u>	<u>47,611.00</u>	<u>45,833.00</u>	<u>43,888.00</u>	<u>41,758.00</u>	<u>34,173.00</u>	<u>31,627.00</u>	<u>28,843.00</u>	<u>25,797.00</u>	<u>22,466.00</u>
Depreciación maquinaria y equipo	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00	7,733.00
Depreciación edificios	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Interes/inversión fija	26,398.00	25,628.00	23,850.00	21,905.00	19,777.00	17,450.00	14,904.00	12,120.00	9,074.00	5,743.00
Interes/capital de trabajo	4,141.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00
Impuestos y seguros ^{1/}	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00	1,973.00
Cargos diferidos	5,260.00	5,260.00	5,260.00	5,260.00	5,258.00	-	-	-	-	-
<u>Servicios</u>	<u>11,320.00</u>	<u>11,706.00</u>	<u>12,132.00</u>	<u>12,600.00</u>	<u>13,114.00</u>	<u>13,680.00</u>	<u>14,303.00</u>	<u>14,988.00</u>	<u>15,742.00</u>	<u>16,570.00</u>
Energía	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00	2,445.00
Teléfono	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
Combustible	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00	4,608.00
Mantenimiento ^{2/}	3,867.00	4,253.00	4,679.00	5,147.00	5,661.00	6,227.00	6,850.00	7,535.00	8,289.00	9,117.00
<u>Costo de operación^{3/}</u>	<u>52,928.00</u>	<u>55,575.00</u>	<u>58,354.00</u>	<u>61,271.00</u>	<u>64,374.00</u>	<u>67,551.00</u>	<u>70,928.00</u>	<u>74,475.00</u>	<u>78,199.00</u>	<u>82,109.00</u>
Mano de obra	13,50.00	14,648.00	15,380.00	16,149.00	16,956.00	17,804.00	18,694.00	19,629.00	20,611.00	21,641.00
Administración	38,454.00	40,377.00	42,396.00	44,515.00	46,741.00	49,078.00	51,532.00	54,109.00	56,814.00	59,655.00
Gastos generales	524.00	550.00	578.00	607.00	637.00	669.00	702.00	737.00	774.00	813.00
<u>Materia prima y auxiliar</u>	<u>189,645.00</u>	<u>227,560.00</u>	<u>273,085.00</u>	<u>327,254.00</u>	<u>393,274.00</u>	<u>471,895.00</u>	<u>566,295.00</u>	<u>679,569.00</u>	<u>761,668.00</u>	<u>761,668.00</u>
Total	<u>301,428.00</u>	<u>342,452.00</u>	<u>389,404.00</u>	<u>445,013.00</u>	<u>512,480.00</u>	<u>587,299.00</u>	<u>683,153.00</u>	<u>797,875.00</u>	<u>881,406.00</u>	<u>882,813.00</u>
Producción (24/303)	28,074.00	33,687.00	40,426.00	48,516.00	58,218.00	69,856.00	83,830.00	100,599.00	112,752.00	112,752.00
Costo Unitario	10.74	10.17	9.63	9.17	8.80	8.41	8.15	7.93	7.82	7.83

1/ 1% de las inversiones fijas sin edificios ni terreno.

2/ 5% de las maquinarias y equipos más un 10% residual.

3/ Incluyen 30% por prestaciones sociales y un 5% residual.

FUENTE: INDOTEC

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Cuadro 2i

Utilidades antes y después de impuesto sobre la renta

- RD\$ -

<u>Detalle</u>	<u>1 año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>	<u>10 año</u>
Ingresos de venta	294,777.00	353,714.00	424,473.00	509,418.00	611,289.00	733,488.00	880,215.00	1,056,290.00	1,183,896.00	1,183,896.00
<u>Menos:</u>										
Costos totales anuales	<u>301,428.00</u>	<u>342,452.00</u>	<u>389,404.00</u>	<u>445,013.00</u>	<u>512,480.00</u>	<u>587,299.00</u>	<u>683,153.00</u>	<u>797,875.00</u>	<u>881,406.00</u>	<u>882,813.00</u>
Utilidad antes de impuesto	(6,651.00)	11,262.00	35,069.00	64,405.00	98,809.00	146,189.00	197,062.00	258,415.00	302,490.00	301,083.00
<u>Menos:</u>										
Impuesto/renta	-	1,339.00	5,665.00	14,524.00	27,597.00	45,602.00	64,934.00	88,248.00	104,996.00	104,462.00
Utilidad neta	<u>(6,651.00)</u>	<u>9,923.00</u>	<u>29,404.00</u>	<u>49,881.00</u>	<u>71,212.00</u>	<u>100,587.00</u>	<u>132,128.00</u>	<u>170,167.00</u>	<u>197,494.00</u>	<u>196,621.00</u>

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Cuadro 22
Fuentes y Usos de Fondos para los primeros diez años de
operación (RDS)

<u>Detalle</u>	<u>0 Año</u>	<u>1 Año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>
A. Fuentes:										
Capital propio	17,253.00	-	-	-	-	-	-	-	-	-
Préstamo a largo plazo	221,023.00	72,284.00	-	-	-	-	-	-	-	-
Préstamo a corto plazo	-	34,507.00	41,809.00	41,809.00	41,809.00	41,809.00	41,809.00	41,809.00	41,809.00	41,809.00
Ingresos por ventas	-	294,777.00	353,714.00	424,473.00	509,418.00	511,289.00	733,488.00	880,215.00	1,056,290.00	1,183,896.00
Saldo del año anterior	-	-	8,372.00	18,407.00	21,785.00	26,407.00	31,320.00	37,467.00	44,813.00	32,738.00
Total fuentes	238,276.00	401,568.00	403,895.00	484,689.00	573,012.00	679,505.00	806,617.00	959,491.00	1,142,912.00	1,258,443.00
B. Usos:										
Inversión intangible	26,298.00	-	-	-	-	-	-	-	-	-
Inversión fija	211,978.00	-	-	-	-	-	-	-	-	-
Activos corrientes	-	106,791.00	15,674.00	18,407.00	21,785.00	26,407.00	31,320.00	37,467.00	44,813.00	32,738.00
Costos de producción ^{1/}	-	255,866.00	296,814.00	345,544.00	403,098.00	472,695.00	555,099.00	653,499.00	771,005.00	857,582.00
Interes a corto plazo	-	4,141.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00	5,017.00
Interes a largo plazo	-	26,398.00	25,628.00	23,850.00	21,905.00	19,777.00	17,450.00	14,904.00	12,120.00	9,074.00
Amortizaciones ^{2/}	-	-	18,958.00	20,736.00	22,681.00	24,899.00	27,136.00	29,682.00	32,466.00	35,511.00
Impuesto/renta	-	-	1,339.00	5,665.00	14,524.00	27,597.00	45,602.00	64,934.00	83,248.00	104,996.00
Total usos	238,276.00	393,196.00	363,430.00	419,219.00	489,010.00	576,302.00	681,624.00	805,503.00	953,669.00	1,044,916.00
A.B Disponibilidad:	-	8,372.00	40,465.00	65,470.00	84,002.00	103,203.00	124,993.00	153,988.00	189,243.00	213,525.00
Pago de dividendos	-	-	22,058.00	43,685.00	57,595.00	71,883.00	87,526.00	109,175.00	156,505.00	212,632.00
Saldo al año siguiente	-	8,372.00	18,407.00	21,785.00	26,407.00	31,320.00	37,467.00	44,813.00	32,738.00	893.00

^{1/} Costos totales anuales sin incluir depreciaciones, cargos diferidos e intereses

^{2/} Se consideró 2 años de gracia para el préstamo a largo plazo (FIDE).

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Cuadro 23

Rentabilidad sobre la inversión total, el capital propio y el capital de crédito

<u>Detalle</u>	<u>1 año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>	<u>10 año</u>
I. Utilidad neta	(6,651.00)	9,923.00	29,404.00	49,881.00	71,212.00	100,587.00	132,128.00	170,167.00	197,494.00	196,621.00
II. Inversión total	345,067.00	360,741.00	379,148.00	400,933.00	427,340.00	458,660.00	496,127.00	540,940.00	573,678.00	574,571.00
III. Capital propio	17,253.00	44,583.00	83,726.00	128,192.00	179,408.00	237,864.00	305,013.00	382,292.00	450,541.00	490,276.00
Rentabilidad sobre la inversión total (I/II%)	(2)	3	8	12	17	22	27	31	34	34
Rentabilidad sobre el capital propio (I/III%)	(39)	22	35	39	40	42	43	45	44	40

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Cuadro 24

Determinación de la capacidad de pago

- RD\$ -

<u>Detalle</u>	<u>1 año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>	<u>10 año</u>
Utilidad Neta	(6,651.00)	9,923.00	29,404.00	49,881.00	71,212.00	100,587.00	132,128.00	170,167.00	197,494.00	196,621.00
<u>Más:</u>										
Gastos que no representan desembolsos.	14,993.00	14,993.00	14,993.00	14,993.00	14,991.00	9,733.00	9,733.00	9,733.00	9,733.00	9,733.00
Capacidad de pago	8,342.00	24,916.00	44,397.00	64,874.00	86,203.00	110,320.00	141,861.00	179,900.00	207,227.00	206,354.00
<u>Menos:</u>										
Amortizaciones	-	18,958.00	20,736.00	22,681.00	24,809.00	27,136.00	29,682.00	32,466.00	35,511.00	38,843.00
Capacidad de pago disponible	<u>8,342.00</u>	<u>5,958.00</u>	<u>23,661.00</u>	<u>42,193.00</u>	<u>61,394.00</u>	<u>83,184.00</u>	<u>112,179.00</u>	<u>147,434.00</u>	<u>171,716.00</u>	<u>167,511.00</u>

Cuadro 26

Estimación del aporte al producto nacional bruto

- RD\$ -

<u>Detalle</u>	<u>1 año</u>	<u>2 año</u>	<u>3 año</u>	<u>4 año</u>	<u>5 año</u>	<u>6 año</u>	<u>7 año</u>	<u>8 año</u>	<u>9 año</u>	<u>10 año</u>
Intereses	30,539.00	30,645.00	28,867.00	26,922.00	24,794.00	22,467.00	19,921.00	17,137.00	14,091.00	10,760.00
Sueldos y sa larios	36,683.00	38,517.00	40,443.00	42,465.00	44,588.00	46,817.00	49,158.00	51,617.00	54,197.00	56,907.00
Prestaciones sociales	15,721.00	16,508.00	17,333.00	18,199.00	19,109.00	20,065.00	21,068.00	22,121.00	23,228.00	24,389.00
Impuesto/renta	-	1,315.00	5,665.00	14,524.00	27,597.00	45,602.00	64,934.00	88,248.00	104,996.00	104,462.00
Utilidad neta	(6,651.00)	9,923.00	29,404.00	49,881.00	71,212.00	100,587.00	132,128.00	170,167.00	197,494.00	196,621.00
Total valor agregado	<u>76,292.00</u>	<u>96,908.00</u>	<u>121,712.00</u>	<u>151,991.00</u>	<u>187,300.00</u>	<u>235,538.00</u>	<u>287,209.00</u>	<u>349,290.00</u>	<u>394,006.00</u>	<u>393,139.00</u>

INDOTEC

APPENDIX E

OPERATIONAL GRANT PROPOSAL

establishment of an Integrated Rural Development Program
in the Dominican Republic Based on a Transfer
of Methodology from Mexico

To: U.S.A.I.D. Mission
Santo Domingo, Dominican Republic

From: Institutional Development and
Economic Affairs Service, Inc.
Center for Agricultural and
Rural Development

Date: October 16, 1978

PROJECT TITLE: Establishment of an Integrated Rural Development Program in the Dominican Republic Based on a Transfer of Methodology from Mexico

PROJECT LOCATION: Monción, in the Sierra Region of the State of , to the west of Santiago de los Caballeros

NAME AND LOCATION OF GRANTEE: Institutional Development and Economics Affairs Service, Inc. (IDEAS), Center for Agricultural and Rural Development
Dr. Simon Williams, Director and Responsible IDEAS official.
1432 Meeker Drive
Fort Collins, Colorado 80524

CENTRAL HEADQUARTERS: Institutional Development and Economic Affairs Service, Inc. (IDEAS)
Magnolia Star Route
Nederland, Colorado 80466
President: Mr. Brian Beun

CHIEF CONTACT PERSONS: Dr. Simon Williams) in Fort Collins, Colorado
Mr. Eugene Miller)
Mr. Brian Beun in Nederland, Colorado

DATE OF SUBMISSION TO USAID/DR:

TOTAL OPERATIONAL GRANT REQUEST:

TIME FRAME OF GRANT:

PROPOSED IMPLEMENTATION DATE:

A. PROJECT PURPOSE AND DESCRIPTION

Note- It is of critical importance to a clear understanding of the nature of this proposal to define, precisely, how the terms "project" and "program" are used throughout the text.

Project, refers specifically to the establishment of a cannery in Monción, to process guandul (pigeon pea); to market the product in the United States, primarily, and in other international markets as may be possible; to stabilize the market for the guandul locally produced; to increase farmer income from the harvest of guandul; to act as a catalyst for strengthening the local organizations of small-scale, traditional farmers; and, to provide the program a first cash flow leading in the direction of economic self-sufficiency. The project is Stage 1, the point of entry, in a comprehensive, integrated program of rural development.

Program, refers specifically to a methodology for economically self-sufficient, integrated rural development, to be described fully in Section B, Project Background, to follow. The program involves the evolution of three stages of development in the years after the project (to be partially supported by the OPG subject of this proposal) is successfully launched. These three stages integrate agricultural improvement and diversification, new capital formation through the establishment of new businesses and industries, community development, farmer organization, training, technical transfers, diffusion of ownership of wealth and human development. The project, therefore, is just one stage of a long range program. The project, as proposed, covers three distinct but overlapping phases. The program, which embraces the project and goes far beyond it, is long range and has no time limits.

A1. Project Purpose

The purpose of the project may best be stated as a series of objectives to be reached over a three year period, namely:

a. Year 1 -

ai. Establish a development company to finance and manage a cannery to process guandul, with investment and working capital derived from the private sector of the Dominican Republic, international sources of capital and, to the extent possible, from existing associations of small-scale farmers who are to be the ultimate owners and beneficiaries of the cannery.

aii. Establish lines of credit and soft development loans from such federal institutions as the Banco Agrícola and the Central Bank, to facilitate the purchase of the crop at harvest time; the purchase of equipment; construction of the plant; and, related activities. As well, to establish other sources of financing in the private sector, as with the Banco Popular.

aiii. While the cannery is being built and in anticipation of beginning operations at harvest time, 1979, test procedures by buying some of the 1978 crop, canning under contract outside of Monción and test marketing in the United States.

aiv. Construct the cannery, utilizing local labor and materials to the maximum extent possible.

av. Train local people for jobs in the cannery. This involves hiring the plant manager and, even as he supervises the construction of the cannery, he is trained to think of and plan for the use of the plant as a part of a larger program of rural development.

avi. Establish relationships with the Instituto Superior de Agricultura (ISA) in Santiago so that the faculty and students of the food technology department, as well as the pilot food processing laboratory, become an integral part of the training and planning aspects of the Monción project.

avii. Establish relationships with the Department of Agronomy and the Agricultural Research Experiment Station at ISA, as well as with specialists in the Ministry of Agriculture (SEA) to initiate basic investigations into improvements in guandul farming practices and, into crop diversification possibilities.

aviii. Begin working closely with the existing associations of guandul producers in order to strengthen their organizational structure; to open their minds and aspirations to the benefits not only of the cannery but, as well, of the long range program; to create confidence in the project management so that the ideas and hopes of the local people are expressed in the course of a continuous, open dialogue; to provide to project management the means of obtaining baseline data to serve in the process of evaluation; to help project management see clearly and with sensitivity the nature of the local culture, social structure, political reality and centers of power (leadership), so that a base can be laid for long range human development involving youth and women, as well as male adults, farmers or otherwise.

b. Year 2 -

bi. Put the cannery into full operation.

bii. Through the farmer organization and in collaboration with ISA and SEA, accelerate the introduction of improved practices of guandul farming as a means of guaranteeing increased supplies of raw material to support growth in cannery output and as a means of increasing farmer income.

biii. Accelerate research into crop diversification, e.g. beans, fruit, to lead to raw material supplies to the cannery over longer periods of the year, again to increase plant efficiency and profit and to increase farmer income. Such diversification may also lead to other industrial developments than the cannery, e.g. forage and silage crops to support milk and meat production; tree farming; among others.

biv. Expand and deepen discussions and training within the farmer organizations, relating to credit management; savings and investment; organizational procedures; diversification of activities; interaction of economic, social and political development; community and family planning.

c. Year 3 -

ci. Enter into first phase of cannery expansion and diversification.

cii. Start-up of crop improvement and crop diversification.

ciii. Start-up of system of charges for services (technical assistance; training; contact with outside world such as the marketplace, sources of information about technology; government institutions and requirements; among others) extended to farmers from development company, to further improve the state of economic self-sufficiency of the program.

civ. Substitute locally generated income for OPG support funds.

cv. Consolidate organizational activities on both the economic and human development fronts.

cvi. Continue crop and small industry diversification research and development activities.

cvii. Start activities which lead to the replication of the Monción project elsewhere in the Dominican Republic.

A2. Project Beneficiaries

No precise census exists of the number of potential beneficiaries of the program in the area of Monción. Estimates made by ISA staff indicate that about 1,500 guandul farmers might be involved, which, in turn, suggests that roughly 9,000 people may benefit.

The size of farm controlled by members of the producer associations to be involved runs from one-half to five tareas (1/32 to 5/16 of a hectare). The primary source of income in the area is from guandul, which yields are average of 2.5 quintals per tarea, valued at from 7 to 9 pesos per quintal. This means that a farm family with one tarea earns (gross) approximately 20 pesos a year from this cash crop. Survival depends on subsistence farming, with some beans, cassava, mango and other fruits and occasional animals providing the meagre dietary base...all of this combined for the more fortunate families with cash remittances from migrants to Puerto Rico and the United States.

Note- A study of one section of the Sierra around Monción, made in 1970, found that U.S. \$500,000, or approximately half of all the money spent that year, came from New York City.*

Finally, it may be observed that when work for wage is available, average pay is 30 cents per hour.

There can be no doubt that the potential beneficiaries of the project and the program under consideration in this proposal are truly among the poorest of the poor and among the most deprived people generally, in the entire world.

A3. General Description of the Project

In essence, section A2, above, describes the project. To summarize, the project establishes a cannery in Monción, in the Sierra region to the west-southwest of Santiago de los Caballeros, Dominican Republic. Guandul (pigeon pea), the basic cash crop of the region, is to be processed and exported.

The company to be organized to own and operate the cannery will have as its investors representatives of the private sector of the Dominican Republic and associations of farmers now in existence in the region of

*Taken from a paper, "The Sierra: A Development Program in the Dominican Republic," by Norberto A. Quezado of ISA and presented at a conference of the Association of Caribbean Universities and Research Institutes in Curaçao W.I., April 21, 1977. The author goes on to suggest that as migrants get younger and less loyal to family ties, remittances will decline, worsening conditions in the Sierra.

Monción. Other possible sources of equity and working capital may be sought in the U.S. and in other international money markets. Investors who are not local farmers will recover their equity plus a reasonable interest, out of profit and their shares will be turned over to the farmers who, through their associations, will be trained to handle the responsibilities of ownership and management.

Initially, economic benefits will flow to the farmers through the receipt of higher prices for their harvest and such dividends from profit of the cannery as it may be prudent to issue. Gradually, farm family income will rise as a consequence of the introduction of improved production practices on the farm, crop diversification yielding more cash for raw material delivered to the cannery, and more dividends from a more profitable industry. Diversification is intended, as well, to provide a basis for other types of industrial development than the cannery, with all new investments eventually to become 100% locally owned and operated.

