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AN EVALUATION OF INDECA'S (NATIONAL
INSTITUTE OF AGRICULTURAL COMMERCIAL-
IZATION) ROLE IN THE LOAN PAPER COM-
PLIANCE AND ORGANIZATIONAL EFFORTS OF
THE GUATEMALA RURAL DEVELOPMENT PROGRAM

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An Evaluation of
INDECA'S ROLE
IN THE LOAN PAPER COMPLIANCE AND ORGANIZATIONAL EFFORTS
OF THE GUATEMALA RURAL DEVELOPMENT PROGRAM

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TABLE OF CONTENTS

	Page
INTRODUCTION	i
EVALUATION OF INDECA'S ROLE	
A. General.....	1
B. Privately-Owned Grain Storage Facilities.....	2
1. Financial Assistance.....	2
2. Technical Input by INDECA.....	5
C. Public Grain Storage Facilities.....	5
1. Present Facilities.....	5
2. Facilities Expansion.....	6
3. New Facility Locations.....	7
4. Problems in Development of New Storage Facilities.....	7
5. Need for Storage Facilities in the Highlands.....	8
D. Grains - Purchase Prices and Cost Pattern.....	9
1. General.....	9
2. Grades.....	10
3. Discounts and Premiums - Moisture.....	10
4. Transportation.....	11
5. Recommendations.....	11
E. Grain Purchase Program.....	11
1. INDECA Purchases - 1971.....	11
2. Corn and Beans.....	12
3. Rice.....	12
4. Records, Reports, and Bookkeeping.....	13
5. An Overview.....	14
F. Inventory Sales Program.....	16
1. General.....	16
2. Method of Making Sales and Sales Policy.....	16
3. Sales Prices.....	17
4. Inventory Movement.....	18
5. Inadequate Physical Handling Facilities-Central Storage.....	18
G. Funds to Cover Inventory Investment.....	19
1. Credit Arrangement.....	19
2. Credit Arrangement for Public Operations.....	19
3. Credit Arrangements for Private Inventory Investment.....	20
H. National Public Warehouse Law.....	21
I. Other Marketing Obligations.....	21
1. General.....	21
2. Vegetables and Fruit.....	22
3. Transportation.....	22
J. Remarks.....	22
APPENDIX.....	23
	25

INDECA'S ROLE
in the
GUATEMALA RURAL DEVELOPMENT PROGRAM

INTRODUCTION

The evaluation presented here is a segment of the over-all Evaluation Report on Loan Paper Compliance and Organizational Efforts, Guatemala Rural Development Program. The Evaluation Report is a team effort under the direction of USAID/Washington.

This portion of the report was prepared by Mr. James W. Lemley, USDA - ASCS. It deals primarily with the recently formed organization known as INDECA, the National Institute of Agricultural Commercialization. This organization's obligations cover price stabilization, operation of public grain warehouse facilities, application of the National Warehouse Law, and quality control and development of markets for fruit, vegetables, flowers, and other products manufactured in the rural area such as weaving, ceramics and silver.

Reports of four other team members went into the over-all Evaluation.

Mr. Lemley's services for this evaluation were supplied by the Food and Feed Grain Institute, Kansas State University under contract AID/csd-1588 Technical Assistance in Food Grain Drying, Storage, Handling and Transportation.

III - D. INDECA

Evaluation of INDECA's Roles

A. General

The review of the Rural Development Program of which INDECA is a most important segment reveals that institutional structure and the financing arrangements are the result of excellent analysis and planning. Every segment of the structure has been designed both with clearly defined purposes and provided with capabilities with which to make it possible to execute the programs in a logical and systematic manner.

Another important factor that is in evidence is that there is a considerable amount of flexibility that has been retained to permit changes and adjustment as the circumstances require rather than absolute rigidity which oftentimes renders a program inoperative.

This program is certainly an ambitious venture. It is far-reaching and it is difficult to identify any segment of agriculture that has been omitted.

Even though the program is still in the development stages, each segment appears to move forward as soon as it is formalized and approved.

The sincerity, individual and cooperative effort and enthusiasm with which the personnel are applying themselves is extremely gratifying to view.

There are problems that are presenting themselves as is expected in any action program such as this. Problems are a part of the action and are expected in abundance during such a development period.

During the short period of observation some major problems were detected. In each instance, however, the problem had been identified and was being given attention and consideration.

Of more concern are the large number of small problems which exist and which may be more difficult to resolve than some of the major problems. In the final analysis these small but difficult problems may be the major factor as to whether the program is considered a huge success or merely an ordinary acceptable program. The following is a summary of the parts of INDECA that were reviewed. INDECA has far-reaching duties and obligations and time did not permit the type of review that would produce a thorough understanding and the satisfaction of having a feeling of involvement.

