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CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE Grains and Perishables Marketing System	2. PROJECT NUMBER 525-0178	3. MISSION/AID/W OFFICE Panama
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES	6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
A. First PRO-AG or Equipment FY 1975 B. Final Obligation Expected FY 1975 C. Final Input Delivery FY 1980	A. Total \$ 9,560,000 B. U.S. \$	From (month/yr.) January, 1977 To (month/yr.) December, 1978 Date of Evaluation Review

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	3. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS	10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT
<input type="checkbox"/> Project Paper <input type="checkbox"/> Implementation Plan e.g., CPI Network <input type="checkbox"/> Other (Specify) _____ <input checked="" type="checkbox"/> Financial Plan <input type="checkbox"/> PIO/T <input type="checkbox"/> Logical Framework <input type="checkbox"/> PIO/C <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Project Agreement <input type="checkbox"/> PIO/P	A. <input type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input checked="" type="checkbox"/> Change Implementation Plan C. <input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)	12. Mission/AID/W Office Director Approval
Candeloro Donato, USAID/Panama	Signature: <i>Frank Almaguer</i>
José Anibal Rodríguez, Director of Planning, IMA	Typed Name: Frank Almaguer
	Date: 3/12/80

PROJECT EVALUATION SUMMARY - PART II

13. SUMMARY

The dual purpose of the Grains and Perishables Marketing System loan project is to "increase the efficiency and effectiveness of the agricultural marketing system and expand its outreach to small farmers." The project is far behind in its schedule, having achieved none of its objectives during 1977/78. In general, this condition exists because: there was little progress in establishing the physical infrastructure required by the Agricultural Marketing Institute (IMA) to execute its public marketing programs; the marketing personnel in IMA were not sufficiently trained; and technical assistance was not provided to meet IMA's institutional development needs.

14. EVALUATION METHODOLOGY

This evaluation was conducted pursuant to Section 4.03b of the Loan Agreement. The evaluation as initially planned covered the period January 1977-December 1977 for the purpose of measuring the progress in achieving the project's objectives. The evaluation team was composed of representatives from IMA, the Comptroller General of Panama, the Ministry of Agricultural Development (MIDA) and USAID/Panama. The team focused on the following areas: price and marketing policy, construction, technical assistance and training. Joint work groups were formed to evaluate each of these components of the Project.

The methodology used was to review files in IMA and USAID/Panama and interview the people responsible for the various components of the project. Each work group prepared a report on its respective component, which was then reviewed with IMA and USAID project management personnel.

Towards the end of 1977, a major disagreement between AID and IMA over a public bid for the construction of grain plants led to a virtually total stoppage of project implementation. This dispute was not resolved until March 1978, but problems related to this bid continued to plague the project throughout 1978. As a result, this PES covers two distinct periods of evaluation: 1) the 1977 period for which the joint AID/IMA team conducted a normal evaluation; 2) the post-November 1977 bid date through the end of 1978, a period for which only USAID personnel have participated in the evaluation.

No additional costs were incurred because of the evaluation.

15. EXTERNAL FACTORS

A major disagreement between AID and IMA over the bidding for the primary component of the project has prevented the achievement of most project objectives. See 16.2 below.

16. INPUTS

1. Utilization of loan funds. Of the \$6,200,000 provided by the loan, only \$823,058 had been committed as of December 31, 1977, and \$1,200,200 as of December 31, 1978.

2. Construction. The architectural and engineering consortium of Harris and Solarian was contracted by IMA to: design 4 grain drying and storage plants, 1 onion storage plant and 14 purchasing installations for grains and perishables; to supervise the construction of the installations, and to prepare manuals for the operation of the installations. For a number of reasons discussed below, the deadline of March 27, 1977, for submission of the designs was not met.

At the request of Harris and Solarian, a contract amendment was prepared and signed on May 27, 1977, which reduced the scope of its work and set new deadlines for different parts of the design work. But even with these changes, the deadlines were again not met, and the project was delayed further.

The start of construction was delayed by the late submission of the designs and by disagreement over the designs and the cost estimates. The four grain plants were put out to bid in November, 1977 but the bid was subsequently cancelled by IMA.

The cancellation of the bid set off a series of events which has continued to delay the Project to this date. The bid process and the cancellation were the subjects of an AID/W review, an AG audit and an IIS investigation. The findings of these reviews are contained in reports issued separately and are not presented here.