The project will involve a unique combination of institutional collaboration. Investment capital will derive from some combination of inputs from the private sector of the Dominican Republic, the private sector of the United States and the international private sector. Loans for equipment and plant construction may be available from the Central Bank of the Dominican Republic, utilizing funds whose origin is the Interamerican Development Bank. The Banco Agrícola of the Dominican Republic has expressed its willingness to extend agriculture credit to the farmers for crop production costs and to the cannery to purchase the harvest. Research and training activities will be in collaboration with the Instituto Superior de Agricultura and the Dominican Ministry of Agriculture. Marketing will be a joint venture with Carnation International of Los Angeles, California.

A4. Conditions Expected at the End of Project.

1. A diversified vegetable and fruit processing plant will be in operation in Monción.
2. A major percentage of the guandul crop in the Monción region will be processed through this plant and marketed externally to the Dominican Republic.

3. Farmer income from guandul alone will be at least doubled by means of receiving a better price for the raw product, plus increased yields due to the introduction of superior practices, plus decreased cost of crop financing, plus the receipt of the first small dividend payments out of the profit of the cannery.
4. At least one-half of the small-scale, poor, traditional farmers in the area will be involved as suppliers and part-owners of the cannery through associations, formally organized, which will be receiving training in governance and in the management of their economic and human resources.
5. The basis will have been laid for crop diversification and diversification of the small business and industry development of the area.
6. The basis will have been laid to integrate the cannery into the full-fledged, rural development program, as described below, in Section B.
7. At least twenty people will be employed in the cannery.
8. A development corporation (the original owner of the cannery) will exist, with a resident staff in Monción, with the capability not only of managing the cannery but, as well, with competence in dealing with all other phases of the program.
9. Lines of action will have drawn up leading to replication of the Monción model elsewhere in the Dominican Republic.

B. PROJECT BACKGROUND

1. History of Proposal Development

On March 15, 1977, IDEAS, Inc. was awarded a Development Program Grant by U.S.A.I.D. (Specific Support Grant--AID/pha-G-1163; P10/T 932-13-950-73-3279207), "to enable IDEAS to significantly strengthen its institutional capacities to multiply the application of methodologies for integrated rural development in LOC's..."

The DPG from A.I.D. took its inspiration from a program of rural development initiated in Mexico in 1966, out of which has emerged a private sector financed, national, fully integrated methodology for rural

development.* The project being proposed herein, in the Dominican Republic, represents the most advanced activity by IDEAS under the terms of reference of its DPG.

Note- While the DPG to IDEAS covers funding to March 15, 1980, no monies from the DPG can be used to cover local costs such as will be involved in the use of the OPG. Thus, the project budget being proposed picks up where the DPG must stop and helps maintain the dynamic thrust into the Dominican Republic. This procedure is indeed an elegant way to ensure that the investment by AID in IDEAS pays off at the point of localized field action.

To facilitate understanding of the history of this project proposal, the following description of the development of Coordinación Rural, A.C. in Mexico is included. This text is taken from a presentation at an International Seminar on Accelerating National and Agricultural Rural Development, University of Reading, Reading, England, sponsored by the International Agricultural Development Service, September, 1976. Some additions and modifications of the original text have been made, to bring the description up-to-date.

The Case of Coordinación Rural, A.C.--Mexico

Coordinacion Rural A.C. (CRAC) is offered as a model of integrated rural development. Though it is located in Mexico, it is intended to be replicated throughout Latin America, and perhaps elsewhere. It is designed to generate dynamic economic self-sufficiency and social change among small-scale, traditional and truly poor agriculturalists. It is based on the use of investment and loan capital derived from the private sector, alone or in joint venture with national or international public institutions for development.

CRAC has its beginnings in 1963. At that time, sponsored by the International Chemical and Minerals Corporation (of Skokie, Illinois, USA), the author began a world wide study of the obstacles to the application of known technology to the lands of the small-scale agricultur-

*The work in Mexico was financed between November 1, 1966 and June 1, 1969, by means of a grant from U.S.A.I.D. to the International Marketing Institute, Cambridge, Massachusetts. When this grant was terminated, the program became part of IDEAS, Inc. and proceeded with financing from several U.S. private foundations. In 1971, IDEAS entered into a joint venture with the Grupo ICA, in Mexico (Ingenieros Civiles Asociados, S.A.) to create Coordinación Rural, A.C. (CRAC), a subsidiary of the Grupo ICA. CRAC, with 100% budget support from the Grupo ICA, has been the operator of the Mexican program ever since. CRAC now has a professional staff of sixteen.

alists of the world. The study was designed to find out how to attract the resources of technology, research capacity, money and management skills, which are held within the private, profit-making sector of the western world, into the processes of agricultural and rural development. This study went on until mid 1966. A tentative solution was outlined in an article, The Role of Private Investment in World Agriculture, which appeared in the November-December, 1965 issue of the Harvard Business Review.

In October 1966 an attempt (funded by USAID) began in Mexico to derive a practice and then a methodology from the concepts of the report published in the Harvard Business Review. In mid 1969, the work was being privately financed; by 1971, financing was almost exclusively derived from Mexican sources.

This study describes the structure of the CRAC model, but it cannot represent the detail and wealth of the human experience, derived from close contact with Mexican campesinos, which has been so significant for the evolution of concepts and modes of action.

WHAT IS CRAC?

CRAC is a non-profit (Asociación Civil) corporation, devoted exclusively to rural development in Mexico. Within Mexico, there are no geographical constraints. CRAC may base its projects in agriculture, mining or forestry; it may relate to the production of raw materials alone or it may concern itself with marketing alone or with processing alone; and it may seek to integrate these several levels of economic activity.

CRAC receives all of its operating budget from Ingenieros Civiles Asociados, S.A. (the ICA Group), a wholly Mexican-owned civil engineering enterprise. CRAC is a subsidiary of ICA. On occasion, CRAC has received grants-in-aid from several foundations in the United States. These donations, over the past five years, have amounted to less than 6% of available operating funds. CRAC is a cost to ICA; but at the same time it represents an investment by ICA in the future of Mexico.

In 1978, CRAC is staffed by seventeen professionals, all Mexican. The representatives of IDEAS, who for over ten years functioned as Manager and Assistant Manager of the program, have been replaced by Mexicans trained for these jobs. IDEAS staff remain as consultants to CRAC. There are, then, five people in management roles; six agronomists; one industrial engineer; one specialist in agrarian law and policy; and, four specialists in rural organizations, training and community development. By 1979, it is intended to expand the staff by at least three, with emphasis on rural industry development, financial promotion and technology transfer.

The CRAC experiment is intended to lead the way for private enterprise off the farm and a center of wealth and knowledge, to share with government in the general attack on poverty, insufficient productivity, and their attendant miseries, which plague the world. In this sense, CRAC is the symbol of a policy intended to help diffuse the ownership and effective management of capital, on a large scale, into heretofore poor and foundering or even abandoned rural areas.

CRAC seeks first to maximize the income from unused and/or under-utilized resources (capital) of land and labour already possessed by the rural poor; second, to bring new capital into play which helps to diversify the sources of income and jobs at a chosen site; ~~third~~, to recover investment capital and then gradually transfer the ownership of this new capital to the rural people, while the rural beneficiaries are being organized and trained for management and operations; and fourth, to encourage the use of newly created wealth, which may not initially be shared by all, to enhance the quality of life for all members of the community.

HOW DOES CRAC WORK?

CRAC develops projects in this way:

Without detailed study, CRAC seeks out (and, increasingly is asked to consider) promising opportunities for investment in rural areas. If technology exists through which to increase productivity or to increase the value to the producer of raw material through processing; if a market can be detected where price and demand seem positively related to production/distribution costs; and, if prior public investment has produced infrastructure (even if it is imperfect) which encourages commercial activity, CRAC goes on to step 2.

Next, and again without detailed study, CRAC reacts to the human resource at the potential project site. If, within some days or weeks of discussion and observation in the community (or communities) which may be involved, no reason is discovered to reject the site, CRAC goes on to the third step, even though the precise method of working with the people has yet to be worked out in the course of project development.

An important aspect of method must be noted at this point. Our experience encourages us to take risks, and to encourage investors to do the same, to establish a close, collaborative relationship with any community, unless, after the investment committed in the fourth step, we find a very potent reason (such as violent political turmoil) to withdraw. In other words, if our impression of the people is favourable, we believe that the investment provides the critical means of winning confidence and entering into organizational and collaborative efforts.

As the third step, CRAC then makes a careful, classically-organized investment feasibility study to determine the financial viability of the project, that is, its ability to generate enough profit to increase local net income sharply and rapidly; to protect and then recover at a modest return the equity capital at risk; and to satisfy government that the benefits claimed can be achieved. If the feasibility study is favourable, CRAC goes on to the fourth step.

In this step, CRAC promotes the investment of the necessary equity and loan capital, from the private sector wherever possible. Nowadays, it also takes advantage of development institutions in the public sector. At present, however, we regard the source of money as less important than the attitude of investors towards such policies as transfer of ownership to rural people and long range (10-20 years) recovery of equity.

If CRAC is successful in promoting the financing of a project, it then proceeds, as a fifth step, to form a stock corporation (such as FORUSA, described below), operating for profit. The corporation, an appealing and familiar type of enterprise to investors, then becomes independent of CRAC and takes full responsibility for the development program. At first, its Board of Directors does not include rural people from the project site; we intend, however, to invite such participation as part of the long range educational process which leads to full self-sufficiency on the part of the

"campesinos." In one case, as of 1978, two representatives of a community sit on a FORUSA Board of Directors.

Finally, CRAC serves as a consultant to each operating company it creates. Ultimately, CRAC hopes to become self-sufficient financially, through payments for services from every company it forms. If this goal is achieved, newly-created income at each project site will, in part, help to extend service to additional sites.

To summarize, the private sector of Mexico, in this case represented by the ICA Group, agrees to experiment on ways to use private sector risk investment as an instrument of rural development. The ICA Group creates and finances the operations of a specialized company, exclusively concerned to direct and carry out the experiment. This specialized company is CRAC. CRAC seeks out, evaluates, determines the feasibility of, promotes, forms and advises profit-making rural development companies (such as FORUSA (below)) which, out of profit, recover equity over time; earn an interest on risk capital; and pay for the professional staff necessary to run the company and to organize and train local people to become owners and operators of everything created for them.

HOW DOES A COMPANY CREATED BY CRAC WORK?

The following description illustrates in more detail just how CRAC forms a development company, FOMENTADORA RURAL S.A. (FORUSA) and just how FORUSA proceeds with its tasks. This illustration is taken from the State of Jalisco, where FORUSA relates to ten communities in an arc south to west to north of Guadalajara. Roughly 2,000 hectares are under management; there are three farmer organizations including several hundred members who collaborate voluntarily.

Preparatory stage

From October 1966 until 1971, the field work was in a preparatory stage. Contacts with people in political, legal, scientific, technological and sociological circles were being established. The general locality was selected on technical considerations and three sites were identified for further investigation. At each of these sites, the 'high-yield' corn (maize) technology which was to be the basis of the first stage of economic change was tested, with the cooperation of a very small number of farmers. These test/demonstrations were used as a point of entry into the several communities involved and a start toward gaining recognition and

confidence. This stage took three years, in part, because it takes time to win a position of leadership, and in part because we had never before attempted such a project and had much to learn, to rethink and to do again. The cost to USAID and several foundations of this preliminary stage was \$300,000.

CRAC, FORUSA and the Sociedades

In 1971, CRAC organized FORUSA. Five investors from the industrial sector of Mexico risked \$3200 as equity; in 1970, equity has increased to over \$50,000 and the investor group has grown to fifteen. In 1971, FORUSA organized a group of 23 farmers, who voluntarily placed their lands (roughly 100 hectares) under management, into the Sociedad del Valle, S.C. (Sociedad Civil - an enterprise which can engage in profit-making businesses, yet pays no income tax, which maximizes the benefits to members). In 1978, 200 farmers have placed 2,000 hectares under FORUSA's management.

The Sociedad del Valle, S.C. is a legally constituted body and is self-governing. It is not a true cooperative. While all members have one vote on matters of governance, each member shares income in proportion to the amount of land he has placed under management and the shares he has purchased in the Sociedad. However, no member may own more than twice as many shares as any other. At death, shares pass to the heirs at current audited value. Shares may not be sold to outsiders.

With regard to credit, the Sociedad is the borrower and distributes funds to its members in accordance with a system of control introduced by FORUSA. The Sociedad is responsible for repayment of loans and all members are mutually responsible for each other's debts. Every farmer who voluntarily solicits membership, and who is accepted, agrees to forego dividends for 5 years as his contribution to the financial stability of the organization, although these dividends accrue to his account, in estate terms. This policy, which took some time to be understood and accepted, recognizes a) that crop disasters can occur and must be provided for; and b) that it is through savings that funds, and the ability to borrow, evolve for reinvestment in new and diverse means of generating income and reducing dependence on the land.

In 1970 and before, the average net income from farming corn and sorghum, per hectare, was about \$50; in 1975, net income per hectare average about \$500. Yields of corn had increased fivefold; yields of sorghum had quadrupled. At present, crops in the area are rain-grown; irrigation, from wells, will be introduced in 1979. The average land holding in the area is 8 hectares, divided into two sections, one usually of much poorer quality than the other.

Larger yields are not the only reasons for larger incomes. Government support prices for grain have doubled since FORUSA began operations. Crop insurance, offered through a federal agency, has been extended to all members of the Sociedad del Valle and covers about 70% of the investment per hectare. Money-lenders have been eliminated and interest rates for production credit have been decreased from an average of 4 to 5% per month to 5% per year. Agricultural inputs are now purchased in bulk, at prices smaller than ever before.

Credit and the Banks

Before 1971, very limited amounts of agricultural credit flowed into the area from federal banks and essentially there was no supervision. In 1971, FORUSA induced private banks to provide \$16,000 of crop cycle credit for the Sociedad and also began its program of resident technical supervision and training, with a staff of two. In 1976, FORUSA supports a staff of seven professionals, including two humanists who work full-time to strengthen local organizations through training for both technical tasks and organizational responsibility. In 1978, crop credit from private banks to the Sociedad is more than \$1,000,000; in addition, these same banks have provided \$240,000 in medium-term credit for the purchase of trucks, tractors and auxiliary equipment. Also in 1978, medium-term credit of \$67,000 has been obtained, to drill wells and prepare several hundred hectares for the first irrigation system ever.

In 1971, FORUSA was related to one village; in 1978, it supervises activities in 10 communities. In 1971, only one Sociedad existed; in 1978, there are three Sociedades, all collaborating with FORUSA.

The extension of interest, and the replication of the FORUSA system, now proceed very rapidly. It is no longer necessary to invest years of time and money to build acceptance and to motivate a new community to collaborate. When either FORUSA or CRAC staff contact the leaders of a village which expresses interest, these leaders are invited to send a delegation to Zapotitan, the site of the first and most dynamic of the Sociedades, for a visit of as many days as they wish. These visits are made without any presence or intervention on the part of FORUSA or CRAC personnel. So far, every such delegation has left with an expressed desire to participate. There is now no restriction on the replication of the CRAC/FORUSA method, anywhere in Mexico, other than funding the pre-operational stage (feasibility analysis, financial promotion and staffing at the FORUSA level).

Not only has the original FORUSA in Jalisco expanded to become a statewide program but a FORUSA has been put into operation in the States of Puebla and Tamaulipas, where climate, crop and marketing patterns and social and cultural background are very different. Areas so different have been deliberately chosen, so as to test both the adaptability of the method and the appeal of the system to private and public sector investors. A variety of other statewide programs is under investigation and we are also considering the extension of the CRAC experience in Mexico into Central America and to zones of agricultural poverty within the United States, for example to the lands of U.S. Indians embraced within reservations.

Stages of Development

FORUSA attempts to move through three logically related stages, all now in evidence in Jalisco:

First, it concentrates on increasing the return from the capital already in the hands of the rural poor, mainly their land and their labour. This provides the most rapid means of increasing income, a vital consideration in gaining confidence and establishing the professional authority of the FORUSA staff. The tangible results so obtained encourage farmers to participate in growing numbers. Since the activity is concrete, it simplifies the early aspects of training which concentrate on technical and financial matters and only later on begin to attack more subtle and

complex issues such as responsibility to the group and to the community, or concepts of political action.

Second, as existing resources begin to yield substantially larger net income, and as participation by local people grows significantly, FORUSA seeks to identify and promote new types of economic activity which form other wealth-producing capital assets than land, such as a store, an agricultural machinery service center, a dairy, a feed mill, an oil extractor plant (for example, to process soy bean and safflower), a textile enterprise based on local raw material such as wool, or one to fabricate parts for nearby large-scale industry, among many others. The long range aspects of this second stage turn on four main policies: a) all of the risk, until success is demonstrated, is taken by FORUSA; b) all of the equity capital at risk is intended to be recovered from profit, over a period which may be as long as twenty years or even more, with a modest rate of return intended more to symbolise the meaning of "investment" than to enrich the already advantaged investor; c) all enterprises created by FORUSA are to be transferred to the ownership of the Sociedad or another local entity formed for the purpose; and, d) no transfer of ownership is to take place until the local people are trained for effective management and responsible ownership.

For the process of rural development, it is considered essential to diffuse the ownership of wealth-producing capital instruments. In the first place, there can never again be land enough for all rural people who wish to remain on the land and who have rights to land under national law and constitutional thrust. More and more in the future, rural people must have access to sources of income other than land, if they are to stay and survive in rural areas at an acceptable level of social cost.

In addition, the land area held or controlled by the multitude of rural poor, no matter how efficiently managed, simply cannot yield the income we might agree is necessary to satisfy the desires of a family of 8 to 10 (a size very common among the rural poor of all continents). Only by integrating income generated from the land with income otherwise derived can the return to rural families continue to grow over time.

Finally, we believe that no combination of improved agricultural practice with jobs created through non-agricultural enterprise can provide income for all rural people. There are too many now; and their numbers are

increasing too fast. While it is obviously not a total solution to what may well be an insoluble problem, it is nonetheless imperative that more rural people own shares in wealth-producing enterprises which yield income, even if they do not yield work.

In the third stage, as total income at the project site grows, from a more and more diversified base, FORUSA deliberately fosters a dynamic program of community development in a social and cultural sense. Here roads, schools and homes are improved, a supply of potable water is assured, and other projects are introduced, concerned with other aspects of health, family planning, entertainment and recreation, making the physical environment of the community more attractive, political action, formation of exportable skills among youth (some of whom simply must emigrate in the future), and other concerns. This aspect of the CRAC/FORUSA program is the most basic of all and symbolizes the ultimate goal of the effort. It attempts to make income a tool of service. It is through this stage that we combat the tendency for a Sociedad, where concerns are economic, to form an elite, inwardly-turned group and through it we also try to substitute the classical objective of work for a wage by the concept of work without a wage in service of the community, so that the natural urge to use one's intelligence and skills finds an outlet.

During the early years of a FORUSA project, most ideas for change in stages 1 and 2 tend to derive from FORUSA's staff. This is a natural result of the ignorance (not the lack of intelligence) and inexperience of the local participants. On the other hand, the goals of community development implied in the third stage are, for the most part, perceived by members of the community, and FORUSA staff, while encouraging discussion, tend to respond with technical and, sometimes, financial help (loans from FORUSA or negotiated from the banks).

While the first two stages are obviously long range activities (indeed they are never-ending) it is the third stage which demands the presence of FORUSA (or an equivalent catalytic force) over a period of many, many years, perhaps decades. To change the ground rules of a local culture so that the changes themselves become rules governing behaviour, is perhaps the most ambitious of goals. To undertake the task, change agents must be continuously present for decades if necessary.

All this illustrates two fundamental weaknesses in development planning and financing which the CRAC/FORUSA model is attempting to overcome. One is the tendency to introduce agents of change for relatively short periods of time, usually defined by an agency supplying funds and/or by the lack of permanent political support. CRAC takes as a constant the demand for long-range participation at a project site and hence has attempted to free itself from dependence either on grants or on political support.