B. Privately-Owned Grain Storage Facilities

1. Financial Assistance

The program provides for a joint financial arrangement between Guatemala and AID to provide available loan funds to construct privately-owned storage and handling facilities. The financial arrangement provides that available loan funds will be made available on an accumulating basis over a five-year period, resulting in a total commitment of \$5,060,000. The projected results are that this available financial arrangement will result in 46,000 MT (1,840,000 bushels) of new privately-owned grain storage and handling facilities. This results in providing available loan funds for construction which amount to approximately \$110 per MT (\$5 per cwt.) (\$2.80 per bu.).

Remarks and Suggestions:

- (a) It is difficult to determine the momentum that can be generated in the development by the private sector. Past experience indicates that construction of grain storage and handling facilities

by the private sector is very slow. They are inclined to wait until they can determine that the new trend in production is permanent and that a consistent need for such facility is in evidence. This segment of the program will probably require a considerable amount of promotional effort on the part of INDECA personnel. If the program starts slow, those who review the progress should not over-react. If a review shows that sufficient effort is being made to identify potential locations of need and that sufficient exposure of the program is being given, then only time will probably cause the private investor to participate. This program is quite complicated and perhaps one individual should be chosen to study and to become fully acquainted with the privileges offered the private sector both from the financial and the operational standpoint.

- (b) The financial structure for construction loans have been established in BANDESA by the Central Bank of Guatemala. The loan paper provides for AID participation. This is, however, conditioned upon establishing a method of making sufficient money available for inventory investment. This arrangement is being developed at this time and is covered in Section C herein.
- (c) A bonded warehouse law has been established and will be an important part of the private grain storage facility development.
- (d) The department within INDECA which will be responsible for promotion and development of the private storage loans and supervision is in the process of being developed at this time. During this department development period the method of promotion

will be established. Also the technical assistance obligations will be identified and the method of supervision and inspection will be formalized.

- (e) One important consideration on the part of INDECA related to promotion is that this is a loan to a private investor. Care must be taken to be sure that each individual case is carefully handled. Excess promotional efforts can endanger the success of the venture. The capacity of the facility should be carefully analyzed and also the type of facility should be adequate as well as the equipment, but an excessive cost may be very difficult to recover.
- (f) There was no evidence of program omission at this time except in relation to products other than grain. Perhaps such consideration was given during the planning stage, and for good reason, not included. It does appear with the emphasis that is being put on production and marketing of crops other than grain, a need for a processing plant, and in some instances, a storage facility may become necessary to facilitate the marketing process. In all probability financing will be as much of a problem as is now apparent in developing private grain facilities. It is obvious that as these new crops are brought into concentrated commercial production, new facilities will be necessary for quality selection, processing and storage. Therefore, if a study has not been made relative to availability of money for this purpose, it is suggested that some consideration be given this problem.

INDECA has the marketing responsibility and the technicians. This arrangement would only be an extension of the authority they now have to provide loan funds for grain facilities.

2. Technical Input by INDECA

INDECA has the obligation to promote loans for construction of new grain storage and handling facilities through their technical field agents.

Due to the complexity of this effort, it is obvious that the feasibility study and technical planning with the potential borrower will be a job for a person who is fully familiar with all aspects of storage and handling of grain. Also this person must be familiar with the loan requirements, the type of facility and needed equipment, as well as the compliance and inspection procedure that will be established relative to the inventory financing. The responsibility for this promotional effort should be assigned to one person who becomes specialized in this venture. INDECA is also obligated to provide technical assistance and guidance in the field of storage and processing techniques. This person is available and is capable of training and guiding the warehouse personnel in the proper operation and grain storage techniques as well as carrying out the follow-up inspections and reporting system.

C. Public Grain Storage Facilities

1. Present Facilities

At the present time INDECA has available one central storage center and four buying stations. These are the facilities that were transferred under the reorganization from INFOP.

The central storage center is located in Guatemala City. The four buying stations are located at Coatepeque, Retalhuleu, La Democracia and Chiquimuililla.

2. Facilities Expansion

The public grain facilities are to be expanded in the near future. Finances have been established in BANDESA to cover this construction cost.

The engineering blueprints and specifications for the central silo centers were contracted to a private engineering firm. The work on the buying stations is being done by the engineers in INDECA.

The bids on both types of facilities are being let in two phases.

The first bids cover all of the equipment. The second bids will cover the construction and installation of the equipment.

The reason for this was that a determination was made that the required equipment would come from many sources and that local construction companies would have difficulty in putting the entire package together.

There were three bids received on the equipment for the central silos and they are being analyzed. As soon as a contract is awarded it will be necessary to finish the blueprints on the basis of the equipment acquired. Following this bid, invitations for construction and equipment installation will be released.

The same procedure will be followed on the buying stations. The actual sites have been selected with special attention to drainage, electricity and over-all desirability.

There is some delay in actually acquiring the sites. The contracting engineer has obtained permission from the site owners and is proceeding to make subsoil borings in order to verify satisfactory foundation conditions.

The construction and equipment installation contracts will be confined to Guatemala based contractors.

3. New Facility Locations

The location and capacity of the new proposed grain facilities are as follows:

Central Storage Centers

<u>Locations</u>		<u>Capacity</u>
Quezaltenango	Quezaltenango	10,000 TM
Retalhuleu	Retalhuleu	10,000 TM
Jutiapa	Jutiapa	3,900 TM
Los Amates	Los Amates	3,900 TM
Tactic	Tactic	3,900 TM

Buying Stations

<u>Locations</u>		<u>Capacity</u>
Parc. La Maquina	Cuyotenango, Such.	2,500 TM
Fray Bart. De Las Casas	Sebol, Alta Verapaz	2,500 TM
Teleman	Panzos, Alta	2,500 TM
Nueva Concepcion	Escuintla	1,250 TM
Cayuga	Morales, Izabal	1,250 TM
Montufar	Jutiapa	625 TM
Jalpatagua	Jutiapa	625 TM
Parc. Caballo Blanco	Champerico, Reu.	312.50 TM
Catarina	Malacatan, San Marcos	312.50 TM
Las Palmas	Coatepeque, Quezaltgo	312.50 TM
Ipala	Chiquimula	312.50 TM
Mongoy	Asuncion Mita, Jut.	312.50 TM
Parc. Monterrey	Suchitepequez	156.25 TM
Parc. La Blanca	Ocos, San Marcos	156.25 TM
Rio Dulce	Izabal	156.25 TM
San Esteban	Chiquimula	156.25 TM
		<hr/> 45,450.00 TM

4. Problems in Development of New Storage Facilities

The major problem for INDECA that was anticipated and which was found to exist relates to the development of the storage facilities. This is expected when such a far-reaching development program is initiated.

Production promotion and price commitments can be initiated in a rather short time. Planning and bringing about the construction of complex

facilities requires a considerable amount of time.

This problem is very apparent to those persons working in INDECA. There is real concern as to whether they can meet their commitment to buy and exert the intended influence in the market. This is a critical problem. The first year is the utmost importance if public confidence in the program is to be maintained.

The target dates for acquiring storage facilities are already falling behind. The initial date for letting the contract for equipment for the central centers was December of 1971. The new target date is about the middle of March.

A target date for completing the other contracts and to start construction was set for May 1972. July seems more logical as of now for beginning construction.

If these facilities are operative by harvest time of 1973, they will be fortunate.

The buying stations are more simple to construct; however, site selection, site acquisition, contractor selection and construction will probably take more time than originally anticipated. It appears that if the progress is watched carefully and efforts are made to expedite the completion, these buying stations can be completed in time for the 1973 major harvest season. There appears to be no chance of having any of the stations available for the 1972 harvest.

5. Need for Storage Facilities in the Highlands

In reviewing the over-all Rural Development Program, the biggest surprise was the absence of any INDECA grain facilities in the highlands. The over-all program repeatedly points to the problems in this highly populated rural area. All planning points to the concentrated effort

that is to be made in applying production techniques, making production loans available, and moving these small farmers from a subsistence environment into an economic environment. In spite of this, the capability of influencing the producers' marketing prices is absent.

It is recognized that this area has some well-organized privately-owned operations but most of these operations are involved in wheat which has been influenced by Government involvement for many years. It is also recognized that to date, this is considered a deficit corn producing area. The fact remains that at harvest, corn is sold and later corn is brought into the area.

If prices are to be made available to the producer and to the consumer within the pre-announced ranges, then INDECA must exert its influence. This can be done only if INDECA's presence is established in the area and the agency stands ready and willing to buy and sell at the committed prices. It appears that there is an absolute need for at least three small buying stations between Guatemala City and Quezatenango. This would assure proper support of the producers' prices and also serve as an outlet into the local market to apply the proper influence on the consumers' market.

D. Grains - Purchase Prices and Cost Pattern

1. General

Time did not permit completing an in-depth study of the prices being paid producers by INDECA. Prior research documents were used relative to cost of production, other C.A. market trends and off-shore import prices for making a judgement analysis. This brief review did not reveal any obvious miscalculations. It appears that INDECA did the best job possible.

If it becomes necessary in the future to make changes, it appears that INDECA will be guided by experience and by giving close attention to other country prices and production unit costs that will change as yields are increased by applying modern production techniques.