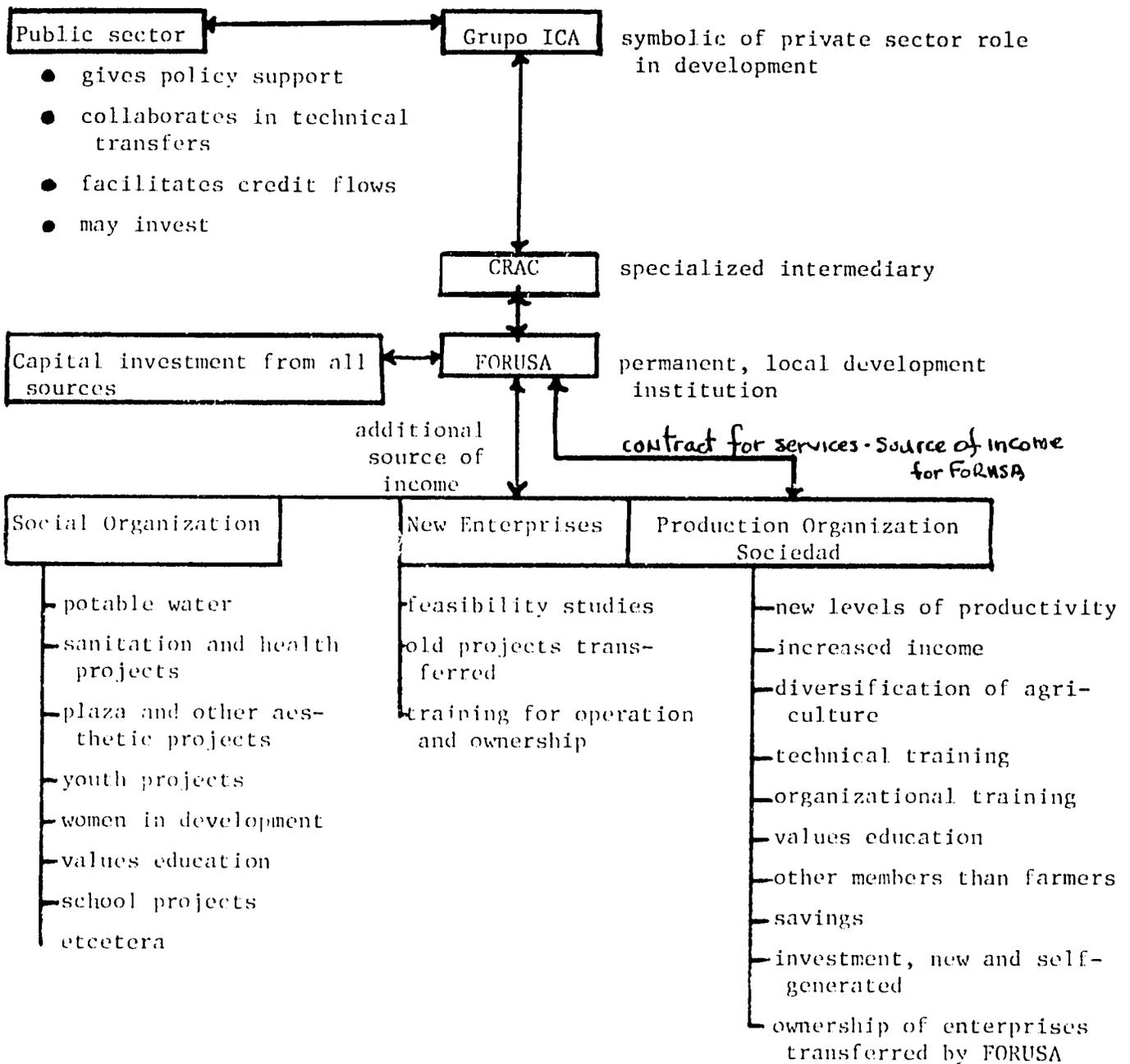
Of course, no rural development program in the underdeveloped nations can be independent of political support in the sense of policy. But by giving priority to private sector backing, CRAC eases away from the impact of political whimsy which characterizes shifts in public power. Beyond this, each FORUSA is intended to become financially self-sufficient, that is, to earn enough to support its costs. Thus, like any other business enterprise which succeeds, FORUSA self-finances its existence and its growth.

General Considerations

This leads to a final operational point about FORUSA.

The entire concept of CRAC takes its form from a consideration that every resource applied to rural development must be managed as an investment, not as an expense, that is, the application of resources must yield a new increment of wealth. The management of investment capital we think of as a business. When applied to rural development, we think of a product called "development" which, for all of its fuzziness as perceived through different eyes, is, nonetheless a clearly definable end product.

Within the view and in light of all over the foregoing, the CRAC/FORUSA methodology may be represented diagrammatically this way:



B2. Prior Project Experience

With specific regard to the project proposed for an OPG, IDEAS, supported by DPG funds, has over the past year:

1. Identified Monción as a site for a program.
2. Isolated a point of entry into the community as being a cannery for processing guandul.
3. Gained the acceptance of the farmers, through their associations of producers.
4. Completed a feasibility study of the cannery project, including an export marketing study in collaboration with Carnation International.
5. Obtained a decision by Carnation International to contract the marketing operation, taking the product at the shipping deck of the cannery; at the same time, Carnation International has agreed to:
 - a. allow the cannery to sell its product elsewhere if by so doing a better net price can be obtained; and,
 - b. participate in technical studies and market studies bearing upon the introduction of new crops to the Monción area and, ~~upon the processing and marketing of~~ these crops as supplemental sources of income to guandul.
6. Established a close relationship with the Instituto Superior de Agricultura and the Ministry of Agriculture.
7. Established and nurtured contacts at the Central Bank and Banco Agrícola which seem to ensure the availability of long term equipment and construction loans, as well as adequate lines of crop credit (production credit and harvest purchase credit).
8. Established and fostered broad relationships within the private sector, most particularly with the members of the Santiago Asociación para el Desarrollo, which have led to assurances of the availability of investment capital.
9. Established contacts with other potential sources of capital, outside of the Dominican Republic, e.g. Technoserve, Inc. and ADELA, who stand ready to review the investment prospectus and to enter into a joint venture with D.R. investors, including farmers.
10. Established other contacts, e.g., the Fundación Dominicana para el Desarrollo, through which observations have been made and recorded for reference if and when IDEAS feels ready to expand from Monción into other parts of the Dominican Republic.

B3. Host Country Activity in the Project Area

1. The Instituto Superior de Agricultura, in collaboration with the Santiago Asociación para el Desarrollo, has evolved a long range development plan for the Sierra. It was because of the pre-existence of this plan that IDEAS was so quickly led to the project/program potential of Monción. Too, it was because of Plan Sierra that IDEAS has been able to collaborate so closely with ISA in studying and planning for the project and, that IDEAS was able to establish such strong ties to the private sector.
2. The Ministry of Agriculture has had a resident agronomist in Monción for some time. This has facilitated the deepening of our understanding of the agronomic potential of the area around Monción and simplifies drawing upon Ministry resources in the evolution of both the project and the program.
3. The Government of the Dominican Republic has already invested \$40 million in the region for the largest hydroelectric installation in the country. The Tavera Dam on the Yague del Norte River is only the first stage in a larger program to harness the water power and water for irrigation which lies in the Sierra. IDEAS cannot, at this stage, assess the implications of these works for the future of its Monción program, but surely the impact can only be beneficial.
4. The "Forest Law" of the government, passed in 1967, prohibited logging in the Sierra until an effective management plan could be developed. In 1971, FAO published the bases for such a management plan but it has yet to be implemented. In 1976, strong pleas were made by the Central Bank and the Planning Office of the Government for more refined studies and subsequent action. All of this has considerable significance for IDEAS program planning, since Monción is surrounded by existing and potential forest resources which could provide raw material for a wide variety of wood industries.
5. In 1975, the International Fertilizer Development Center, Muscle Shoals, Alabama, completed a study of fertilizer uses and needs in the Dominican Republic. The report is a most valuable summary of the agricultural potential of different crops and regions of the country and has already served IDEAS by encouraging its planning for better practices and crop diversification in the Monción area.

C. PROJECT ANALYSIS

C1. Economic Effects of the Project/Program

There is no precise way to quantify the economic effects of the project and the program it initiates, at this time. The following statements, therefore, are estimates only:

1. Over the three year period covering the project, which should be thought of as the introductory period which leads to an economically self-sufficient program over the long run, roughly 1500 farmers (9000 or more people) should at least double their farming income. Beyond three years, if we extrapolate results from IDEAS experience in Mexico, it is reasonable to estimate ten-fold increases in net income from all aspects of the program, within ten years.

Thus, the project cost, calculated as per capita cost, should first be measured as cost per three years or cost per year per capita for three years; and, second, be determined as cost per year per capita per ten or more years. As with any business venture, start-up costs are always higher than operating costs are during an advanced stage.

2. Since one objective of the program is to demonstrate how adequate investment of the type proposed can lead both to profit and program self-sufficiency in a financial sense, it is intended that the program in Monción, which is to be helped start as a pioneering venture with OPG funds, be replicated elsewhere without any subsidy. Projected out over a decade, therefore, and, once again drawing upon the Mexican experience of IDEAS it is not being overly optimistic to suggest that the OPG funds, in a decade, will stimulate significant economic and social change for the better for ten times the number of beneficiaries of the Monción program.

3. Crop diversification and concomitant development of rural industries are basic components of the program in Monción. Success in these aspects of the program inevitably will create jobs (for example, the cannery in Monción will be an optimum blend of labor and capital intensive technology and should create 20 to 30 new jobs) and catalyze the creation of training systems for a variety of trades. As a diverse group of businesses and industries emerge, they will, in turn, provide a market for the services of

truckers, electricians, carpenters, bookkeepers, plumbers, mechanics, shops and the usual array of economic activity which always characterizes the economic satellites of primary manufacturing centers. The training systems in Monción, as well, can become a source of supply of skilled labor to serve development over the whole of the Sierra.

C2. Appropriateness of Project Technology

The technology selected for the cannery represents a careful balance between machinery absolutely necessary for the control of quality and cost and, operations which maximize the use of labor. ^{In} the plan of project development, as noted in Sections A, sub-sections a, b and c, a manager-trainer will be hired many months before the plant is built and equipped to prepare the labor-force. It may be observed that canneries have been established in many countries of the world without serious problems in training a reliable and skilled body of employees and the fact is that there are a variety of canneries in the Dominican Republic which had to go through the same processes as will be the case in Monción. In other words, no major obstacles are foreseen with regard to the appropriateness of the technology in terms of the trainability of the local people.

In support of this conclusion, the feasibility study already completed reveals that all of the support structure for the cannery exists in Monción. Water, power, land upon which to build, roads over which the farmers can deliver their crops to the plant, all these are available in Monción. Santiago is only an hour away by car and truck which means that critical maintenance and shipping support facilities will be at hand as needed. As nearly as all restraints on plant operations and marketing can be anticipated, there would appear to be no obstacles facing the project. The people of Monción, the farmer associations, government agencies and private enterprise supporters are eager to begin the project and promise every kind of effort to ensure success.

C3. Sociocultural Factors

While poor and undereducated, the sociocultural structure of the area seems in every way as supportive of the program objectives as can be in a

rural setting, the historical limitations of which are classical and universal. A factor which works to the favor of both the project and the program is the change through which the people of Monción have gone through since the passage of the Forest Decree in 1967. Traditionally, these people were culturally and economically related to logging and the multitude of craft products made of wood. Too, such cultivation as was entered into was of the "slash and burn" type. In the decade since cutting was absolutely prohibited except for firewood, the people learned a great deal about adjustment to new conditions of life and livelihood and the IDEAS' project will benefit a great deal from this learning process. The people clearly perceive the benefits an integrated, long range program of rural development can bring and, as has been said repeatedly, they are eager for the project to proceed.

Another plus is the social structure of the zone. Monción is still a small town but it already shows the incipient trend toward the characteristics of a rural city, with a variety of services, such as stores, access via paved roads, among others. Monción, therefore, is a natural setting for a rural industry location, wherein a stable labor force exists, yet this force is not so separate from neighboring farms that an urban-rural separation, with resultant tension, need be created by the project and the planned diversification of industry and business in the years ahead. In other words, Monción, as the logical location of industry, facilitates area development rather than causing a separation between farmers and town dwellers.

With regard to the impact of the project on women, several factors which will affect them may be noted. First, the operations of a cannery lend themselves to the employment of women. Canneries the world over demonstrate this as fact. Second, and far more important in the long run, the program which emerges out of the project emphasizes a fundamental shift in values toward the use of newly created wealth for improvements in the quality of personal and community life. Thus, once the cannery is established, it is intended to encourage the farm families within the producer associations to learn and act upon health care, nutrition, budgeting, home improvement and other facets of home life which, in the process of change, do not violate cultural form or social mores. Beyond these possibilities, it is impossible to predict in advance just how to integrate women more tightly in the program plan, except for one additional thrust.

As population in the rural areas of the world has grown out of proportion to opportunities for gainful and acceptable work by youth moving into adulthood, discontent has caused ruptures of many kinds in family life. The result often is most burdensome for mothers. Young people migrate out. Family loyalties are weakened. Violent response may on occasion explode. With this in mind, the program envisions a time when corporate income is sufficient to bear the cost both of skill training for youth, male and female, and financing skilled tradespeople into small businesses not only in Monción but, as well, in the region.

In support of all these objectives, the project budget includes an input from staff women and consultants in the field of "women in development." At least this will guarantee priority attention to these matters and a sensitivity which an all male staff could not hope to express adequately.

Finally, it may be noted that the project has aroused no opposition nor is it conceivable that anyone would be harmed by the development. This is especially true in Monción itself and in the surrounding farming territory. Some competition for guandul supplies may develop early on, affecting canneries outside the project sphere of influence. However, even this effect should be small and would be cancelled out as the project develops a capability to increase productivity and to diversify the harvest. Insofar as the export market is concerned, our market analysis reveals that this market is not satisfied, either in quantity or quality.

C4. Project Relationship to Guidelines Governing Funding of PVOs

Section C1, above, indicates that the project deals directly with people who are among the poorest majority in the Dominican Republic. Their existing economic and social condition stands as eloquent evidence that they remain essentially beyond the reach of public services.

Section B3, above, details just how the project ties in with host country, complementary efforts. It remains to be said, only, that the U.S. Peace Corps has also been at work in the area, in a program whose objective is the creation of savings cooperatives. IDEAS' staff has been in close touch with these volunteers and intends to draw on their presence and their experience.

Several of the foregoing Sections have referred to one goal of the program of IDEAS, namely, that of using the Monción model as a base on which to construct a national program. The potential for doing this is very great, as is attested to by our experience in Mexico. In concept, wide scale application will depend exclusively on domestic resources. It is for this reason that the Monción project and program will include the broadest possible participation by private and public sector institutions. In combination, these institutions have all of the financial, educational, technical and attitudinal resources necessary to replicate the program (not always based on a cannery, at the outset, of course) throughout the nation. Indeed, in fostering interest in the Monción project, discussion has always centered on its demonstration value.

C5. Plan for Institutionalization of Proposed Activity

Step 1- IDEAS selects and trains cannery manager.

Step 2- Cannery manager trains workers--IDEAS advises and participates

Step 3- IDEAS selects and trains program manager--advises and works alongside program manager to ensure that project development catalyzes program development.

Coincident

Step- All collaborating institutions are kept informed at all stages of problems and progress.

Step 4- Even as diversification of crop and industrial activity are instituted in Monción, project and program staff will be studying opportunities to replicate the methodology elsewhere.

Step 5- With project success, private and public sector sources of support will be encouraged to establish a national, rural development organization, modelled after Coordinación Rural, A.C., in Mexico

Step 5, as well as those steps which will have been taken to ensure the profitability of the Monción venture, will make the program, nationally as well as locally, independent of external donor financing.

This was the case of IDEAS program in Mexico. The Dominican Republic contains all of the necessary resources and support facilities to assure program independence; many of those who control these resources have already expressed interest in growing out of the Monción activity into a national scheme of integrated rural development.

D. PROJECT DESIGN AND IMPLEMENTATION

D1. Implementation Plan

The project will be carried out directly under the supervision of a resident IDEAS' staff member. No subgrants or contracts will be made, although it is possible that consultants will be utilized, e.g., from the faculty of the Instituto Superior de Agricultura for research and training; from other sources bearing upon women in development; among others.

It is assumed that IDEAS can locate and hire a competent cannery manager, within the Dominican Republic. With regard to IDEAS' project management, overall supervision from headquarters staff is already assured; and, several interested candidates for the job of resident supervisor have already been contacted. There is little doubt that this job can be filled promptly, once the OPG is an assured source of income.

The OPG will be made directly to IDEAS. The Center for Agricultural and Rural Development will be IDEAS' locus of operational responsibility. Disbursement, procurement and fiscal control will be the responsibility of the Office of the President of IDEAS. All procedures will be in keeping with methods already in effect which take their design from the handling of other U.S. Government Funds (AID and other agencies) granted to IDEAS in years past.

The schedule of required actions is perceived this way:

a. Independently of the OPG, DPG funds will be used to finalize the investment prospectus covering the Monción cannery. This will be completed by November 30, 1978.

b. Independently of the OPG, it is expected to obtain support from Carnation International, Banco Agrícola, the Central Bank and the interested D.R. private investors to purchase a small part of the 1978

guandul harvest, contract its canning and, test market in the U.S. A determination of the reality of this scheme will be made by November 15, 1978.

c. Assuming OPG approval by January 1, 1979, the combined flow of funds from the grant and from investors will be utilized to have the plant manager and place the IDEAS resident in place, in Monción. These people will immediately negotiate the purchase of equipment and construction of the plant. Further, plans will be laid for worker training and for close, continuing interaction with the farmers.

d. IDEAS' central staff will monitor all of the foregoing, closely.

No request for waivers of AID rules and regulations is anticipated.

E. MEASUREMENT AND EVALUATION

E1. Schedule of Planned Accomplishment

Reference Point - Start - October 31, 1978

a. November 15, 1978. Completion of purchase of guandul for market test; completion of contract to process; completion of marketing plan.

b. November 30, 1978. Completion of investment prospectus.

c. January 1, 1979. Completion of legal formation of operating company; completion of financial promotion, including equity, working capital, capital for purchase of equipment and plant construction.

d. January, 1979. Completion of purchase of equipment and contracting construction; site for construction purchased.

Note- All of the foregoing steps are self-evaluating in that the test is completion of a task with fixed dimensions.

e. January-December, 1979 -

i. training of labor force for cannery;

ii. strengthening producer associations, that is, in

in terms of organizational procedures, fiscal control, transmission of improved farming practices, management of credit, future planning for crop diversification, inter-relationships with program management, methods of task analysis and task implementation relating to felt needs for community, family and personal life style improvement.

iii. designing and implementing research and practical systems of technology transfer, in cooperation with ISA and SEA, bearing on improved production practices for guandul and on crop diversification;

iv. focussing in on the potential for other investment opportunities than the cannery.

Note- In the course of the year 1979, careful and continuous assessment of results, causal factors, obstacles to progress, range of impact, level of involvement of the farmers and their families, level of interaction with investors and with concerned government agencies, will be made.