2. Grades

The standards for classification of grains that are being used are those which have been established as the uniform standards for Central America. They are a good set of standards. They provide for only three grades for corn compared to six grades used in the United States. There is no need for six grades. The three meet the marketing needs, and they are still compatible with other standards used in world trade.

3. Discounts and Premiums - Moisture

INDECA's pricing system is also good. They announce their buying price based on 16% moisture content and make settlement by paying a premium for lower moisture and discounts for higher moisture. This method develops favorable appeal to sellers. Most markets offer only discounts with no incentive aspects.

The moisture premiums and discounts appear to be sufficient to cover weight loss and drying cost. The formula for corn is 1.1% loss in weight for each 1% of moisture which results in approximately 3¢ per cwt. An additional 3¢ for each 1% of moisture is applied to the price for the cost of drying. This accounts for the 6¢ premium or discount in the pricing system except for 5¢ in the higher range. Research and cost accounting during the first few years will verify the accuracy of these figures.

The price adjustments between grades also appear fair and reasonable. Attached are Exhibits 1, 2, 3, 4, and 5 which show the standards and the pricing pattern being used for beans, rice and corn.

4. Transportation

The other pricing factor used is related to transportation. The announced prices are based on buying price at the farm level. If the farmer delivers or makes arrangements to have his grain delivered to the buying station, the price is increased by 15¢ per cwt. If corn is delivered to the Central Storage Center in Guatemala City, the price is increased by 40¢ per cwt.

5. Recommendations

This method of pricing should be reviewed carefully to be sure that the increase is not resulting in a total cost that is out of balance with other country prices. The review will also reveal whether the present buying price is resulting in a built-in excessive spread between production cost and the stabilization price. If this happens, it will result in too small a spread between buying and selling prices. This puts the squeeze on the private grain dealers or results in too high a price to consumers. This phase of the pricing should be researched by INDECA in order to be certain that the pricing is correct or that adjustments should be made.

Any needed downward adjustment should be made early in the program before country-wide application of the stabilization program is initiated.

It will cause less concern to the public than if it is done later.

E. Grain Purchase Program

The effort to apply the price stabilization program during the year of 1971 was by necessity confined to the areas adjacent to the existing storage facilities. There were some exceptions.

1. INDECA Purchases

The amounts of grain acquired during the past harvest were:

Corn - 180,000 cwt.
Beans - 21,000 cwt.
Rice - 68,000 cwt.

2. Corn and beans were purchased primarily directly from the producer. Two methods were used. The first method was to make purchases at the INDECA storage locations. The recognition and compensation for transportation served as a useful incentive for such effort. It also made it possible to apply an alternative method where a group of producers could not or did not know how to accomplish the delivery. INDECA field agents would meet with a group of producers and encourage them to accumulate and pool their corn. At a predetermined time INDECA would send a truck to pick up the grain.

Producers, as a group, made their own arrangements to rent a building or to use one furnished by one of the producers. The quality determination, pricing and purchase was made at the accumulation point. This extra effort on the part of INDECA reveals the real desire on their part to properly apply the program. As time passes, producers will become accustomed to pooling and acquiring a truck for delivery to the INDECA facility. In the meantime, this type of INDECA concern and effort is what is needed to build confidence and respect for the program.

3. Rice

Rice is being handled in a different manner. Because of limited storage facilities and rice outlets which require special milling equipment, INDECA has made an agreement with the millers. It appears that the arrangement is sound and workable at least for the present.

The conditions are:

- (a) The miller must pay the producer the established price set by INDECA.
- (b) The miller places the rice in his storage facility.

- (c) INDECA purchases the rice in storage at the mill.
- (d) Millers are permitted to repurchase a portion of the rice each month up to 80% of INDECA inventory.
- (e) Twenty percent of inventory is retained to cover excessive consumer price rises late in the marketing year.
- (f) If INDECA calls for their rice, the miller is paid 30¢ per cwt. for milling costs, and INDECA moves the rice to the markets where prices are moving above the announced consumer price.

This arrangement sounds logical; however, close supervision must be maintained to be certain that:

- (a) The producer is being paid the INDECA announced price,
- (b) Proper grades are being established at the buying location,
- (c) The proper premiums and discounts are being applied.

There are several other safeguards that should be established in order to be certain that both parties are fully aware of their obligations and to be sure that all cost records are properly maintained.

As soon as INDECA facilities are completed and the warehouse inventory loan program is activated, perhaps these stocks should be handled in the same manner as other grains. INDECA would have better control and such arrangements would probably work to a better advantage for both parties.

4. Records, Reports and Bookkeeping

No attention was directed to records, reports or bookkeeping methods. This should be carefully reviewed with two purposes in mind. First, to be certain that all information necessary for pricing, fiscal recording and grain quality control is recorded. However, special

attention should be given to reducing the paperwork to a minimum by eliminating information that has little or no meaningful use. Also, duplicate recording of the same information on separate forms should be eliminated. By the use of copies of a basic form and proper flow of paper, multiple duplication of information on different forms can be reduced to a minimum. Too often new operations result in massive paperwork that causes inefficient operations and loss of productive time. The other type of information that can be included is statistical information that really has nothing to do with the actual purchase procedure but may supplement other statistical efforts such as: area of production, size of farm, yield, production loan participant, and current prices being offered by private buyers etc.

Buying grain is one thing, a good report system, recording system and cost accounting system are just as important but excess recording and generating masses of paper is a waste of time.

5. An Overview

From the over-all standpoint, it is felt that INDECA has the technical ability and understands how to exert the proper influence on producers' prices. Continued training will bring forth the final desired level of efficiency and public respect. The primary problem at this time is the shortage of storage space and equipment for handling, conditioning and storage of grain. Country-wide application of the program is not now possible. Producer market prices can only be slightly affected until more capability is provided.

The public will be patient for a limited length of time. Beyond that, they will start to compare present efforts to past performance.

When this happens, it will be difficult to regain their confidence. There are some things that can be done now to demonstrate the sincere effort that is being made by INDECA. If these efforts are made, two things can be accomplished. The influence in the market will be extended and the producers will recognize the extent to which INDECA is willing to go while waiting for new facilities to be constructed. As grain is acquired and put into the storable condition, it can then be placed in temporary storage. For example, the building at the buying stations can be filled with grain to supplement the capacity of the silos. A search in adjacent towns will undoubtedly result in buildings that can be rented. Temporary space can be used with a minimum of risk if clean, dry corn is transferred to temporary storage and if a good rodent control program is practiced.

Over a long term, a certain amount of portable equipment can be used to a good advantage. Consideration should be given to purchasing such equipment now, such as grain augers, portable driers, bagging equipment, etc. It might be logical to purchase a reasonable number of small steel silos. They are easy to erect and are not difficult to relocate at a later date.

It seems that this first year must be viewed as critical. Production loans are to be applied over a wide area. With this, the companion market must be available if the over-all program is to get off to a good start.

It is obvious that during this development period, ingenuity is the order of the day. INDECA has already demonstrated their ability to fabricate ideas and solutions, and they deserve any outside support or encouragement needed.

Again for the purpose of emphasis, it must be recognized that no buying stations for the highlands are included in the present plans. An initial analysis might indicate that proper pricing influence in other parts of the Nation would carry over to all other areas and particularly to the highlands.

This area is probably the last place where outside activity would influence the local markets. Some reasons for this are (1) the fact that the farms are small, (2) the farmers are poor, and (3) they are quite closely attached to their local markets. It appears certain that both producer and consumer prices will follow the patterns of the past unless INDECA moves in and includes this area in their national marketing system.

F. Inventory Sales Program

1. General

This phase of INDECA's operation can be viewed only from the standpoint of planning and delivery capability. They are fully conscious of their current position. All of the public grain facilities are full to capacity and their ability to operate a buying program during the next harvest period depends entirely upon their ability to sell the grain now in inventory.

In the absence of any historical base, this problem is a real concern.

2. Method of Making Sales and Sales Policy

- (a) Grain will be offered for sale to all purchasers at the same price.
- (b) Grain will be disbursed at all storage facilities and at other locations, by truck delivery if necessary, to exert influence on consumers costs until the additional facilities are available.

- (c) If the supplies appear to be too small to successfully influence the consumers' price, selective selling will be imposed. First choice - consumers and consumer suppliers; Second choice - commercial buyers, such as food requirements for workers in cotton and coffee; Third choice - processors; and, Fourth choice - other country buyers.
- (d) If domestic supplies are obviously insufficient to hold consumers prices, additional supplies will be imported.
- (e) Future plans will be to hold a reasonable supply from one year into the next year, or at least until the new crop prospects indicate that the new supply will be adequate.

3. Sales Prices

- (a) The announced sales prices for this year are:
 - 1. At regional buying centers - September through December.
 - Corn - \$3.60 per cwt.
 - Beans - \$9.10 per cwt.

These prices are being increased at the rate of five cents per cwt. each month from January through August.
 - 2. At the central storage center in Guatemala City - September through December.
 - Corn - \$3.85
 - Beans - \$9.35
 - Rice - \$8.80

These prices will also be increased at the rate of five cents per cwt. each month from January through August.

From the readily available information, it appears that the margin between the buying prices and the selling prices are sufficient to cause the pricing structure to be economically sound.

A cost accounting system should be established so that a future cost analysis can be made by INDECA. Such information would then be the basis for any needed adjustments either to reduce or increase the sales margin.