At the outset, a baseline study of the economic and social conditions of the people to be affected will be made, to provide the necessary reference points for the measurement of change during the life of the project.

f. January-December, 1980

i. cannery in full operation, testing for the means to maximize the use of labor while maintaining quality and competitive production costs;

ii. plans started to enlarge plant, in anticipation of higher yields due to the introduction of superior farming practices;

iii. plans started to extend the time during each year when the plant remains in operation, in anticipation of crop diversification and diversification of the product line;

iv. analysis started of the value to the local educational facilities of having the cannery in the community and using its technology, marketing, management and financial system to enrich and enliven the school curriculum;

v. continue work with farmer organizations and farm families in all aspects of life in the community;

vi. continue and both broaden and deepen studies leading to new investments...develop these to the determination of feasibility as rapidly as possible.

g. January-December, 1981

i. implementation of diversification of cannery product line and of plant expansion;

ii. introduce a charge for services against each farmer, in accordance with land area placed under corporate management;

iii. start some form of cash dividend payment to farmer associations out of cannery profit; start repayment of equity capital to non-farmer stockholders as the beginning movement toward full transfer of ownership to the farmer associations;

iv. initiate at least the second capital investment in commerce or industry, with attendant training of labor and new dimensions of discussion within associations and between program management and farmers (farm families);

v. put into action one or more significant projects concerned with community development;

vi. begin national promotion by means of systematic invitations to visit Monción on the part of key government officials, leaders in the private sector, representatives of international financial and development institutions and, as well, farmers from other parts of the Dominican Republic;

vii. arrive at a point of financial self-sufficiency within the project/program to permit further development independently of OPG funds.

Note- measurement of results and evaluation in terms of the goals of integrated rural development will be a continuous function. Methods will be consistent with AID guidelines.

E. FINANCIAL PLAN

1. January - December, 1979

a. U.S. personnel - Salaries

- Supervisor - Resident in the D.R. 15,000
- Program Director - Resident in U.S.
equivalent 6 man-months 18,000

b. Dominican personnel - Salaries

- Plant Manager-Trainer 12,000
- Total Direct Salaries 45,000
- Indirect Benefits @ 15% 6,750

c.	Training Cost - in U.S. for Dominican plant manager, 2 man-months	2,500
d.	Consultants	10,000
e.	Travel, to and from the U.S. <u>and</u> within the D.R.	10,000
f.	Other direct costs, @28% of sum of above items	20,790
g.	Two vehicles plus maintenance @ 20% of cost	<u>12,000</u>
	Total Year 1	107,040*

*Note- The OPG budget is _____% of the total project cost.
The balance is the result of equity, investment and the
value of the marketing services provided by Carnation
International.

2. January - December, 1980

a.	U.S. personnel - Salaries	
●	Supervisor - Resident in the D.R.	16,200
●	Program Direction	<u>18,000</u>
	Total Direct Salaries	34,200
	Indirect Benefits	5,130
b.	Consultants	15,000
c.	Travel	10,000
d.	Other Direct Costs	18,012
e.	Vehicle maintenance	<u>2,000</u>
	Total Year 2	84,342

3. January - December, 1981

a.	U.S. personnel - Salaries	
●	Supervisor - Resident in the D.R. $\frac{1}{2}$ time ($\frac{1}{2}$ paid by income generated by locally)	8,748
●	Program Direction ($\frac{1}{2}$ paid by income generated locally)	<u>10,000</u>
	Total Direct Salaries	18,748
	Indirect Benefits	2,812

b.	Consultants	10,000
c.	Travel (50% supported by income generated locally)	5,000
d.	Other direct costs	<u>10,236</u>
	Total Year 3	46,796*

*Note- The three year total OPC budget of \$238,178 is _____%, approximately of the equity capital invested in the project by the end of three years, plus the accumulated value of the marketing services provided by Carnation International.

OPERATIONAL GRANT PROPOSAL

Establishment of an Integrated Rural Development Program
in the Dominican Republic Based on a Transfer
of Methodology from Mexico

To: U.S.A.I.D. Mission
Santo Domingo, Dominican Republic

From: Institutional Development and
Economic Affairs Service, Inc.
Center for Agricultural and
Rural Development

Date: October 16, 1978

PROJECT TITLE: Establishment of an Integrated Rural Development Program in the Dominican Republic Based on a Transfer of Methodology from Mexico

PROJECT LOCATION: Monción, in the Sierra Region of the State of , to the west of Santiago de los Caballeros

NAME AND LOCATION OF GRANTEE: Institutional Development and Economics Affairs Service, Inc. (IDEAS), Center for Agricultural and Rural Development
Dr. Simon Williams, Director and Responsible IDEAS official.
1432 Meeker Drive
Fort Collins, Colorado 80524

CENTRAL HEADQUARTERS: Institutional Development and Economic Affairs Service, Inc. (IDEAS)
Magnolia Star Route
Nederland, Colorado 80466
President: Mr. Brian Beun

CHIEF CONTACT PERSONS: Dr. Simon Williams) in Fort Collins, Colorado
Mr. Eugene Miller)
Mr. Brian Beun in Nederland, Colorado

DATE OF SUBMISSION TO USAID/DR:

TOTAL OPERATIONAL GRANT REQUEST:

TIME FRAME OF GRANT:

PROPOSED IMPLEMENTATION DATE:

A. PROJECT PURPOSE AND DESCRIPTION

Note- It is of critical importance to a clear understanding of the nature of this proposal to define, precisely, how the terms "project" and "program" are used throughout the text.

Project, refers specifically to the establishment of a cannery in Monción, to process guandul (pigeon pea); to market the product in the United States, primarily, and in other international markets as may be possible; to stabilize the market for the guandul locally produced; to increase farmer income from the harvest of guandul; to act as a catalyst for strengthening the local organizations of small-scale, traditional farmers; and, to provide the program a first cash flow leading in the direction of economic self-sufficiency. The project is Stage I, the point of entry, in a comprehensive, integrated program of rural development.

Program, refers specifically to a methodology for economically self-sufficient, integrated rural development, to be described fully in Section B, Project Background, to follow. The program involves the evolution of three stages of development in the years after the project (to be partially supported by the OPG subject of this proposal) is successfully launched. These three stages integrate agricultural improvement and diversification, new capital formation through the establishment of new businesses and industries, community development, farmer organization, training, technical transfers, diffusion of ownership of wealth and human development. The project, therefore, is just one stage of a long range program. The project, as proposed, covers three distinct but overlapping phases. The program, which embraces the project and goes far beyond it, is long range and has no time limits.

A1. Project Purpose

The purpose of the project may best be stated as a series of objectives to be reached over a three year period, namely:

a. Year 1 -

ai. Establish a development company to finance and manage a cannery to process guandul, with investment and working capital derived from the private sector of the Dominican Republic, international sources of capital and, to the extent possible, from existing associations of small-scale farmers who are to be the ultimate owners and beneficiaries of the cannery.

aii. Establish lines of credit and soft development loans from such federal institutions as the Banco Agrícola and the Central Bank, to facilitate the purchase of the crop at harvest time; the purchase of equipment; construction of the plant; and, related activities. As well, to establish other sources of financing in the private sector, as with the Banco Popular.

aiii. While the cannery is being built and in anticipation of beginning operations at harvest time, 1979, test procedures by buying some of the 1978 crop, canning under contract outside of Monción and test marketing in the United States.

aiv. Construct the cannery, utilizing local labor and materials to the maximum extent possible.

av. Train local people for jobs in the cannery. This involves hiring the plant manager and, even as he supervises the construction of the cannery, he is trained to think of and plan for the use of the plant as a part of a larger program of rural development.

avi. Establish relationships with the Instituto Superior de Agricultura (ISA) in Santiago so that the faculty and students of the food technology department, as well as the pilot food processing laboratory, become an integral part of the training and planning aspects of the Monción project.

avii. Establish relationships with the Department of Agronomy and the Agricultural Research Experiment Station at ISA, as well as with specialists in the Ministry of Agriculture (SEA) to initiate basic investigations into improvements in guandul farming practices and, into crop diversification possibilities.

aviii. Begin working closely with the existing associations of guandul producers in order to strengthen their organizational structure; to open their minds and aspirations to the benefits not only of the cannery but, as well, of the long range program; to create confidence in the project management so that the ideas and hopes of the local people are expressed in the course of a continuous, open dialogue; to provide to project management the means of obtaining baseline data to serve in the process of evaluation; to help project management see clearly and with sensitivity the nature of the local culture, social structure, political reality and centers of power (leadership), so that a base can be laid for long range human development involving youth and women, as well as male adults, farmers or otherwise.

b. Year 2 -

bi. Put the cannery into full operation.

bii. Through the farmer organization and in collaboration with ISA and SEA, accelerate the introduction of improved practices of guandul farming as a means of guaranteeing increased supplies of raw material to support growth in cannery output and as a means of increasing farmer income.

biii. Accelerate research into crop diversification, e.g. beans, fruit, to lead to raw material supplies to the cannery over longer periods of the year, again to increase plant efficiency and profit and to increase farmer income. Such diversification may also lead to other industrial developments than the cannery, e.g. forage and silage crops to support milk and meat production; tree farming; among others.

biv. Expand and deepen discussions and training within the farmer organizations, relating to credit management; savings and investment; organizational procedures; diversification of activities; interaction of economic, social and political development; community and family planning.

c. Year 3 -

ci. Enter into first phase of cannery expansion and diversification.

cii. Start-up of crop improvement and crop diversification.

ciii. Start-up of system of charges for services (technical assistance; training; contact with outside world such as the marketplace, sources of information about technology; government institutions and requirements; among others) extended to farmers from development company, to further improve the state of economic self-sufficiency of the program.

civ. Substitute locally generated income for OPG support funds.

cv. Consolidate organizational activities on both the economic and human development fronts.

cvi. Continue crop and small industry diversification research and development activities.

cvii. Start activities which lead to the replication of the Monción project elsewhere in the Dominican Republic.

A2. Project Beneficiaries

No precise census exists of the number of potential beneficiaries of the program in the area of Monción. Estimates made by ISA staff indicate that about 1,500 guandul farmers might be involved, which, in turn, suggests that roughly 9,000 people may benefit.

The size of farm controlled by members of the producer associations to be involved runs from one-half to five tareas (1/32 to 5/16 of a hectare). The primary source of income in the area is from guandul, which yields are average of 2.5 quintals per tarea, valued at from 7 to 9 pesos per quintal. This means that a farm family with one tarea earns (gross) approximately 20 pesos a year from this cash crop. Survival depends on subsistence farming, with some beans, cassava, mango and other fruits and occasional animals providing the meagre dietary base...all of this combined for the more fortunate families with cash remittances from migrants to Puerto Rico and the United States.

Note- A study of one section of the Sierra around Monción, made in 1970, found that U.S. \$500,000, or approximately half of all the money spent that year, came from New York City.*

Finally, it may be observed that when work for wage is available, average pay is 30 cents per hour.

There can be no doubt that the potential beneficiaries of the project and the program under consideration in this proposal are truly among the poorest of the poor and among the most deprived people generally, in the entire world.

A3. General Description of the Project

In essence, section A2, above, describes the project. To summarize, the project establishes a cannery in Monción, in the Sierra region to the west-southwest of Santiago de los Caballeros, Dominican Republic. Guandul (pigeon pea), the basic cash crop of the region, is to be processed and exported.

The company to be organized to own and operate the cannery will have as its investors representatives of the private sector of the Dominican Republic and associations of farmers now in existence in the region of

*Taken from a paper, "The Sierra: A Development Program in the Dominican Republic," by Norberto A. Quezado of ISA and presented at a conference of the Association of Caribbean Universities and Research Institutes in Curacao W.I., April 21, 1977. The author goes on to suggest that as migrants get younger and less loyal to family ties, remittances will decline, worsening conditions in the Sierra.

Monción. Other possible sources of equity and working capital may be sought in the U.S. and in other international money markets. Investors who are not local farmers will recover their equity plus a reasonable interest, out of profit and their shares will be turned over to the farmers who, through their associations, will be trained to handle the responsibilities of ownership and management.

Initially, economic benefits will flow to the farmers through the receipt of higher prices for their harvest and such dividends from profit of the cannery as it may be prudent to issue. Gradually, farm family income will rise as a consequence of the introduction of improved production practices on the farm, crop diversification yielding more cash for raw material delivered to the cannery, and more dividends from a more profitable industry. Diversification is intended, as well, to provide a basis for other types of industrial development than the cannery, with all new investments eventually to become 100% locally owned and operated.

The project will involve a unique combination of institutional collaboration. Investment capital will derive from some combination of inputs from the private sector of the Dominican Republic, the private sector of the United States and the international private sector. Loans for equipment and plant construction may be available from the Central Bank of the Dominican Republic, utilizing funds whose origin is the Interamerican Development Bank. The Banco Agrícola of the Dominican Republic has expressed its willingness to extend agriculture credit to the farmers for crop production costs and to the cannery to purchase the harvest. Research and training activities will be in collaboration with the Instituto Superior de Agricultura and the Dominican Ministry of Agriculture. Marketing will be a joint venture with Carnation International of Los Angeles, California.

A4. Conditions Expected at the End of Project.

1. A diversified vegetable and fruit processing plant will be in operation in Monción.
2. A major percentage of the guandul crop in the Monción region will be processed through this plant and marketed externally to the Dominican Republic.

3. Farmer income from guandul alone will be at least doubled by means of receiving a better price for the raw product, plus increased yields due to the introduction of superior practices, plus decreased cost of crop financing, plus the receipt of the first small dividend payments out of the profit of the cannery.
4. At least one-half of the small-scale, poor, traditional farmers in the area will be involved as suppliers and part-owners of the cannery through associations, formally organized, which will be receiving training in governance and in the management of their economic and human resources.
5. The basis will have been laid for crop diversification and diversification of the small business and industry development of the area.
6. The basis will have been laid to integrate the cannery into the full-fledged, rural development program, as described below, in Section B.
7. At least twenty people will be employed in the cannery.
8. A development corporation (the original owner of the cannery) will exist, with a resident staff in Monción, with the capability not only of managing the cannery but, as well, with competence in dealing with all other phases of the program.
9. Lines of action will have drawn up leading to replication of the Monción model elsewhere in the Dominican Republic.

B. PROJECT BACKGROUND

B1. History of Proposal Development

On March 15, 1977, IDEAS, Inc. was awarded a Development Program Grant by U.S.A.I.D. (Specific Support Grant--AID/pha-G-1163; P10/T 932-13-950-73-3279207), "to enable IDEAS to significantly strengthen its institutional capacities to multiply the application of methodologies for integrated rural development in LOC's..."

The DPG from A.I.D. took its inspiration from a program of rural development initiated in Mexico in 1966, out of which has emerged a private sector financed, national, fully integrated methodology for rural

development.* The project being proposed herein, in the Dominican Republic, represents the most advanced activity by IDEAS under the terms of reference of its DPG.

Note- While the DPG to IDEAS covers funding to March 15, 1980, no monies from the DPG can be used to cover local costs such as will be involved in the use of the OPG. Thus, the project budget being proposed picks up where the DPG must stop and helps maintain the dynamic thrust into the Dominican Republic. This procedure is indeed an elegant way to ensure that the investment by AID in IDEAS pays off at the point of localized field action.

To facilitate understanding of the history of this project proposal, the following description of the development of Coordinación Rural, A.C. in Mexico is included. This text is taken from a presentation at an International Seminar on Accelerating National and Agricultural Rural Development, University of Reading, Reading, England, sponsored by the International Agricultural Development Service, September, 1976. Some additions and modifications of the original text have been made, to bring the description up-to-date.

The Case of Coordinación Rural, A.C.--Mexico

Coordinacion Rural A.C. (CRAC) is offered as a model of integrated rural development. Though it is located in Mexico, it is intended to be replicated throughout Latin America, and perhaps elsewhere. It is designed to generate dynamic economic self-sufficiency and social change among small-scale, traditional and truly poor agriculturalists. It is based on the use of investment and loan capital derived from the private sector, alone or in joint venture with national or international public institutions for development.

CRAC has its beginnings in 1963. At that time, sponsored by the International Chemical and Minerals Corporation (of Skokie, Illinois, USA), the author began a world wide study of the obstacles to the application of known technology to the lands of the small-scale agricultur-

*The work in Mexico was financed between November 1, 1966 and June 1, 1969, by means of a grant from U.S.A.I.D. to the International Marketing Institute, Cambridge, Massachusetts. When this grant was terminated, the program became part of IDEAS, Inc. and proceeded with financing from several U.S. private foundations. In 1971, IDEAS entered into a joint venture with the Grupo ICA, in Mexico (Ingenieros Civiles Asociados, S.A.) to create Coordinación Rural, A.C. (CRAC), a subsidiary of the Grupo ICA. CRAC, with 100% budget support from the Grupo ICA, has been the operator of the Mexican program ever since. CRAC now has a professional staff of sixteen.

alists of the world. The study was designed to find out how to attract the resources of technology, research capacity, money and management skills, which are held within the private, profit-making sector of the western world, into the processes of agricultural and rural development. This study went on until mid 1966. A tentative solution was outlined in an article, The Role of Private Investment in World Agriculture, which appeared in the November-December, 1965 issue of the Harvard Business Review.

In October 1966 an attempt (funded by USAID) began in Mexico to derive a practice and then a methodology from the concepts of the report published in the Harvard Business Review. In mid 1969, the work was being privately financed; by 1971, financing was almost exclusively derived from Mexican sources.

This study describes the structure of the CRAC model, but it cannot represent the detail and wealth of the human experience, derived from close contact with Mexican campesinos, which has been so significant for the evolution of concepts and modes of action.

WHAT IS CRAC?

CRAC is a non-profit (Asociación Civil) corporation, devoted exclusively to rural development in Mexico. Within Mexico, there are no geographical constraints. CRAC may base its projects in agriculture, mining or forestry; it may relate to the production of raw materials alone or it may concern itself with marketing alone or with processing alone; and it may seek to integrate these several levels of economic activity.

CRAC receives all of its operating budget from Ingenieros Civiles Asociados, S.A. (the ICA Group), a wholly Mexican-owned civil engineering enterprise. CRAC is a subsidiary of ICA. On occasion, CRAC has received grants-in-aid from several foundations in the United States. These donations, over the past five years, have amounted to less than 6% of available operating funds. CRAC is a cost to ICA; but at the same time it represents an investment by ICA in the future of Mexico.

In 1978, CRAC is staffed by seventeen professionals, all Mexican. The representatives of IDEAS, who for over ten years functioned as Manager and Assistant Manager of the program, have been replaced by Mexicans trained for these jobs. IDEAS staff remain as consultants to CRAC. There are, then, five people in management roles; six agronomists; one industrial engineer; one specialist in agrarian law and policy; and, four specialists in rural organizations, training and community development. By 1979, it is intended to expand the staff by at least three, with emphasis on rural industry development, financial promotion and technology transfer.

The CRAC experiment is intended to lead the way for private enterprise off the farm and a center of wealth and knowledge, to share with government in the general attack on poverty, insufficient productivity, and their attendant miseries, which plague the world. In this sense, CRAC is the symbol of a policy intended to help diffuse the ownership and effective management of capital, on a large scale, into heretofore poor and foundering or even abandoned rural areas.

CRAC seeks first to maximize the income from unused and/or under-utilized resources (capital) of land and labour already possessed by the rural poor; second, to bring new capital into play which helps to diversify the sources of income and jobs at a chosen site; ~~third~~, to recover investment capital and then gradually transfer the ownership of this new capital to the rural people, while the rural beneficiaries are being organized and trained for management and operations; and fourth, to encourage the use of newly created wealth, which may not initially be shared by all, to enhance the quality of life for all members of the community.

HOW DOES CRAC WORK?

CRAC develops projects in this way:

Without detailed study, CRAC seeks out (and, increasingly is asked to consider) promising opportunities for investment in rural areas. If technology exists through which to increase productivity or to increase the value to the producer of raw material through processing; if a market can be detected where price and demand seem positively related to production/distribution costs; and, if prior public investment has produced infrastructure (even if it is imperfect) which encourages commercial activity, CRAC goes on to step 2.

Next, and again without detailed study, CRAC reacts to the human resource at the potential project site. If, within some days or weeks of discussion and observation in the community (or communities) which may be involved, no reason is discovered to reject the site, CRAC goes on to the third step, even though the precise method of working with the people has yet to be worked out in the course of project development.