4. Inventory Movement

As has been mentioned before, disposal of the current inventories is absolutely necessary. Failure to dispose of these supplies means no purchase program this year. INDECA personnel are fully aware of this and are deeply concerned. It is too early to get an indication regarding the normal demand period for the pending price movement. Under normal conditions, it would be expected that the market will move up starting in about April and that the market would take the inventory by harvest time.

They intend to watch this situation closely beginning in late March and if conditions appear to be hopeless by June 1, then vigorous effort will be put forth to make other country sales including off-shore sales.

This problem must be watched very carefully and current reports relative to price movement and sales must be made available to all levels of management on a current basis.

5. Inadequate Physical Handling Facilities - Central Storage

There is one other problem that should be surveyed at this time. This has to do with physical ability to empty the central storage center silos in Guatemala City.

Located in one small room is one bagging machine. There is no storage or holding space for bagged grain. As grain is bagged, it must be loaded on a truck, one truck at a time.

The employees at the facility estimate that it will take from three to four months to bag the grain now held in inventory. As of now, most grain is handled in bags. Very few buyers are able to handle bulk grain. This problem of bagging is entirely unsatisfactory and could be the limiting factor as to the movement of the inventory. This problem should be analyzed now and action taken to provide a solution. Beyond this, there is little that can be done at this time other than attempt to establish other country potential market outlets.

G. Funds to Cover Inventory Investment

1. Credit Arrangement

The loan paper under Commercialized Credit relates that GOG intends to provide a working capital fund to finance grain inventory. A portion of the fund is to be used to make finances available to the private facility owners to enable them to invest in inventory holdings. Another portion is to be made available to INDECA to cover their inventory holdings.

The public funds have been financed by the Central Bank of Guatemala through BANDESA. The fund for private financing is pending.

2. Credit Arrangement for Public Operations

The initial available credit for INDECA was established in BANDESA in the amount of \$900,000. This was later increased by \$1,000,000 for the total of \$1,900,000.

INDECA has drawn upon this fund to cover their current inventory. They feel that the current fund is more than ample to cover their expected purchases from the next harvest.

3. Credit Arrangements for Private Inventory Investment

The present plans provide for private credit, making funds available in two different manners.

- (a) Loans will be made by BANDESA direct to the facility owner to cover a portion of the inventory investment.
- (b) A companion arrangement will be established in BANDESA, a "Guarantee Fund" which will run to a commercial bank to cover loans made by the bank to private facility owners for inventory investments. This is in reality a substitute for the guarantee often provided by a commercial bond.
- (c) In both cases, the application for coverage either by direct loan or a guarantee will be made through INDECA. The final review and granting of the loan or guarantee will be the responsibility of BANDESA.
- (d) Although this department within INDECA is only in the development stage, it is only logical to expect that such financing will be limited to those grain storage facility owners who are operating as a licensed warehouseman under the warehouse law. This would provide the proper structure of obligations. The INDECA technicians would then be used to make the required investigations, reviews and inventory examinations.
- (e) The funding of this phase of the program has not been completed. It was reported that a study was being made of the proposal by the Minister of Finance and that a decision was expected in the rear future.

H. National Public Warehouse Law

A public warehouse law has been made available. A copy of the law was provided; however, it has not been reviewed to date. It was reported that the law was general in nature and would cover any type of warehousing and would be applied to specific commodities by the execution of a set of rules and regulations such as grains, processed fruits and vegetables, household appliances, etc. This is the type of law that was previously suggested. No comment is being offered relative to the completeness of the law at this time.

I. Other Marketing Obligations

1. General

Under the Rural Development Program the marketing obligations of INDECA cover a much wider range than grains. As the diversification of rural production develops, these responsibilities will become more and more demanding. It is already apparent that the personnel within INDECA must become specialized if the proper technical assistance is to be made available. No one could be expected to become sufficiently proficient to be effective in marketing of all the products that can be produced in rural Guatemala. There are potentials in fruits, vegetables, weaving, ceramics, woodcraft, silver craft, leather, flowers, and meats including fish, etc. Marketing techniques must include review of potential production, quality control, concentration of supplies, market outlets, price analysis, transportation, financing, etc. No one person can cover such a wide field and do an acceptable job.

It is apparent that a considerable amount of study and planning must go into this phase of INDECA's efforts. Even though only a few products are now being produced in sufficient quantity and of a quality for

off-shore sales, many more could be and will be demanding attention in the near future.

Even with the few products that are now moving into export, there are many problems that are requiring attention. Some are of a serious nature and may jeopardize the success of what now appears to be an emerging industry.