An important aspect of method must be noted at this point. Our experience encourages us to take risks, and to encourage investors to do the same, to establish a close, collaborative relationship with any community, unless, after the investment committed in the fourth step, we find a very potent reason (such as violent political turmoil) to withdraw. In other words, if our impression of the people is favourable, we believe that the investment provides the critical means of winning confidence and entering into organizational and collaborative efforts.

As the third step, CRAC then makes a careful, classically-organized investment feasibility study to determine the financial viability of the project, that is, its ability to generate enough profit to increase local net income sharply and rapidly; to protect and then recover at a modest return the equity capital at risk; and to satisfy government that the benefits claimed can be achieved. If the feasibility study is favourable, CRAC goes on to the fourth step.

In this step, CRAC promotes the investment of the necessary equity and loan capital, from the private sector wherever possible. Nowadays, it also takes advantage of development institutions in the public sector. At present, however, we regard the source of money as less important than the attitude of investors towards such policies as transfer of ownership to rural people and long range (10-20 years) recovery of equity.

If CRAC is successful in promoting the financing of a project, it then proceeds, as a fifth step, to form a stock corporation (such as FORUSA, described below), operating for profit. The corporation, an appealing and familiar type of enterprise to investors, then becomes independent of CRAC and takes full responsibility for the development program. At first, its Board of Directors does not include rural people from the project site; we intend, however, to invite such participation as part of the long range educational process which leads to full self-sufficiency on the part of the

"campesinos." In one case, as of 1978, two representatives of a community sit on a FORUSA Board of Directors.

Finally, CRAC serves as a consultant to each operating company it creates. Ultimately, CRAC hopes to become self-sufficient financially, through payments for services from every company it forms. If this goal is achieved, newly-created income at each project site will, in part, help to extend service to additional sites.

To summarize, the private sector of Mexico, in this case represented by the ICA Group, agrees to experiment on ways to use private sector risk investment as an instrument of rural development. The ICA Group creates and finances the operations of a specialized company, exclusively concerned to direct and carry out the experiment. This specialized company is CRAC. CRAC seeks out, evaluates, determines the feasibility of, promotes, forms and advises profit-making rural development companies (such as FORUSA (below)) which, out of profit, recover equity over time; earn an interest on risk capital; and pay for the professional staff necessary to run the company and to organize and train local people to become owners and operators of everything created for them.

HOW DOES A COMPANY CREATED BY CRAC WORK?

The following description illustrates in more detail just how CRAC forms a development company, FOMENTADORA RURAL S.A. (FORUSA) and just how FORUSA proceeds with its tasks. This illustration is taken from the State of Jalisco, where FORUSA relates to ten communities in an arc south to west to north of Guadalajara. Roughly 2,000 hectares are under management; there are three farmer organizations including several hundred members who collaborate voluntarily.

Preparatory stage

From October 1966 until 1971, the field work was in a preparatory stage. Contacts with people in political, legal, scientific, technological and sociological circles were being established. The general locality was selected on technical considerations and three sites were identified for further investigation. At each of these sites, the 'high-yield' corn (maize) technology which was to be the basis of the first stage of economic change was tested, with the cooperation of a very small number of farmers. These test/demonstrations were used as a point of entry into the several communities involved and a start toward gaining recognition and

confidence. This stage took three years, in part, because it takes time to win a position of leadership, and in part because we had never before attempted such a project and had much to learn, to rethink and to do again. The cost to USAID and several foundations of this preliminary stage was \$300,000.

CRAC, FORUSA and the Sociedades

In 1971, CRAC organized FORUSA. Five investors from the industrial sector of Mexico risked \$3200 as equity; in 1978, equity has increased to over \$50,000 and the investor group has grown to fifteen. In 1971, FORUSA organized a group of 23 farmers, who voluntarily placed their lands (roughly 100 hectares) under management, into the Sociedad del Valle, S.C. (Sociedad Civil - an enterprise which can engage in profit-making businesses, yet pays no income tax, which maximizes the benefits to members). In 1978, 200 farmers have placed 2,000 hectares under FORUSA's management.

The Sociedad del Valle, S.C. is a legally constituted body and is self-governing. It is not a true cooperative. While all members have one vote on matters of governance, each member shares income in proportion to the amount of land he has placed under management and the shares he has purchased in the Sociedad. However, no member may own more than twice as many shares as any other. At death, shares pass to the heirs at current audited value. Shares may not be sold to outsiders.

With regard to credit, the Sociedad is the borrower and distributes funds to its members in accordance with a system of control introduced by FORUSA. The Sociedad is responsible for repayment of loans and all members are mutually responsible for each other's debts. Every farmer who voluntarily solicits membership, and who is accepted, agrees to forego dividends for 5 years as his contribution to the financial stability of the organization, although these dividends accrue to his account, in estate terms. This policy, which took some time to be understood and accepted, recognizes a) that crop disasters can occur and must be provided for; and b) that it is through savings that funds, and the ability to borrow, evolve for reinvestment in new and diverse means of generating income and reducing dependence on the land.

In 1970 and before, the average net income from farming corn and sorghum, per hectare, was about \$50; in 1975, net income per hectare average about \$500. Yields of corn had increased fivefold; yields of sorghum had quadrupled. At present, crops in the area are rain-grown; irrigation, from wells, will be introduced in 1979. The average land holding in the area is 8 hectares, divided into two sections, one usually of much poorer quality than the other.

Larger yields are not the only reasons for larger incomes. Government support prices for grain have doubled since FORUSA began operations. Crop insurance, offered through a federal agency, has been extended to all members of the Sociedad del Valle and covers about 70% of the investment per hectare. Money-lenders have been eliminated and interest rates for production credit have been decreased from an average of 4 to 5% per month to 5% per year. Agricultural inputs are now purchased in bulk, at prices smaller than ever before.

Credit and the Banks

Before 1971, very limited amounts of agricultural credit flowed into the area from federal banks and essentially there was no supervision. In 1971, FORUSA induced private banks to provide \$16,000 of crop cycle credit for the Sociedad and also began its program of resident technical supervision and training, with a staff of two. In 1976, FORUSA supports a staff of seven professionals, including two humanists who work full-time to strengthen local organizations through training for both technical tasks and organizational responsibility. In 1978, crop credit from private banks to the Sociedad is more than \$1,000,000; in addition, these same banks have provided \$240,000 in medium-term credit for the purchase of trucks, tractors and auxiliary equipment. Also in 1978, medium-term credit of \$67,000 has been obtained, to drill wells and prepare several hundred hectares for the first irrigation system ever.

In 1971, FORUSA was related to one village; in 1978, it supervises activities in 10 communities. In 1971, only one Sociedad existed; in 1978, there are three Sociedades, all collaborating with FORUSA.

The extension of interest, and the replication of the FORUSA system, now proceed very rapidly. It is no longer necessary to invest years of time and money to build acceptance and to motivate a new community to collaborate. When either FORUSA or CRAC staff contact the leaders of a village which expresses interest, these leaders are invited to send a delegation to Zapotitan, the site of the first and most dynamic of the Sociudades, for a visit of as many days as they wish. These visits are made without any presence or intervention on the part of FORUSA or CRAC personnel. So far, every such delegation has left with an expressed desire to participate. There is now no restriction on the replication of the CRAC/FORUSA method, anywhere in Mexico, other than funding the pre-operational stage (feasibility analysis, financial promotion and staffing at the FORUSA level).

Not only has the original FORUSA in Jalisco expanded to become a statewide program but a FORUSA has been put into operation in the States of Puebla and Tamaulipas, where climate, crop and marketing patterns and social and cultural background are very different. Areas so different have been deliberately chosen, so as to test both the adaptability of the method and the appeal of the system to private and public sector investors. A variety of other statewide programs is under investigation and we are also considering the extension of the CRAC experience in Mexico into Central America and to zones of agricultural poverty within the United States, for example to the lands of U.S. Indians embraced within reservations.

Stages of Development

FORUSA attempts to move through three logically related stages; all now in evidence in Jalisco:

First, it concentrates on increasing the return from the capital already in the hands of the rural poor, mainly their land and their labour. This provides the most rapid means of increasing income, a vital consideration in gaining confidence and establishing the professional authority of the FORUSA staff. The tangible results so obtained encourage farmers to participate in growing numbers. Since the activity is concrete, it simplifies the early aspects of training which concentrate on technical and financial matters and only later on begin to attack more subtle and

complex issues such as responsibility to the group and to the community, or concepts of political action.

Second, as existing resources begin to yield substantially larger net income, and as participation by local people grows significantly, FORUSA seeks to identify and promote new types of economic activity which form other wealth-producing capital assets than land, such as a store, an agricultural machinery service center, a dairy, a feed mill, an oil extractor plant (for example, to process soy bean and safflower), a textile enterprise based on local raw material such as wool, or one to fabricate parts for nearby large-scale industry, among many others. The long range aspects of this second stage turn on four main policies: a) all of the risk, until success is demonstrated, is taken by FORUSA; b) all of the equity capital at risk is intended to be recovered from profit, over a period which may be as long as twenty years or even more, with a modest rate of return intended more to symbolise the meaning of "investment" than to enrich the already advantaged investor; c) all enterprises created by FORUSA are to be transferred to the ownership of the Sociedad or another local entity formed for the purpose; and, d) no transfer of ownership is to take place until the local people are trained for effective management and responsible ownership.

For the process of rural development, it is considered essential to diffuse the ownership of wealth-producing capital instruments. In the first place, there can never again be land enough for all rural people who wish to remain on the land and who have rights to land under national law and constitutional thrust. More and more in the future, rural people must have access to sources of income other than land, if they are to stay and survive in rural areas at an acceptable level of social cost.

In addition, the land area held or controlled by the multitude of rural poor, no matter how efficiently managed, simply cannot yield the income we might agree is necessary to satisfy the desires of a family of 8 to 10 (a size very common among the rural poor of all continents). Only by integrating income generated from the land with income otherwise derived, can the return to rural families continue to grow over time.

Finally, we believe that no combination of improved agricultural practice with jobs created through non-agricultural enterprise can provide income for all rural people. There are too many now; and their numbers are

increasing too fast. While it is obviously not a total solution to what may well be an insoluble problem, it is nonetheless imperative that more rural people own shares in wealth-producing enterprises which yield income, even if they do not yield work.

In the third stage, as total income at the project site grows, from a more and more diversified base, FORUSA deliberately fosters a dynamic program of community development in a social and cultural sense. Here roads, schools and homes are improved, a supply of potable water is assured, and other projects are introduced, concerned with other aspects of health, family planning, entertainment and recreation, making the physical environment of the community more attractive, political action, formation of exportable skills among youth (some of whom simply must emigrate in the future), and other concerns. This aspect of the CRAC/FORUSA program is the most basic of all and symbolizes the ultimate goal of the effort. It attempts to make income a tool of service. It is through this stage that we combat the tendency for a Sociedad, where concerns are economic, to form an elite, inwardly-turned group and through it we also try to substitute the classical objective of work for a wage by the concept of work without a wage in service of the community, so that the natural urge to use one's intelligence and skills finds an outlet.

During the early years of a FORUSA project, most ideas for change in stages 1 and 2 tend to derive from FORUSA's staff. This is a natural result of the ignorance (not the lack of intelligence) and inexperience of the local participants. On the other hand, the goals of community development implied in the third stage are, for the most part, perceived by members of the community, and FORUSA staff, while encouraging discussion, tend to respond with technical and, sometimes, financial help (loans from FORUSA or negotiated from the banks).

While the first two stages are obviously long range activities (indeed they are never-ending) it is the third stage which demands the presence of FORUSA (or an equivalent catalytic force) over a period of many, many years, perhaps decades. To change the ground rules of a local culture so that the changes themselves become rules governing behaviour, is perhaps the most ambitious of goals. To undertake the task, change agents must be continuously present for decades if necessary.

All this illustrates two fundamental weaknesses in development planning and financing which the CRAC/FORUSA model is attempting to overcome. One is the tendency to introduce agents of change for relatively short periods of time, usually defined by an agency supplying funds and/or by the lack of permanent political support. CRAC takes as a constant the demand for long-range participation at a project site and hence has attempted to free itself from dependence either on grants or on political support.

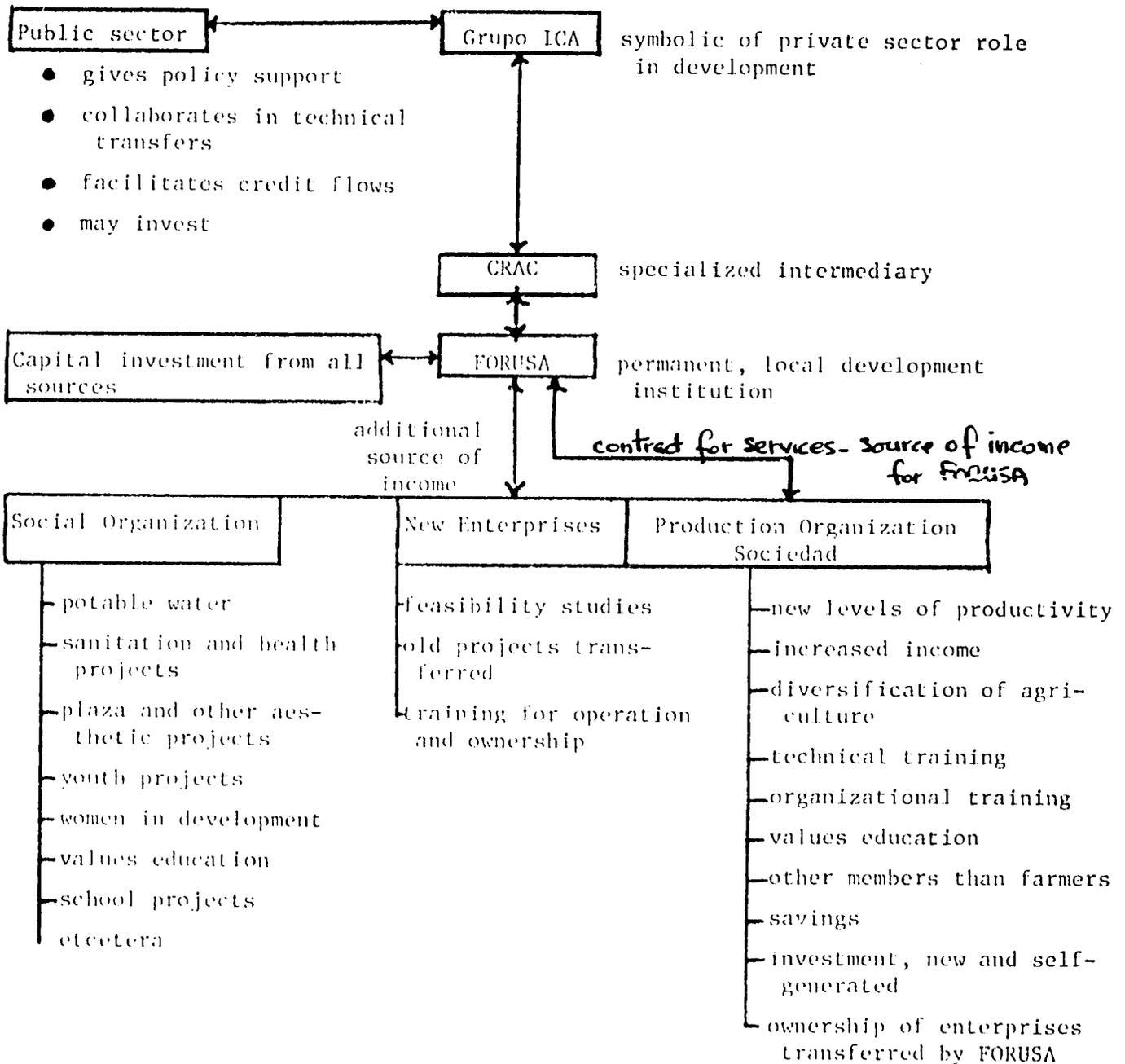
Of course, no rural development program in the underdeveloped nations can be independent of political support in the sense of policy. But by giving priority to private sector backing, CRAC eases away from the impact of political whimsy which characterizes shifts in public power. Beyond this, each FORUSA is intended to become financially self-sufficient, that is, to earn enough to support its costs. Thus, like any other business enterprise which succeeds, FORUSA self-finances its existence and its growth.

General Considerations

This leads to a final operational point about FORUSA.

The entire concept of CRAC takes its form from a consideration that every resource applied to rural development must be managed as an investment, not as an expense, that is, the application of resources must yield a new increment of wealth. The management of investment capital we think of as a business. When applied to rural development, we think of a product called "development" which, for all of its fuzziness as perceived through different eyes, is, nonetheless a clearly definable end product.

Within the view and in light of all over the foregoing, the CRAC/FORUSA methodology may be represented diagrammatically this way:



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B2. Prior Project Experience

With specific regard to the project proposed for an OPG, IDEAS, supported by DPG funds, has over the past year:

1. Identified Monción as a site for a program.
2. Isolated a point of entry into the community as being a cannery for processing guandul.
3. Gained the acceptance of the farmers, through their associations of producers.
4. Completed a feasibility study of the cannery project, including an export marketing study in collaboration with Carnation International.
5. Obtained a decision by Carnation International to contract the marketing operation, taking the product at the shipping deck of the cannery; at the same time, Carnation International has agreed to:
 - a. allow the cannery to sell its product elsewhere if by so doing a better net price can be obtained; and,
 - b. participate in technical studies and market studies bearing upon the introduction of new crops to the Monción area and, ~~upon the processing and marketing of~~ these crops as supplemental sources of income to guandul.
6. Established a close relationship with the Instituto Superior de Agricultura and the Ministry of Agriculture.
7. Established and nurtured contacts at the Central Bank and Banco Agrícola which seem to ensure the availability of long term equipment and construction loans, as well as adequate lines of crop credit (production credit and harvest purchase credit).
8. Established and fostered broad relationships within the private sector, most particularly with the members of the Santiago Asociación para el Desarrollo, which have led to assurances of the availability of investment capital.
9. Established contacts with other potential sources of capital, outside of the Dominican Republic, e.g. Technoserve, Inc. and ADELA, who stand ready to review the investment prospectus and to enter into a joint venture with D.R. investors, including farmers.
10. Established other contacts, e.g., the Fundación Dominicana para el Desarrollo, through which observations have been made and recorded for reference if and when IDEAS feels ready to expand from Monción into other parts of the Dominican Republic.

B3. Host Country Activity in the Project Area

1. The Instituto Superior de Agricultura, in collaboration with the Santiago Asociación para el Desarrollo, has evolved a long range development plan for the Sierra. It was because of the pre-existence of this plan that IDEAS was so quickly led to the project/program potential of Monción. Too, it was because of Plan Sierra that IDEAS has been able to collaborate so closely with ISA in studying and planning for the project and, that IDEAS was able to establish such strong ties to the private sector.
2. The Ministry of Agriculture has had a resident agronomist in Monción for some time. This has facilitated the deepening of our understanding of the agronomic potential of the area around Monción and simplifies drawing upon Ministry resources in the evolution of both the project and the program.
3. The Government of the Dominican Republic has already invested \$40 million in the region for the largest hydroelectric installation in the country. The Tavera Dam on the Yaque del Norte River is only the first stage in a larger program to harness the water power and water for irrigation which lies in the Sierra. IDEAS cannot, at this stage, assess the implications of these works for the future of its Monción program, but surely the impact can only be beneficial.
4. The "Forest Law" of the government, passed in 1967, prohibited logging in the Sierra until an effective management plan could be developed. In 1971, FAO published the bases for such a management plan but it has yet to be implemented. In 1976, strong pleas were made by the Central Bank and the Planning Office of the Government for more refined studies and subsequent action. All of this has considerable significance for IDEAS program planning, since Monción is surrounded by existing and potential forest resources which could provide raw material for a wide variety of wood industries.
5. In 1975, the International Fertilizer Development Center, Muscle Shoals, Alabama, completed a study of fertilizer uses and needs in the Dominican Republic. The report is a most valuable summary of the agricultural potential of different crops and regions of the country and has already served IDEAS by encouraging its planning for better practices and crop diversification in the Monción area.