2. Vegetables and Fruit

There is an exciting development taking place in the Zacapa area with only a small portion of the potential irrigable area developed. Small quantities of vegetables and melons are being produced, packed and sold into the Miami market. Some problems as would be expected in the beginning are in existence such as quality control, proper selection for the market, proper packing and transportation. All of the mentioned problems are being reviewed and corrective action being applied except the problem of transportation.

3. Transportation

The problem of sufficient water transportation is in evidence.

Transportation seems to be a worldwide problem and is a particular problem in those cases where production is seasonal. This does not alter the fact that a commodity is really not worth producing unless transportation is available. This is particularly true when perishables are involved such as cucumbers, melons, platanos and flowers.

Transportation is a difficult problem and will undoubtedly require the attention of other than INDECA personnel. INDECA should, however, start an investigation on current and projected transportation needs.

As soon as meaningful information is available, it should be made available to those who can bring pressure upon the suppliers of

transportation. If it requires the attention of the President, then the President should be made aware of the problem. The review and analysis should cover both air and water transportation.

J. Remarks

It was a privilege and a gratifying experience to view the Guatemalan Rural Development Program. It was particularly interesting to be permitted to take a look at the program during the organizational period. There are several items which caused me to come away with an over-all satisfying and optimistic impression.

1. The organizational structure itself has the appearance of being well-planned, complete and fully operative. Obligations and responsibilities seem to be well-defined and properly placed.
2. The sincere enthusiasm that extends from the Minister and Vice-Minister of Agriculture down through each department to the field agents is most apparent. Everyone contacted was fully aware of the over-all program goals and left an impression that they felt they were a part of the team. Even more unique was that the same feeling was shared by the public. To me this was something new and different.
3. I was impressed with the interest, understanding and involvement within the AID Mission. Mr. Cuibertson and his staff are as dedicated to the success of this program as are the Guatemalans. It is more than apparent that Al Chable and Joe Courand are actually living the program. It seems their workload would be unbearable if it were not for the efficiency and effectiveness of their office personnel.

4. I also appreciated the frankness of expression and immediate cooperative attitude that was afforded at INDECA. They volunteered their problems and concerns, and without hesitation were willing to discuss any phase of their program. I offer my apology to each employee of INDECA, either for the brief attention I gave to their part of the operation, or in many instances, for not becoming involved in any manner with their assignments and responsibilities.
5. As was stated on several occasions, this is an ambitious program. It is one that has and will continue to present difficult problems. Each problem will require a solution, otherwise the program will finally exist primarily for the purpose of defending its weaknesses rather than operating from a position of strength.

If this report contains erroneous interpretations or assumptions, I apologize. Also, if this report appears too lengthy, it is only because of the enthusiasm that is generated by becoming involved in what I consider the best planned program and the one with the most potential to succeed that I have viewed.

APPENDIX

Exhibit 1 - Price Tables for the Purchase of Beans.....	26
Exhibit 2 - Price Table for the Purchase of Paddy Rice In Benefit to Long Grain Rice.....	27
Exhibit 3 - Price Table for the Purchase of Paddy Rice In Benefit to Medium Grain Rice.....	28
Exhibit 4 - Price Table for the Purchase of Paddy Rice In Benefit to Short Grain Rice - Quality Standards....	29
Exhibit 5 - Price Table for the Purchase of Corn in the Production Region - Quality Standards.....	31

Exhibit 1

**PRICE TABLES FOR THE
PURCHASE OF BEANS**

Humidity	Grade-1	Grade-2	Grade-3
14	8.00	7.84	7.68
15	7.84	7.68	7.52
16	7.68	7.52	7.36
17	7.52	7.36	7.20
18	7.36	7.20	7.04

Characteristics:

Grade-1:	Damaged kernels up to	4%
	Broken kernels up to	2%
	Other types of grains up to	2%
	Foreign material up to	6%
Grade-2:	Damaged kernels up to	6%
	Broken kernels up to	3%
	Other types of grains up to	4%
	Foreign material up to	8%
Grade-3	Damaged kernels up to	8%
	Broken kernels up to	4%
	Other types of grains up to	6%
	Foreign material up to	10%

Exhibit 2

PRICE TABLE FOR THE PURCHASE OF PADDY RICE
IN BENEFIT TO LONG GRAIN RICE*
SEASON 1971-72

Humidity	Grade-1	Grade-2	Grade-3
13	4.39	4.27	4.15
14	4.31	4.19	4.07
15	4.23	4.11	3.99
16	4.15	4.03	3.91
17	4.07	3.95	3.83
18	3.99	3.87	3.75
19	3.91	3.79	3.67
20	3.83	3.71	3.60
21	3.75	3.64	3.53
22	3.67	3.57	3.46
23	3.60	3.50	3.39
24	3.53	3.43	3.31
25	3.46	3.36	3.24

*The purchases made in benefit in the capital city will receive an additional premium of Q. 0.25 per hundred-weight above the prices stated in the table.

Exhibit 3

PRICE TABLE FOR THE PURCHASE OF PADDY RICE
IN BENEFIT TO MEDIUM GRAIN RICE*
SEASON 1971-72

Humidity	Grade-1	Grade-2	Grade-3
13	4.14	4.02	3.89
14	4.06	3.94	3.81
15	3.98	3.86	3.74
16	3.90	3.78	3.67
17	3.82	3.70	3.60
18	3.74	3.63	3.53
19	3.67	3.56	3.46
20	3.60	3.49	3.39
21	3.53	3.42	3.32
22	3.46	3.35	3.25
23	3.39	3.28	3.18
24	3.32	3.21	3.12
25	3.25	3.15	3.06

*The purchases made in benefit in the capital city will receive an additional premium of Q. 0.25 per hundred-weight above the prices stated in the table.

Exhibit 4

PRICE TABLE FOR THE PURCHASE OF PADDY RICE IN
BENEFIT TO SHORT GRAIN RICE*
SEASON 1971-72

Humidity	Grade-1	Grade-2	Grade-3
13	3.61	3.51	3.40
14	3.54	3.44	3.33
15	3.47	3.37	3.26
16	3.40	3.30	3.20
17	3.33	3.23	3.14
18	3.26	3.17	3.08
19	3.19	3.11	3.02
20	3.13	3.05	2.96
21	3.07	2.99	2.90
22	3.01	2.93	2.84
23	2.95	2.87	2.78
24	2.89	2.81	2.72
25	2.83	2.75	2.67

*The purchases made in benefit in the capital city will receive an additional premium of Q. 0.25 per hundred-weight above the prices stated in the table.

Exhibit 4 (con't)

Quality Standards:

The institute will buy all the grain that the producers are willing to supply at fixed and guaranteed prices as long as they satisfy the requisites of quality as stated in the Uniform Standards of Grain Grading for Central America and which application is obligatory under the Resolution No. 22 (CCMEP).

c) Paddy Rice:

- 1) Kinds: The Institute will buy paddy rice of the following types:
long, medium, short.
- 2) Qualities: There are three acceptable qualities with the following maximum variations:

Grade-1 Foreign materials, 4%; stained grains, 2%; other types of grains, 8%.

Grade-2 Foreign materials, 7%; stained grains, 4%; other types of grains, 12%.

Grade-3 Foreign materials, 10%; stained grains, 6%; other types of grains, 16%.

The quality (grade) will be determined by the factor representing the worse condition according to the table of maximum variations of foreign materials, stained grains and other types of grain.

Grain with a humidity content up to 25% will be accepted as long as this grain does not exceed the limits for foreign materials, stained grains, and other types of grain for the quality of Grade-3.

Exhibit 5

NATIONAL INSTITUTE OF AGRICULTURAL MARKETING

"INDECA"

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PRICE TABLE FOR THE PURCHASE OF CORN
 IN THE PRODUCTION REGION
 Season 1971/72*

Humidity	Grade-1	Grade-2	Grade-3
12	3.04	2.98	2.92
13	2.98	2.92	2.86
14	2.92	2.86	2.80
15	2.86	2.80	2.74
16	2.80	2.74	2.68
17	2.74	2.68	2.62
18	2.68	2.62	2.56
19	2.62	2.56	2.50
20	2.56	2.50	2.45
21	2.50	2.45	2.40
22	2.45	2.40	2.35
23	2.40	2.35	2.30
24	2.35	2.30	2.25
25	2.30	2.25	2.20

*Sales done at the level of country elevators will receive an additional premium of Q. 0.15 per hundred-weight, and those done at a terminal elevator Q. 0.40 per hundred-weight.

Quality Standards:

The institute will buy all the grain that the producers of Guatemala are willing to supply at fixed and guaranteed prices as long as they satisfy the requisites of quality as stated in the Uniform Standards of Grain Grading for Central American and which application is obligatory under the Resolution No. 22 (CCMEP).

a) Corn

1) Kinds: The institute will buy the following corn types: white and yellow, as agreed with the stated standards.

2) Types: The acceptable types are: Flint and Dent

Exhibit 5 (con't)

- 3) Qualities: Three acceptable qualities (grades) with the following maximum variations:
- | | |
|---|-----|
| Grade-1 - Broken kernels and foreign material | 2% |
| Damaged kernels | 5% |
| Grade-2 - Broken kernels and foreign material | 4% |
| Damaged kernels | 8% |
| Grade-3 - Broken kernels and foreign material | 6% |
| Damaged kernels | 17% |

The quality (grade) will be determined by the factor representing the worse condition according to the table of maximum variations of broken kernels, foreign materials and damaged kernels.