C. PROJECT ANALYSIS

C1. Economic Effects of the Project/Program

There is no precise way to quantify the economic effects of the project and the program it initiates, at this time. The following statements, therefore, are estimates only:

1. Over the three year period covering the project, which should be thought of as the introductory period which leads to an economically self-sufficient program over the long run, roughly 1500 farmers (9000 or more people) should at least double their farming income. Beyond three years, if we extrapolate results from IDEAS experience in Mexico, it is reasonable to estimate ten-fold increases in net income from all aspects of the program, within ten years.

Thus, the project cost, calculated as per capita cost, should first be measured as cost per three years or cost per year per capita for three years; and, second, be determined as cost per year per capita per ten or more years. As with any business venture, start-up costs are always higher than operating costs are during an advanced stage.

2. Since one objective of the program is to demonstrate how adequate investment of the type proposed can lead both to profit and program self-sufficiency in a financial sense, it is intended that the program in Monción, which is to be helped start as a pioneering venture with OPG funds, be replicated elsewhere without any subsidy. Projected out over a decade, therefore, and, once again drawing upon the Mexican experience of IDEAS it is not being overly optimistic to suggest that the OPG funds, in a decade, will stimulate significant economic and social change for the better for ten times the number of beneficiaries of the Monción program.

3. Crop diversification and concomitant development of rural industries are basic components of the program in Monción. Success in these aspects of the program inevitably will create jobs (for example, the cannery in Monción will be an optimum blend of labor and capital intensive technology and should create 20 to 30 new jobs) and catalyze the creation of training systems for a variety of trades. As a diverse group of businesses and industries emerge, they will, in turn, provide a market for the services of

truckers, electricians, carpenters, bookkeepers, plumbers, mechanics, shops and the usual array of economic activity which always characterizes the economic satellites of primary manufacturing centers. The training systems in Monción, as well, can become a source of supply of skilled labor to serve development over the whole of the Sierra.

C2. Appropriateness of Project Technology

The technology selected for the cannery represents a careful balance between machinery absolutely necessary for the control of quality and cost and, operations which maximize the use of labor. ⁱⁿ the plan of project development, as noted in Sections A, sub-sections a, b and c, a manager-trainer will be hired many months before the plant is built and equipped to prepare the labor-force. It may be observed that canneries have been established in many countries of the world without serious problems in training a reliable and skilled body of employees and the fact is that there are a variety of canneries in the Dominican Republic which had to go through the same processes as will be the case in Monción. In other words, no major obstacles are foreseen with regard to the appropriateness of the technology in terms of the trainability of the local people.

In support of this conclusion, the feasibility study already completed reveals that all of the support structure for the cannery exists in Monción. Water, power, land upon which to build, roads over which the farmers can deliver their crops to the plant, all these are available in Monción. Santiago is only an hour away by car and truck which means that critical maintenance and shipping support facilities will be at hand as needed. As nearly as all restraints on plant operations and marketing can be anticipated, there would appear to be no obstacles facing the project. The people of Monción, the farmer associations, government agencies and private enterprise supporters are eager to begin the project and promise every kind of effort to ensure success.

C3. Sociocultural Factors

While poor and undereducated, the sociocultural structure of the area seems in every way as supportive of the program objectives as can be in a

rural setting, the historical limitations of which are classical and universal. A factor which works to the favor of both the project and the program is the change through which the people of Monción have gone through since the passage of the Forest Decree in 1967. Traditionally, these people were culturally and economically related to logging and the multitude of craft products made of wood. Too, such cultivation as was entered into was of the "slash and burn" type. In the decade since cutting was absolutely prohibited except for firewood, the people learned a great deal about adjustment to new conditions of life and livelihood and the IDEAS' project will benefit a great deal from this learning process. The people clearly perceive the benefits an integrated, long range program of rural development can bring and, as has been said repeatedly, they are eager for the project to proceed.

Another plus is the social structure of the zone. Monción is still a small town but it already shows the incipient trend toward the characteristics of a rural city, with a variety of services, such as stores, access via paved roads, among others. Monción, therefore, is a natural setting for a rural industry location, wherein a stable labor force exists, yet this force is not so separate from neighboring farms that an urban-rural separation, with resultant tension, need be created by the project and the planned diversification of industry and business in the years ahead. In other words, Monción, as the logical location of industry, facilitates area development rather than causing a separation between farmers and town dwellers.

With regard to the impact of the project on women, several factors which will affect them may be noted. First, the operations of a cannery lend themselves to the employment of women. Canneries the world over demonstrate this as fact. Second, and far more important in the long run, the program which emerges out of the project emphasizes a fundamental shift in values toward the use of newly created wealth for improvements in the quality of personal and community life. Thus, once the cannery is established, it is intended to encourage the farm families within the producer associations to learn and act upon health care, nutrition, budgeting, home improvement and other facets of home life which, in the process of change, do not violate cultural form or social mores. Beyond these possibilities, it is impossible to predict in advance just how to integrate women more tightly in the program plan, except for one additional thrust.

As population in the rural areas of the world has grown out of proportion to opportunities for gainful and acceptable work by youth moving into adulthood, discontent has caused ruptures of many kinds in family life. The result often is most burdensome for mothers. Young people migrate out. Family loyalties are weakened. Violent response may on occasion explode. With this in mind, the program envisions a time when corporate income is sufficient to bear the cost both of skill training for youth, male and female, and financing skilled tradespeople into small businesses not only in Monción but, as well, in the region.

In support of all these objectives, the project budget includes an input from staff women and consultants in the field of "women in development." At least this will guarantee priority attention to these matters and a sensitivity which an all male staff could not hope to express adequately.

Finally, it may be noted that the project has aroused no opposition nor is it conceivable that anyone would be harmed by the development. This is especially true in Monción itself and in the surrounding farming territory. Some competition for guandul supplies may develop early on, affecting canneries outside the project sphere of influence. However, even this effect should be small and would be cancelled out as the project develops a capability to increase productivity and to diversify the harvest. Insofar as the export market is concerned, our market analysis reveals that this market is not satisfied, either in quantity or quality.

C4. Project Relationship to Guidelines Governing Funding of PVOs

Section C1, above, indicates that the project deals directly with people who are among the poorest majority in the Dominican Republic. Their existing economic and social condition stands as eloquent evidence that they remain essentially beyond the reach of public services.

Section B3, above, details just how the project ties in with host country, complementary efforts. It remains to be said, only, that the U.S. Peace Corps has also been at work in the area, in a program whose objective is the creation of savings cooperatives. IDEAS' staff has been in close touch with these volunteers and intends to draw on their presence and their experience.

Several of the foregoing Sections have referred to one goal of the program of IDEAS, namely, that of using the Monción model as a base on which to construct a national program. The potential for doing this is very great, as is attested to by our experience in Mexico. In concept, wide scale application will depend exclusively on domestic resources. It is for this reason that the Monción project and program will include the broadest possible participation by private and public sector institutions. In combination, these institutions have all of the financial, educational, technical and attitudinal resources necessary to replicate the program (not always based on a cannery, at the outset, of course) throughout the nation. Indeed, in fostering interest in the Monción project, discussion has always centered on its demonstration value.

C5. Plan for Institutionalization of Proposed Activity

Step 1- IDEAS selects and trains cannery manager.

Step 2- Cannery manager trains workers--IDEAS advises and participates

Step 3- IDEAS selects and trains program manager--advises and works alongside program manager to ensure that project development catalyzes program development.

Coincident

Step- All collaborating institutions are kept informed at all stages of problems and progress.

Step 4- Even as diversification of crop and industrial activity are instituted in Monción, project and program staff will be studying opportunities to replicate the methodology elsewhere.

Step 5- With project success, private and public sector sources of support will be encouraged to establish a national, rural development organization, modelled after Coordinación Rural, A.C., in Mexico

Step 5, as well as those steps which will have been taken to ensure the profitability of the Monción venture, will make the program, nationally as well as locally, independent of external donor financing.

This was the case of IDEAS program in Mexico. The Dominican Republic contains all of the necessary resources and support facilities to assure program independence; many of those who control these resources have already expressed interest in growing out of the Monción activity into a national scheme of integrated rural development.

D. PROJECT DESIGN AND IMPLEMENTATION

D1. Implementation Plan

The project will be carried out directly under the supervision of a resident IDEAS' staff member. No subgrants or contracts will be made, although it is possible that consultants will be utilized, e.g., from the faculty of the Instituto Superior de Agricultura for research and training; from other sources bearing upon women in development; among others.

It is assumed that IDEAS can locate and hire a competent cannery manager, within the Dominican Republic. With regard to IDEAS' project management, overall supervision from headquarters staff is already assured; and, several interested candidates for the job of resident supervisor have already been contacted. There is little doubt that this job can be filled promptly, once the OPG is an assured source of income.

The OPG will be made directly to IDEAS. The Center for Agricultural and Rural Development will be IDEAS' locus of operational responsibility. Disbursement, procurement and fiscal control will be the responsibility of the Office of the President of IDEAS. All procedures will be in keeping with methods already in effect which take their design from the handling of other U.S. Government Funds (AID and other agencies) granted to IDEAS in years past.

The schedule of required actions is perceived this way:

a. Independently of the OPG, DPG funds will be used to finalize the investment prospectus covering the Monción cannery. This will be completed by November 30, 1978.

b. Independently of the OPG, it is expected to obtain support from Carnation International, Banco Agrícola, the Central Bank and the interested D.R. private investors to purchase a small part of the 1978

guandul harvest, contract its canning and, test market in the U.S. A determination of the reality of this scheme will be made by November 15, 1978.

c. Assuming OPG approval by January 1, 1979, the combined flow of funds from the grant and from investors will be utilized to have the plant manager and place the IDEAS resident in place, in Monción. These people will immediately negotiate the purchase of equipment and construction of the plant. Further, plans will be laid for worker training and for close, continuing interaction with the farmers.

d. IDEAS' central staff will monitor all of the foregoing, closely.

No request for waivers of AID rules and regulations is anticipated.

E. MEASUREMENT AND EVALUATION

E1. Schedule of Planned Accomplishment

Reference Point - Start - October 31, 1978

a. November 15, 1978. Completion of purchase of guandul for market test; completion of contract to process; completion of marketing plan.

b. November 30, 1978. Completion of investment prospectus.

c. January 1, 1979. Completion of legal formation of operating company; completion of financial promotion, including equity, working capital, capital for purchase of equipment and plant construction.

d. January, 1979. Completion of purchase of equipment and contracting construction; site for construction purchased.

Note- All of the foregoing steps are self-evaluating in that the test is completion of a task with fixed dimensions.

e. January-December, 1979 -

i. training of labor force for cannery;

ii. strengthening producer associations, that is, in

in terms of organizational procedures, fiscal control, transmission of improved farming practices, management of credit, future planning for crop diversification, inter-relationships with program management, methods of task analysis and task implementation relating to felt needs for community, family and personal life style improvement.

iii. designing and implementing research and practical systems of technology transfer, in cooperation with ISA and SEA, bearing on improved production practices for guandul and on crop diversification;

iv. focussing in on the potential for other investment opportunities than the cannery.

Note- In the course of the year 1979, careful and continuous assessment of results, causal factors, obstacles to progress, range of impact, level of involvement of the farmers and their families, level of interaction with investors and with concerned government agencies, will be made.

At the outset, a baseline study of the economic and social conditions of the people to be affected will be made, to provide the necessary reference points for the measurement of change during the life of the project.

f. January-December, 1980

i. cannery in full operation, testing for the means to maximize the use of labor while maintaining quality and competitive production costs;

ii. plans started to enlarge plant, in anticipation of higher yields due to the introduction of superior farming practices;

iii. plans started to extend the time during each year when the plant remains in operation, in anticipation of crop diversification and diversification of the product line;

iv. analysis started of the value to the local educational facilities of having the cannery in the community and using its technology, marketing, management and financial system to enrich and enliven the school curriculum;

v. continue work with farmer organizations and farm families in all aspects of life in the community;

vi. continue and both broaden and deepen studies leading to new investments...develop these to the determination of feasibility as rapidly as possible.

g. January-December, 1981

i. implementation of diversification of cannery product line and of plant expansion;

- ii. introduce a charge for services against each farmer, in accordance with land area placed under corporate management;
- iii. start some form of cash dividend payment to farmer associations out of cannery profit; start repayment of equity capital to non-farmer stockholders as the beginning movement toward full transfer of ownership to the farmer associations;
- iv. initiate at least the second capital investment in commerce or industry, with attendant training of labor and new dimensions of discussion within associations and between program management and farmers (farm families);
- v. put into action one or more significant projects concerned with community development;
- vi. begin national promotion by means of systematic invitations to visit Monción on the part of key government officials, leaders in the private sector, representatives of international financial and development institutions and, as well, farmers from other parts of the Dominican Republic;
- vii. arrive at a point of financial self-sufficiency within the project/program to permit further development independently of OPG funds.

Note- measurement of results and evaluation in terms of the goals of integrated rural development will be a continuous function. Methods will be consistent with AID guidelines.

E. FINANCIAL PLAN

1. January - December, 1979

a.	U.S. personnel - Salaries	
	• Supervisor - Resident in the D.R.	15,000
	• Program Director - Resident in U.S. equivalent 6 man-months	18,000
b.	Dominican personnel - Salaries	
	• Plant Manager-Trainer	<u>12,000</u>
	Total Direct Salaries	45,000
	Indirect Benefits @ 15%	6,750

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c.	Training Cost - in U.S. for Dominican plant manager, 2 man-months	2,500
d.	Consultants	10,000
e.	Travel, to and from the U.S. <u>and</u> within the D.R.	10,000
f.	Other direct costs, @28% of sum of above items	20,790
g.	Two vehicles plus maintenance @ 20% of cost	<u>12,000</u>
	Total Year 1	107,040*

*Note- The OPG budget is _____% of the total project cost.
The balance is the result of equity, investment and the
value of the marketing services provided by Carnation
International.

2. January - December, 1980

a.	U.S. personnel - Salaries	
•	Supervisor - Resident in the D.R.	16,200
•	Program Direction	<u>18,000</u>
	Total Direct Salaries	34,200
	Indirect Benefits	5,130
b.	Consultants	15,000
c.	Travel	10,000
d.	Other Direct Costs	18,012
e.	Vehicle maintenance	<u>2,000</u>
	Total Year 2	84,342

3. January - December, 1981

a.	U.S. personnel - Salaries	
•	Supervisor - Resident in the D.R. ½ time (½ paid by income generated by locally)	8,748
•	Program Direction (½ paid by income generated locally)	<u>10,000</u>
	Total Direct Salaries	18,748
	Indirect Benefits	2,812

b. Consultants	10,000
c. Travel (50% supported by income generated locally)	5,000
d. Other direct costs	<u>10,236</u>
Total Year 3	46,796*

*Note- The three year total OPG budget of \$238,178 is _____%, approximately of the equity capital invested in the project by the end of three years, plus the accumulated value of the marketing services provided by Carnation International.

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APPENDIX F

A PROPOSAL TO ESTABLISH A NATIONAL PROGRAM OF INTEGRATED RURAL
DEVELOPMENT AND TO RELATE THIS PROGRAM TO INTERNATIONAL
SOURCES OF INVESTMENT CAPITAL, APPROPRIATE
TECHNOLOGY, MARKETING ARRANGEMENTS
AND MANAGEMENT TRAINING

Submitted To: The Government of Costa Rica

Submitted By: The Center for Agricultural and
Rural Development
A Division of IDEAS, Inc.
(Institutional Development and Economic
Affairs Service, Inc.)
1432 Meeker Drive
Fort Collins, Colorado 80524
U.S.A.

Date: January 15, 1979

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Submitted To: The Government of Guatemala

Submitted By: The Center for Agricultural and
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A Division of IDEAS, Inc.
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1432 Meeker Drive
Fort Collins, Colorado 80524
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Date: January 15, 1979

INTRODUCTION

This proposal covers the provision of three inter-related but nevertheless separate services by IDEAS, Inc. to the Government of Guatemala. The proposal is based on detailed discussions which have taken place in Guatemala between government officials charged with the responsibility for agrarian reform and rural development, and Mr. Joseph Recinos, representative of IDEAS in Central America. The three services may be summarized, as follows:

I. Assistance in the establishment and management of a nationwide program of integrated rural development, which includes the training of local personnel to assume full operating responsibility for all related functions.

II. Assistance in the establishment and maintenance of contacts in the United States with agribusiness and in the financial markets, by means of which it may be possible to facilitate the creation of joint ventures with rural people in production, manufacturing and/or marketing, as well as to encourage the flow of other resources from the United States, under beneficial terms, which can accelerate development, such as existing technology or new technology particularly appropriate in scale and complexity to the requirements of rural areas. This service also includes the training of local personnel to assume full responsibility for all related functions, if and when the transfer of such responsibility is deemed wise and timely.

III. Assistance to establish and maintain contacts in Europe, Japan and elsewhere in the world, to the same ends as are summarized above under Point II.

Each of these three services is proposed separately, each with its own budget. Each service, in fact, could be provided, independently of the others. However, IDEAS would suggest that Point I, covering the establishment and management of an integrated rural development program is of the highest priority and that the promotional activities covered by Points II and III are, in reality, meaningful only as they support the thrust of the rural development program.

PROPOSAL I

The Establishment and Management of a Nationwide Program of Integrated Rural Development

A. BACKGROUND

The system or process of integrated rural development which it is proposed to introduce into Guatemala is based on a program being carried on in Mexico as a collaborative effort on the part of IDEAS and Ingenieros Civiles Asociados, S.A. (the Grupo ICA), which began in 1963 and which is currently managed by Coordinación Rural, A.C. (CRAC), a non-profit subsidiary corporation of the Grupo ICA. CRAC is staffed with seventeen professionals covering a range of skills including agronomists, sociologists who specialize in rural organizations and human development, business administrators, industrial engineers, a marketing specialist and an expert in agrarian law. IDEAS provides advisory services which include policy analysis, the search for new and appropriate technology, training and financial promotion. The Grupo ICA supports the operating cost of CRAC and, as well, makes legal and engineering expertise available as needed. The Grupo ICA also invests in the specific development projects which CRAC originates; as well, the Grupo ICA works with CRAC management in establishing contacts with other investors and with relevant government officials, as necessary. The current annual operating budget of CRAC approximates 8 million Mexican pesos and this budget has been growing each year by roughly 10 percent. A major expansion is under consideration.

Mr. Recinos has already provided the Government of Guatemala with several publications which describe in some detail just how CRAC functions, to what end. Rather than repeat the content of these papers in this proposal and to ensure their availability to all officials who may read this proposal, copies of two such publications are attached for the convenience of all concerned. Therefore, what follows is but a very brief summary of the key characteristics of the CRAC system of rural development which is being suggested for consideration.

B. SUMMARY OF METHODOLOGY

Based upon the model provided by the IDEAS/CRAC experience in Mexico, it is proposed to establish a system of integrated rural development which builds upon five fundamental policies as a foundation and five operating elements which form structure.

THE FOUNDATION POLICIES are:

B1. That all specific projects be designed to generate enough new wealth to achieve two results simultaneously--a) sharply increase the net income per family and, b) substantially, if not completely, cover project costs.

The reason for this policy is simply stated. Poor, traditional rural people need professional help if they are ever to break the bonds of ignorance and poverty. Professional help is costly. More than this, experience worldwide has clearly proven that while rural development can be accelerated, it is still a long range process. Professional help, therefore, must be continuous or projects can be predicted to fail. Thus, rural development can become an expensive procedure, often too demanding in its continuous drain on public resources or on sources of philanthropy. Faced with these realities, it is imperative that whenever and wherever it is possible, the design of rural development projects forces action toward financial self-sufficiency and security.

B2. That all resources which are provided to a rural development project be considered as an investment, not as a social cost, and that, of a consequence, management be businesslike and held responsible for attaining to a measurable and favorable balance between costs and benefits.

The reason for this second policy is not merely to ensure the necessary profit to support project costs and from which to generate more income for the rural poor who participate at a project site. As well, two other objectives are inherent in the policy. One, is to foment values in the community of rural poor which breed respect for organization, efficiency, the prudent yet imaginative use of money and labor...for the idea of savings and re-investment and self-achievement. Two, is to demonstrate that rural development can be a sound investment field and so attract more and more capital from more and more sources.

B3. That all equity investment capital, whether derived from private or public sources, be recovered out of project profit, at a reasonable rate of interest and, that as equity is recovered by the original group of pioneering investors, ownership of the enterprises which have been created pass into the hands of the rural people involved, at no further cost...and, that in anticipation of these transfers of ownership, each project start the training of local people so that they may receive their ownership, ready and able to handle it with skill and responsibility.

The reason for this third policy is based in the absolute necessity to form new capital (other than land and traditional skills) in rural areas so that a more diversified base of wealth is established than has been the case historically. It is a truism that rural people with some land (for farming, for fishing offshore, for forest or mineral extraction) can not, even under ideal conditions of utilization, generate enough income to meet their own or their nation's aspirations. Land holdings are too small; family size is too great; national requirements too large scale. Beyond this, it is only through the formation of locally-owned new capital that the landless rural poor can ever hope to be the owner of some wealth-producing capital. The creation and then the diffusion of the ownership of capital is vital to the success of rural development.

B4. That rural development proceed by means of the organization of the rural poor who become engaged in a development project and that these organizations become the centers of ownership, training, savings, reinvestment, values education, community development, as well as the legal partners of those who bring capital to the project sites from outside.

The reason for this fourth policy is classical: in organization there is strength. An organization can have a legal personality denied to individuals, whether in seeking credit or a voice in civil affairs. The social forces within an organization facilitate training programs. As well, such forces help establish a corporate sense of responsibility. An organization provides continuity and minimizes the destructive actions of individuals. An organization is a microcosm reflecting the diversity of local talent and is uniquely capable of identifying

leadership while at the same time holding leaders under control...at least this is true if in the creation of an organization, those responsible formalize a system of checks and balances, and a spirit of self-expression. In a pragmatic sense, an organization provides the only feasible channel through which an outside agent of change can relate to a large number of individuals.

B5. That, in the end and as an objective of paramount importance, an integrated rural development program give the highest priority to human development...to improving the quality of life among those who have traditionally lived in poverty beset by illness, deprived of many of the basic rights we conceive to be the inheritance of all mankind. Therefore, economic growth is to be considered as merely an instrument of development, *not* an end unto itself.

The reason for this fifth and final policy is rooted to a fallacy in development planning which has had and which continues to have disastrous effects; that is, to assume that increases in agricultural productivity, or the establishment of rural industries or the creation of any means of increasing income will automatically bring about an improvement in the quality of life among rural people. To the contrary, changes in economic status which take place rapidly can be destructive to the cultural fabric which binds men and women, holds family values intact and provides social cohesion. If anything important has been learned from development experience throughout the world, it is that economic progress must be shaped to serve human development...and, that human development can not be left to chance. Integrated rural development implies a responsibility to the totality of the change process as it affects the lives of the people to be benefitted.

THE OPERATING ELEMENTS

Building upon the foundation policies described above, a construct of operations is put into place. The five structural elements of the IDEAS model may be summarized in the following way.

B6. The tasks of planning; project identification; feasibility analysis; promotion of equity and loan capital; legal formation of the

local development enterprise; setting the development enterprise in motion, that is, gaining acceptance on the part of local people; finding and training management for start-up; and, maintaining consulting services to the local enterprise to ensure the continuity of policy and the competence of management...are all assigned to a specialized development entity of national stature. In Mexico, these are tasks assumed by CRAC and the cost of carrying them out is borne by the Grupo ICA.

Proposal 1 specifically relates to the introduction of the CRAC function into the institutional framework of Guatemala. CRAC may be thought of as a separate institution or as a significant agency within an existing institution charged with rural development. While there are pros and cons as regards either choice, the decision rests with the Government and can be finalized in consultation with everyone concerned. What is most important is that the CRAC operation be given the necessary income and national stature so that in the eyes of the rural people, the private sector of the country, the international business and finance community and the entire body politic, what is being attempted clearly and unequivocally represents a long range commitment by national leadership.

B7. The tasks of project management at the local site are assigned to an operating company, with resident management and staff, legally constituted with its own Board of Directors, its own equity and working capital base, its own authority to promote capital when such action is approved by its Board...in other words, the task of implementation or the task of delivering the benefits of change to the people becomes the charge of a single corporate body which must utilize its resources in a businesslike manner to generate new wealth and to ensure the maximum flow of benefits to the local people involved.

This particular structure is designed to correct several weaknesses in traditional development strategies. First, it demands that management think of money as an investment rather than as a social cost, in turn requiring of management an accounting of performance. Second, it serves as a model for the instruction of local people in the proper means of managing their old and their new capital resources. Third, it provides a

means of placing management into the hands of trained, competent people from "outside," yet keeps control of policy and performance in the hands of local people and their investment partners. Fourth, it is a structure well established in the law and familiar to potential investors of risk capital, thus making it easier to control the enterprise in the public interest, yet attract investment.

B8. One of three primary tasks of the local operating company is to optimize the use of existing, underutilized capital, such as farm land, forest resources, mineral resources, fishing rights and traditional skills, so that net income to the local people is maximized and so that a portion of the new wealth generated flows back to the operating company to support its costs.

It is obvious that not all rural people start with a capital base. Others start with resources which vary widely in quality and quantity. The fact is, however, that most of the rural poor have some assets that are not efficiently exploited...a skill, a parcel of land, access to forests or water, perhaps even a bit of savings. It is of critical importance to rural development to improve upon the use of these resources. Often, the wisest choice in the start-up of a project is to begin operations around the use of existing capital. Very rapid increases in productivity and net income can be achieved, in turn, making it easier to gain the confidence of the people so that they work in more complete harmony with the corporate staff. The changes introduced tend to encourage joint effort through organization, e.g. the establishment of flows of credit from banks, yet the changes need not threaten traditional ways of life with too rapid changes. As well, the way change in farming or forestry or fishing practices are made, provides a variety of direct, practical subject matter around which to start training.

B9. A second of three primary tasks of the local operating company is to create new capital instruments of wealth production by means of investment in business and local industry, so brought about that the ownership of all new wealth transfers completely to the people at the project site.

New capital formation and local ownership of this capital is a vital and historically largely ignored part of integrated rural development. The need to create new capital, owned by rural people, is simply described. First, the resources owned by most rural people, e.g. the land area they control, is not adequate, even when brought to optimum productivity and profitability, to yield enough income to satisfy the needs and aspirations of families whose size ranges from six to ten people...and there is little hope of increasing the size of the land resources per family. Indeed, the pressure of population on the land tends to reduce (fragment) the land area per family. Second, new capital investment is needed to generate jobs. Third, since it is unlikely that enough jobs can ever be generated in rural areas to satisfy the demand, it is only through the ownership of some capital that many of the landless, unemployed rural people can ever hope to own a source of income...perhaps not an adequate income but at least some which derives from ownership other than through social handout. This "ownership factor" is one we regard as basic to a sense of dignity among the poor and dignity should be one final result of rural development.

10. The third of the three primary tasks of the local operating company is to encourage and facilitate action through organization which rests entirely on community and personal development, as the ultimate basis of corporate existence.

As we have already stated, there is widespread evidence of the social disruption which rapid change in economic status can cause in traditional societies. Yet, until the bonds of poverty start to break loose, there is little that anyone can do to improve upon the quality of life in poor, disadvantaged rural communities. Therefore, "integrated rural development," as perceived by IDEAS, demands that as economic vigor is achieved, the results be made meaningful to rural people in terms of life style, rather than in terms of net family income. This calls for a subtle, complex, long-term educational program, the cost and organization of which is a formal responsibility of the joint venture between the local people and the staff of the local operating company. The 'IDEAS' system calls for this task to be accomplished by means of discussion, technical

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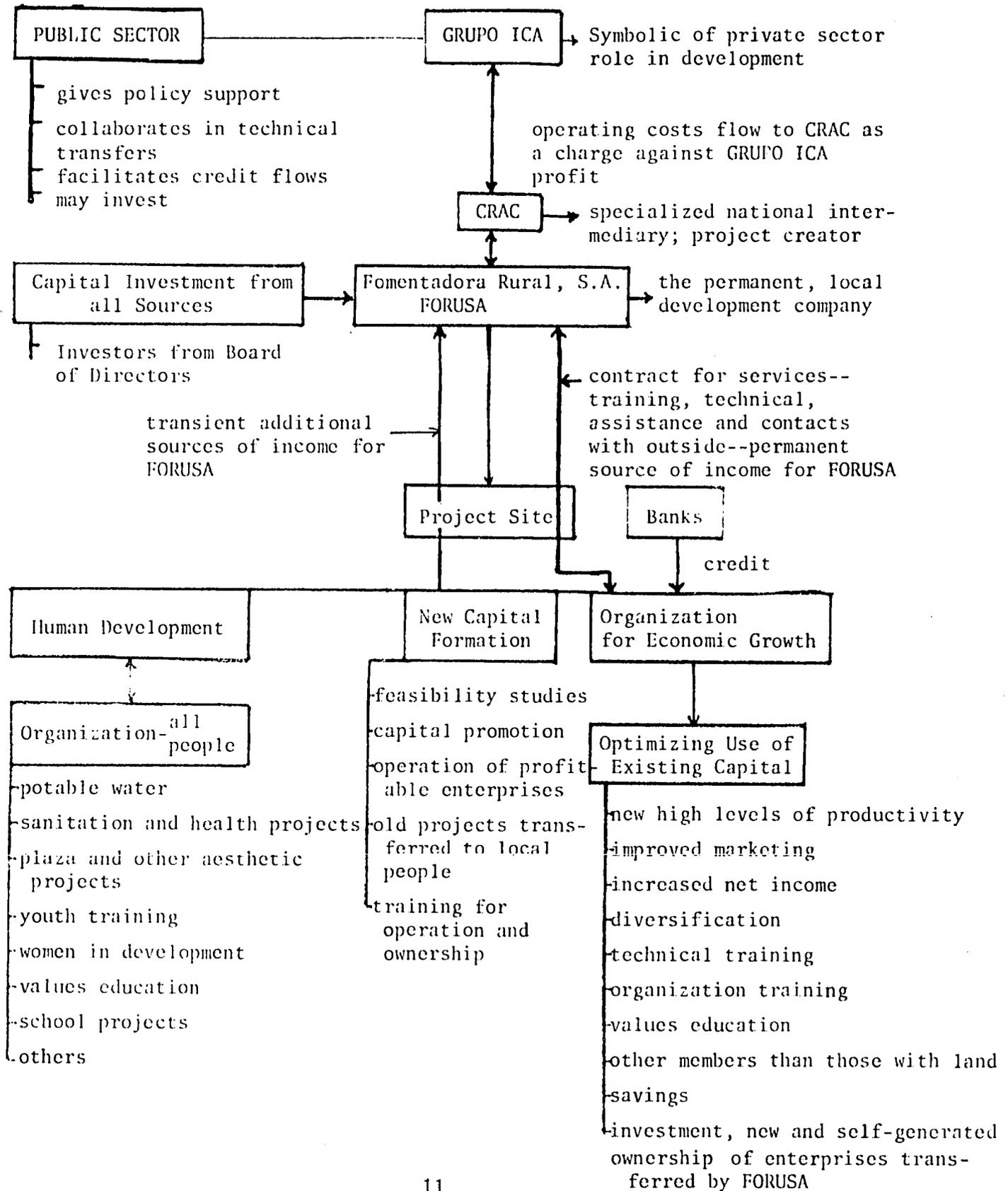
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Figure 1 is an illustrative summary of the Mexican model which IDEAS has built in Mexico and which is in operation under the sponsorship of the Grupo ICA (Ingenieros Civiles Asociados, S.A.). It is this model which reflects all of the foregoing descriptions of policy and implementation and which it is proposed to introduce into Guatemala in a form adapted to local conditions.

FIGURE 1

THE MODEL ORGANIZATION
(As it Exists and Operates in Mexico)



C. THE ACTION PROPOSED

C1. To establish the equivalent of CRAC. To accomplish this, IDEAS proposes the following:

a. To place two people in Guatemala. One, directly from the IDEAS' organization, will function as the temporary General Manager, directly responsible for top management until such time as his replacement can be trained and judged to be competent. Two, directly from CRAC in Mexico, to function as Associate General Manager, bringing to bear the full impact of the operational experience of CRAC over the past decade.

b. To back up the two resident representatives of the IDEAS/CRAC consortium, in the United States, IDEAS will assign a full-time project manager, whose functions, as directed by the Executive Staff of IDEAS, will be: to help organize and to participate in training; to provide information on appropriate technology and markets; and, to facilitate contact with potential investors, as well as joint venture partners in marketing and processing.

c. To further back up the two resident representatives of the IDEAS/CRAC consortium, CRAC, in Mexico, will assign a full-time staff member to be charged with the overall development of the training program, in concert with IDEAS, as it will take place in Guatemala, in Mexico and, in the United States. The training program will also involve other members of the staff of CRAC, in Mexico, as well as staff representing the local operating companies created by CRAC and carrying on their work in rural areas in different parts of Mexico.

d. That the Government of Guatemala be prepared to allocate and financially support no less than five and no more than ten professionally trained people, whose backgrounds and final selection should be decided upon in joint consultation between IDEAS executives and representatives of the Government. These people will constitute the field staff and will be the focus of training over the first two years of the contract with IDEAS.

C2. To place CRAC into operation. The operations proposed are:

a. To initiate the search for investment opportunities and

to proceed to the organization of local operating companies with the objective of setting up no less than two model or prototype enterprises within one year of the start-up of CRAC;

b. To initiate training, with a plan which includes these lines of action:

bi. intensive orientation to the nature of integrated rural development; agrarian history and law; business organization and the law; the nature of rural, small-scale business, as contrasted to larger, urban enterprise; rural culture; rural organization; and, the national organization of rural development institutions---this course, in the country, is to be patterned after the identical training program recently developed and tested by CRAC, in Mexico;

bii. an extended, perhaps up to six months, period in Mexico, which will involve actual field work, with defined responsibility within the operating structure of a local development company---this experience will be combined with regular analytical seminars with CRAC and IDEAS senior staff, to the end of extracting a truly relevant understanding of what goes on day after day, why, with what ease, or difficulty, to what end;

biii. an orientation program, provided in the form of short courses or seminars, in the country, for government officials, businessmen, representatives of technical and financial assistance agencies, university professors, university students, so that the conceptual basis, operational form and results of CRAC and its introduction as a public policy become widely understood and widely supported; and,

biv. an orientation program, provided by means of short courses or seminars or campus visits, aimed at students from Guatemala studying anywhere in the United States in disciplines in any way related to development, to the end of broadening their understanding of rural development work (adding quantity and quality to the talent pool from which to select technical and managerial candidates), and/or encouraging research activity for thesis and post-thesis programming which relates to solving critical problems in rural development.

D. BUDGET AND TIMING

The following budget is projected on an annual basis. IDEAS anticipates the placement of resident staff in Guatemala within three to four months after contract approval. However, IDEAS staff would start work immediately upon contract approval, not waiting upon the arrival of resident people, in order to accelerate the completion of pre-operational, organizational matters such as the physical location and institutional location of the CRAC offices; the selection of Guatemalan staff; the purchase and delivery of vehicles; early discussions of potential sites of projects; development of collaborative relationships with sources of technical information and expertise; the design of training and the actual start-up of a training program; among other matters.

While the budget is submitted as an annual one, it is suggested that the Government keep in mind that IDEAS envisions a three year relationship, with costs maintained more or less at the same order of magnitude, in order to maximize the value of its services. A three year contract is desirable for planning purposes but is *not* a requirement.

Final responsibility for fiscal control will rest with central office of IDEAS, in Nederland, Colorado, U.S.A. Accounting and audit procedures will be those followed by IDEAS in the course of its contracts entered into with various agencies of the Government of the United States, unless otherwise specified by the Government of Guatemala.

In order to proceed, after contract approval, IDEAS would require an irrevocable line of credit, in dollars, established at a bank in the United States. Approval of payment for services would rest with designated representatives of the Government of Guatemala. Based upon the final budget approved, however, IDEAS would require an advance payment equivalent to two months (sixty-one days) of work (one-sixth of the total budget), in order to begin its work.

Either IDEAS or the Government of Guatemala shall have the right of cancellation within ninety (90) days after notice.

It is suggested that the final contract state that any negotiations for a relationship to continue beyond any given year take place in the tenth month of the year to ensure an easy transition into continuity or termination.

With the foregoing details in mind, the budget for Year 1 is proposed, as follows:

1. Staff, resident in Guatemala, resident in Mexico and resident in the United States, necessary to implement the establishment of a national, integrated rural development center; to initiate the search for project opportunities in rural areas and to effect the start-up of local rural development companies; to design and implement a training program aimed at making the integrated rural development program one completely managed and directed by Guatemalan professionals; to facilitate access to U.S. technology, markets, joint venture capital and expertise and training capability as described in the text of this proposal, including a charge of 15% for social benefits..... 144,000
2. Specialized consultants, utilized in the conduct of feasibility studies of investment opportunities at given project sites, including international travel to Guatemala..... 30,000
3. International travel to and from the United States and Mexico, including a cost of living allowance at 40% of the salary of resident personnel..... 30,000
4. Domestic travel, within Guatemala and within the United States and Mexico, by staff 15,000
5. Direct support costs, including administration, office supplies and office management, fiscal audit and control, communications, report reproduction and distribution, at 30% of the total of items 1 through 4, above..... 62,000

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6.	Two vehicles capable of cross-country penetration (unless supplied by the Government) @ \$14,000, plus maintainance at 20% of the purchase price	20,000
7.	Contingency at 10% of the total of items 1 through 6.....	<u>33,000</u>
	TOTAL	334,000

Note: The Government of Guatemala, in addition, would be expected to allocate the necessary funds to support at least five and then a growing number of professional staff of national origin, including physical facilities, vehicles, training and travel costs. None of these costs relate to the IDEAS budget and such costs can *not* be calculated at this time. It is intended, long run, to include the private sector and possibly the international technical assistance agencies as sources of financial support for the integrated rural development center.



PROPOSAL II

Representation in the United States

A. INTRODUCTION

This proposal is intimately related to Proposal I, preceding. However, it is conceivable that independently of whether or not the Government of Guatemala chooses to establish the center for integrated rural development proposed, IDEAS, Inc. could provide a most valuable service by the establishment of close relationships with the research centers, training centers, financial markets, the business community and the multitude of technical assistance agencies, both private and public, which characterize the United States.

Therefore, Proposal II is presented either as a natural extension of the plan of work covered in Proposal I, or as a plan to proceed independently in the overall interest of agricultural and rural development in Guatemala.

B. PURPOSE

The purpose of maintaining widespread and diversified contacts in the United States may best be illustrated by the following brief descriptions of the objectives being sought:

B1. To develop markets for *existing* surpluses of raw and processed material;

B2. To locate and to create potential markets for raw and processed materials which might be produced in rural Guatemala and, then, to implement projects to satisfy these markets;

B3. To generate an accelerated and consciously focussed flow of investment capital, management talent and other benefits of joint ventures with the U.S. private sector;

B4. To generate an accelerated flow of support grants for research, training and project development, to the various institutions, public and private, currently charged with various responsibilities in the field of rural development in Guatemala;

B5. To bring about a dynamic and beneficial connection between the research and development capability of the private and public institutions and industries of the United States and the needs of Guatemala for technology most appropriate to the changing rural environment;

B6. To help, wherever and whenever it is possible, to maximize the benefits of advanced, specialized education in the United States on the part of Guatemalan university students studying in fields related to rural development.

B7. To provide a channel of communication between Guatemala and worldwide experience with the process of integrated rural development as shared by the very large number of university faculties, private voluntary organizations, private consulting companies, federal government agencies and international institutions and multinational corporations headquartered in the United States.

C. METHODOLOGY

C1. Analyze the import statistics covering the annual requirements of U.S. business and industry:

First, to determine overall need by product and by quantity;

Second, to provide the means of identifying, by detailed breakdown, the segments of business and industry purchasing these imports; and

Third, to lead directly to the specific companies involved.

C2. Analyze the full capability of Guatemala to compete in the U.S. market, in terms of quality, quantity, timing, terms of trade and other critical factors, with products now produced in surplus and/or with products which, by reason of climate, soil, available lands, existing or potentially available human skills, known technology, infrastructure in place or in process of construction and financial resources, might be produced for export, competitively.

C3. Seek out individual U.S. enterprises to determine:

First, their specific import requirements;

Second, their specific quality, quantity, price and other requirements;

Third, their satisfaction or dissatisfaction with existing sources of supply and the conditions under which they would consider a new source;

Fourth, how to match the opportunity to sell with the opportunity to supply;

Fifth, how to facilitate the negotiations between U.S. buyers and Guatemalan producers leading to mutually beneficial marketing arrangements; and,

Sixth, in those cases where production involves either, a) the establishment of a completely new production area, as, for example, on virgin land with attendant settlement or, b) the establishment of facilities to semi- or fully process a raw material, how to best organize a joint venture in which the U.S. buyer invests in the project which generates the needed supply.

C4. Establish a close liaison with all Guatemalan public and private institutions related to rural development in any way, in order to:

First, set priorities in the promotion of joint ventures based upon opportunities already said to exist based upon prior investigations;

Second, set priorities for new project developments based upon an integration of plans and perceptions of future opportunity as seen by national institutions and the evolving body of knowledge in the hands of IDEAS as it carries on its investigations and contact work in the United States;

Third, bring about the closest possible collaboration between IDEAS and the human and physical resources of Guatemala, thus ensuring the most rapid and most effective attack on any problems which must be solved before joint ventures in raw material production, processing, marketing, financing, design and production of appropriate new technology, and training can be consummated;

C5. Establish an especially close liaison with those institutions charged with the selection of students and the selection of educational institutions in the U.S. to which these students are sent for advanced training, in order to:

First, help in the selection process by identifying not only the knowledge base necessary for work in integrated rural development but, as well, by identifying those personality characteristics which prior study by IDEAS has identified as essential for effective performance among rural people;

Second, help identify the weaknesses in the educational background of candidates selected for training, such as English language

competency and, as well, help in determining how best to correct these deficiencies either before leaving for the U.S. or in the U.S. but before formal entrance into a study/research program;

Third, help select the most appropriate educational institutions in the U.S., in relationship to the goals of the experience;

Fourth, help the faculty of the institutions selected in the U.S. understand the needs of Guatemala and the environment of work to which the students will return;

Fifth, help both students and faculty identify subjects for theses which are both acceptable from the standpoint of scholarship and from the standpoint of preparing students for the solution of real problems in the rural areas of Guatemala; and,

Sixth, maintain occasional contact with students while they are in the U.S. through letters, telephone calls, sending them reports and by means of seminars to which they come for an assembly of several days duration, to optimize their experience and to ensure that they are current in their knowledge of rural development issues at home.

C6. Maintain continuous contact with the professional literature on development, with individuals working in the field and with the on-going stream of conferences which bring together the people most familiar with rural development experience worldwide, to the end of ensuring for Guatemala immediate access to successful techniques which might well be adapted to program and project design. The likely outcome of this search will be a newsletter of some type which would be published regularly and then widely distributed in Guatemala and elsewhere as current promotional strategy dictates.

D. BUDGET AND TIMING

1.	Staff necessary to apply the methodologies described in Section III, above, with appropriate supervision, as a fulltime responsibility	137,000
2.	Travel throughout the U.S. and to Guatemala	35,000
3.	Special costs of promotional literature and informational newsletters	10,000
4.	Special costs of student meetings at central points in the U.S.	10,000
5.	Direct costs of administration, fiscal control, audits, office operation, office equipment, report reproduction and communications	58,000
6.	Contingency fund calculated at 10% of the sum of items 1 through 5	<u>25,000</u>
	ANNUAL BUDGET TOTAL	275,000

Notes to the budget

- a. the same controls and conditions affecting the budget, as defined in the budget section of Proposal I, apply to the budget of Proposal II.
- b. it is conceivable that if both Proposal I and Proposal II were approved that certain efficiencies in staff organization and the assignment of work might be introduced, thus reducing the combined budget of both proposals. It is *not* possible to calculate this reduction before discussing the scope of work with officials of the Government.

PROPOSAL III

Representation Throughout the World

The preceding text covering the purposes and methodology of Proposal II, applies exactly to a justification of a promotional program which:

1. *Includes both* the United States and the rest of the so-called "developed" nations of the world, such as in Europe...and the so-called "capital surplus" nations, such as are represented in the oil rich countries of the Middle East; or,

2. *Excludes* the United States and concentrates entirely on sources of capital, technology and talent elsewhere.

Therefore, to avoid duplication, it is suggested that the descriptive sections of Proposal II be referred to as being the text of Proposal III, as well. What varies is only the budget.

BUDGET ALTERNATIVES

A. Assuming that both the United States and other parts of the world are to be covered:

- | | |
|--|----------|
| 1. Staff costs would increase over those shown for the budget of Proposal II to | 294,000* |
| 2. Travel costs would double to | 70,000 |
| 3. Special costs of promotional and informational literature would increase to | 25,000 |
| 4. Student relationships would remain at the same level as in Proposal II, unless there are a significant number of students outside of the U.S. | 10,000** |
| 5. Special costs related to the establishment and maintainance of an office center in Europe | 30,000 |
| 6. Other direct costs of administration, fiscal control, office operation, office equipment, report reproduction and general communications | 174,000 |

7. Contingency fund calculated at 10% of the sum of items 1 through 6	<u>50,000</u>
ANNUAL BUDGET TOTAL	558,000***

Notes:

- * Essentially doubles the staff and establishes a fulltime resident team in Europe.
- ** This budget item is subject to negotiation when further information is available on the number and distribution of students placed outside of the U.S. become known.
- *** The budget integrates the total cost of both Proposal II and Proposal III, Alternative A.

B. Assuming that representation in the United States is excluded and that work concentrates on possibilities elsewhere in the world:

1. Staff costs	157,000
2. Travel costs	35,000
3. Special costs of promotional and informational literature	15,000
4. Student relationships - to be determined	--
5. Special costs related to the establishment and maintainance of an office center in Europe	30,000
6. Other direct costs, as noted above	95,000
7. Contingency fund	<u>33,000</u>
ANNUAL BUDGET TOTAL	362,000

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APPENDIX G

Institutional Information

IDEAS, Inc. (Institutional Development and Economic Affairs Service, Incorporated) is a non-profit, tax-exempt educational and developmental institution, with headquarters in Nederland, Colorado, U.S.A., and was founded in 1965. IDEAS has two principle programs: one, focussed on integrated rural development, with field operations in Mexico and Central America; and, two, focussed on human development by means of experimental or non-formal educational techniques, with an emphasis on the problems of disadvantaged young people. IDEAS is not an endowed institution and conducts its work under the terms of grants and contracts entered into with a wide variety of private and public agencies.

The rural development program of IDEAS is administered through its Center for Agricultural and Rural Development, located in Fort Collins, Colorado. Historically, this program goes back to 1963, when the current Director of the Center, Dr. Simon Williams, began a worldwide study of the twin problems of hunger and poverty, the goal of which was to design innovative methods for accelerating rural development. This study, which covered a two year period, led to a field program in Mexico which began late in 1965 and continues to this date. Early in 1966, and shortly after the creation of IDEAS, the work in Mexico became a formal part of the total program of IDEAS and has remained so ever since.

Over the years, many talented and experienced people have contributed to the success and growth of the integrated rural development program, as staff and as consultants with continuing relationships. As an example of the people who would become involved in the delivering of the services described in Proposals I, II and III to the Government of Guatemala, the following form the basic corps.

STAFF AND CONSULTANT CORE RESOURCE

Dr. Simon Williams, Director of the Center for Agricultural and Rural Development. Dr. Williams would be directly in charge of any or all programs resulting from Proposals I, II and III. Academically, he received his Ph.D. in 1939 from Syracuse University, New York State

College of Forestry, as a major in wood technology and wood chemistry; as well, he holds a Masters degree in Education, granted by Harvard University, Graduate School of Education. Dr. Williams was formerly Dean of Faculty at Lowell Textile Institute and is currently Affiliate Professor, Department of Economics, Colorado State University and serves this university as Chairman of the International Advisory Council. In the field of development, Dr. Williams has served in Argentina, Venezuela, Ecuador and Nigeria in industrial development, with investment promotion experience in both the United States and Western Europe, particularly in the interest of the Government of Nigeria. In 1965, he took up residence in Mexico, as Associate Director of the International Marketing Institute, and, in 1969, was able to found and become General Manager of Coordinación Rural, A.C. (CRAC) (see Proposal I for details on the work of CRAC in integrated rural development, as well as note the attached copies of several publications which give additional information). During his residence in Mexico, which extended until 1976, Dr. Williams became the first Chairman of the Interdisciplinary Section on Agricultural and Rural Development of the Society for International Development and represented the Society at the World Food Conference, Rome, Italy. During 1977 and 1978, with the help of a grant from the Ford Foundation, Dr. Williams travelled extensively in Europe, Africa and Asia, to update observations and contacts relative to rural development activities. He has maintained extensive contacts with professional people and agencies concerned with development and with the agribusiness community. Relative to agribusiness, Dr. Williams is currently participating in an extended program focussed on the means through which agribusiness can be led to greater participation in efforts aimed at improving the performance of national food systems in developing countries.

Mr. Brian Beun, President of IDEAS, Inc. Mr. Beun received his B.S. degree in agricultural economics from the University of Arizona in 1958 and his Masters degree from this same university in 1960, also in agricultural economics. As well, he did advanced study in international economic development at Michigan State University in 1961, prior to

joining the U.S. Agency for International Development, in Washington. In 1962 and for the next four years, Mr. Beun was resident in Peru and worked extensively on rural development among the highland Indians. In 1966, he returned to Washington as the head of a newly formed Office of Campesino Affairs and it was just before this assignment that he conceived the organization which became IDEAS, Inc. Mr. Beun has been a Fellow of the Adlai Stevenson Institute and has served as a consultant to the East-West Center at the University of Hawaii and the Partners of the Americas. In recent years, in addition to his interest and participation in the IDEAS' program of rural development, Mr. Beun has been very active in the field of non-formal education, with special reference to disadvantaged youth, including those from traditional, minority societies. Mr. Beun also brings to the team a highly specialized talent and extensive experience in the field of the promotion of grants and other forms of capital inputs among both private and public sector sources of financing.

Mr. Eugene H. Miller, Associate Director of the Center for Agricultural and Rural Development of IDEAS. Mr. Miller, who is directly in charge of a new project in the Dominican Republic which is implementing a program precisely like that proposed for Guatemala in Proposal I, received his B.S. degree in Agronomy from Arizona State University in 1959 and a Masters degree in Foreign Trade, in 1961, from the American Institute for Foreign Trade. Thereafter, for seventeen years, Mr. Miller worked with Carnation International, first in Peru, then in the Philippines and then for ten years in Mexico where he was Manager of Production. During his years with Carnation, Mr. Miller served to study the feasibility of establishing milk processing factories in the United Arab Republic, the Republic of South Korea and England. In addition to his current responsibilities in the Dominican Republic, Mr. Miller has been and is involved in several other aspects of the IDEAS program of rural development, two of which are singularly relevant to all of the Proposals herewith submitted to the Government of Guatemala namely:

one, the design of training programs for the management of integrated world development enterprises, and,

two, a study of the needs of U.S. agribusiness for raw material supplies, semi-processed goods and export markets.

Mr. Joseph W. Recinos, Assistant Director, Center for Agricultural and Rural Development, IDEAS, who is resident in Guatemala City, Guatemala, is responsible for program development throughout Central America, received a B.A. degree from the State University of New York, City College, New York City, with major studies in Political Science, Economics and Latin American Affairs. Subsequently, he studied for two years in the Foreign Service School of the University of Georgetown, Washington, D.C. During the nine years prior to joining IDEAS in 1978, Mr. Recinos was Latin American Director of the Institute for the Study of Economic Systems and, at the same time, served as Latin American Representative and Associate of Kelso and Company, investment bankers headquartered in San Francisco, California, with responsibility for introducing Employee and Consumer Stock Ownership Plans into the area. This work led to extensive contacts with top management of both multinational and national corporations and high level government officials. As well, Mr. Recinos became deeply involved with feasibility analysis, financial markets, corporate financial analysis, labor organizations and law, among other aspects of the interaction between the private and public sectors in the field of economic development. Parallel with his relationship to Kelso and Company, Mr. Recinos served as an economic consultant to a variety of corporations in Mexico, Costa Rica and Guatemala and published widely in Central American newspapers and periodicals relative to the theme of broad capital ownership. The responsibilities of Mr. Recinos with IDEAS involve a natural extension of his experience from industry to rural development.

Lic. José Zaragoza Pulido, Gerente General, Coordinación Rural, A.C., with whom IDEAS has worked in collaboration since the inception of the integrated rural development program in Mexico in 1965. Lic. Zaragoza has had over a quarter century of rural development experience in Mexico and is a leading world authority, with extraordinary talent, in all aspects of rural organization, human development and, what might be called the "empresa rural." He received the Licencia in three disciplines, Philosophy, Social Sciences and Sociology from the Gregorian University, Rome, Italy. As well, he studied Social Psychology for three additional

years and did post-graduate study in Economic Development at the Instituto Luigi Sturzo, Rome; in Cooperative Movements at the Instituto Católica de Paris, in France; and, in Labor Law at the University of Munster, in Germany.

Ing. Jorge A. Galván Sanchez, Coordinación Rural, A.C., Mexico.

Ing. Galván was trained as a Civil Engineer at the Universidad Nacional Autónoma de México and received a Master's degree in Administration and Economic Planning at Stanford University, Palo Alto, California. He also did post-graduate work in the administration of small and medium-sized businesses and industries at Delft University, in Holland. Ing. Galván is charged with the development of new investment feasibility studies for all of the projects of Coordinación Rural and has had special training and experience in the overall management of integrated rural development enterprises which conform to the IDEAS/CRAC model.

Lic. Eduardo Llanos San Millán, Coordinación Rural, A.C., México.

Lic. Llanos, who is directly responsible for the training of management and staff of the integrated rural development enterprises established by Coordinación Rural, received his Licencia degrees in both Philosophy and Theology at the Universidad de Foriburgo, in Switzerland and, as well has done advanced study in Sociology, Social Psychology and Business Administration. Prior to joining Coordinación Rural, Lic. Llanos had worked for ten years as Gerente of two manufacturing companies.

Mr. James A. Miller, Coordinación Industrial, S.A., Grupo ICA, México.

Mr. Miller, who is also an Associate of IDEAS, worked with Dr. Williams in the development of the integrated rural development model from the inception of the field work in 1965 and served as General Manager of CRAC during 1976 and 1977 when he became financial analyst and consultant on new investments for the entire Grupo ICA. Mr. Miller received Bachelor degrees in Business Administration and International Economics from the University of Southern California, Los Angeles, California and a Master of Business Administration from the Harvard Graduate School of Business Administration, Cambridge, Massachusetts, in 1965. In addition to his decade of experience in Mexico and his association with IDEAS, Mr. Miller an Associate of the International Marketing Institute, Cambridge,

Massachusetts. For this institution, Mr. Miller participated in a world-wide study of the systems and practices of export promotion, with extensive contacts among top level businessmen and government officials in Europe and the Middle East. Mr. Miller is co-author with Dr. Williams of the book, Agricultural Credit Systems for Small-Scale Farmers--Case Histories from Mexico. Mr. Miller would serve either as a consultant or a senior staff member.

Ing. Alberto Jaime Guardiania, Director, de Manejo de Cuencas, Secretaría de Agricultura y Recursos Hidraulicos, Gobierno de México, D.F. Ing. Jaime is associated with the IDEAS/CRAC program as a consultant and brings to the team a vitally important expertise in water management and the protection of soil resources. He has been with the Secretaría since 1972. Prior to that time, between the years 1965 and 1972, he was Jefe, Departamento del Medio Físico e Infraestructura, Plan Lerma, a regional development organization with headquarters in Guadalajara. With Plan Lerma, Ing. Jaime conducted numerous feasibility studies relating to rural agribusinesses and the improvement of agricultural production. He is a civil engineer with a degree from the Instituto de Estudios Superiores de Monterrey, N.L., and received his Master's degree in Science after two years of study at the Instituto de Planamiento de Lima, Peru. He has been a member of the faculties of both the University of Guadalajara and the National University of Mexico and has travelled worldwide as a representative of the Government of Mexico.

Mr. Edward J. Wygard, President, Batres, Valdés, Wygard y Asociados, S.C., Mexico, D.F. Mr. Wygard, who would serve as a senior consultant to IDEAS in the fields of market analysis and promotion, feasibility studies, financial promotion and institutional relations, as they relate to Latin America and worldwide, has had over thirty years of experience in every aspect of economic development in Latin America, Europe and Africa. In the establishment of new industries, his work with private enterprise has involved feasibility analysis, plant location, financing, organization and policy, mergers and acquisitions and, joint ventures in public institutions. In the public sector, Mr. Wygard has carried out a wide variety of projects, including, for example, industrial financing and promotion in

Colombia, for the Interamerican Development Bank; implementation of the industrial plan in Ecuador, for the United States; identification and promotion of industrial opportunities in the Central American Common Market, for the Central American Bank for Economic Integration; reorganization of the Corporación de Fomento Industrial, Dominican Republic, for Arthur D. Little. Mr. Wygard spent nine years as industrial development advisor to the United Nations, four of these in Mexico and Central America, three in Peru and two in Ecuador. He is by training an industrial economist and chemical engineer, with post-graduate studies at the Imperial College of Science and Technology, London, and the University of Leeds. Mr. Wygard speaks English, Spanish, French and German, fluently.

Dr. Harold H. Webber, President, Croton Bioindustries Development Corporation, Groton, Massachusetts and a lifelong associate of Dr. Williams in the field of development. Dr. Webber is also a member of the Board of Trustees of IDEAS. He would serve as a senior consultant in new project development, especially in rural agri-industry; in the promotion of joint venture capital in the markets of the U.S. and elsewhere in the world; and, in the design, development and transfer of new and appropriate technology. Dr. Webber received his Ph.D. degree from the University of Texas in 1941, with major studies in Genetics and Biochemistry. He has been Director of Research, National Cotton Council of America; Executive Director of the Lowell Technological Institute Research Foundation, Lowell, Massachusetts; Senior member of the Research and Development Division of Arthur D. Little, Inc., Cambridge, Massachusetts; and, Vice-President for Development of the Roehr Products Division of the Brunswick Corporation. In recent years, Dr. Webber has given special development attention to applied aquaculture and to integrated biological systems which combine plant and animal production in sustained yield of a variety of commercial products, ideally suited to rural areas. His contacts are worldwide and would be of inestimable value to the IDEAS team. Dr. Webber has contributed extensively to the scientific literature and he holds fourteen patents. He was recently Chairman of the FAO/NORAD Round Table on the "Strategy for the Development of Aquaculture as an Industry," at Svandøy, Norway; and Chairman of the Fourth Food and Drugs from the Sea Conference, held in Mayaguez, Puerto Rico.

These biographical sketches are indicative of the range of talent immediately available should the attached proposals for an integrated rural development program be accepted. The people identified are *not*, in total, all of those who may become involved from the IDEAS/CRAC associates. Too, it is unquestionably true that considering the magnitude and complexity of the work programs included in Proposals I, II and III, new staff members and new consultants would be recruited as the work built up to full momentum.