As a result of these reviews, a decision was made to redesign the grain plants and rebid them by September, 1978. During 1978, the redesign was accomplished, but for reasons difficult to determine, IMA did not proceed with the rebid before the end of the year. It is not clear at this time when, or even whether it will take place.

In addition to the grain plants, IMA was responsible for the construction of other installations - i.e. small purchasing and storage facilities and an onion plant. The former were designed and put out to bid in January, 1978 with a contract signed in August, 1978. The contract

called for delivery of the prefabricated buildings within 150 days for some, and 210 days for the remainder. Thus, at the close of 1978, the facilities were not yet in place.

The onion plant was designed by the A&E firm but was dropped from the project as a result of the revision of the financial plan necessitated by the higher cost of other project components, particularly the grain plants.

3. Technical Assistance. The loan was also to cover technical assistance in five areas for the purpose of institutional development. As of the end of 1978, the only area in which assistance had been provided was accounting and finances.

A contract for the financial management technical assistance was won by the firm of Chandeck and Bosquez, after the contract was put out for bids on August 30, 1976. The Contract itself was not signed until September 2, 1977, because it was amended and because the Comptroller General of Panama did not participate in the contract negotiations from the outset. The start of work was delayed even more by delays in approving the letter of credit for payment of Chandeck and Bosquez. Once initiated, this T. A. was provided successfully and met most of its objectives.

Other technical assistance requirements were not met because IMA did not give enough attention to this part of the project, partially due to being too much absorbed with the problems related to the construction of the installations.

4. Training. Training objectives have not been met, largely as a result of inadequate planning, which, in turn, is due to insufficient attention given to the subject by IMA management. Annual detailed training plans were to have been prepared and followed. While attempts at these were made, the plans lacked coherence and specificity, leading to much training being of relatively low priority. Moreover, IMA often ignored the training plans and proposed training for their personnel as unplanned training opportunities arose. The Mission usually approved these ad hoc requests, as there was seldom any solid grounds on which to deny them.

5. Price and marketing policy. IMA provided price supports for rice, corn, sorghum, onions, potatoes and beans in order to give the farmers incentives to increase production of these crops. While the support prices were considerably above world market prices, there was production response in some crops, particularly rice and corn. However, with support prices remaining stable in 1977/78, production began to stagnate. The price policies have not had the intended result, and the agriculture sector is burdened with many domestic products priced

above world market levels. Moreover, the country is faced with having to import ever increasing amounts of basic staples.

17. OUTPUTS

None of the planned outputs was achieved because of the problems with the inputs cited above. Specifically, no storage and handling facilities were constructed or renovated, IMA marketing personnel were not sufficiently trained to run an efficient and effective agricultural marketing system, the quality of farm products was not upgraded (i.e., spoilage and deterioration of these products were not reduced) and no new cost accounting system within IMA was established.

18. PURPOSE

"Increase the efficiency and effectiveness of the agricultural marketing system and expand its outreach to small farmers." This purpose was not achieved due to the shortfall of inputs and outputs.

As of the end of 1978, it was clear that the Project would have to be reconsidered in light of the new cost estimates and the results of the aforementioned reviews.

19. GOAL

1. "Improve income for small and medium size farmers."
2. "Reduce the real cost of domestically produced foodstuffs while improving diets of low income rural and urban populations."

While income data were not obtained for the purpose of this evaluation, it is obvious that the Project has had no impact on Goal 1. As of this writing, the impression is that progress toward Goal 2 does not seem to have been achieved. To be certain, however, a greater analysis of the price and marketing policy and its effects is required, an analysis which is not warranted at this time. When the major outputs of the project have been achieved, such analysis should be undertaken.

20. BENEFICIARIES

The direct beneficiaries are expected to be small and medium size farmers who belong to collective campesino production groups

(8,000 members) and rural cooperatives (8,000 members). Other direct beneficiaries would be 2,500 small producers of vegetables and 3,500 indigenous farmers and settlers in the province of Darien. Most of the perishables component of the project was deleted when the costs of the other components, particularly, the grain plants, were found to be considerable in excess of those originally estimated.

The indirect beneficiaries would be the low income urban consumer who would be assured more foodstuffs at fair and stable prices. Due to almost total lack of accomplishment of Project objectives, there has been no opportunity to test whether Project benefits were reaching the intended beneficiaries.

21. UNPLANNED EFFECTS

Not pertinent at this time.

22. LESSONS LEARNED

Not pertinent at this time.

23. SPECIAL COMMENTS

This evaluation began in late 1977 as a regular joint USAID/GOP review of the project. Before this review process was completed, the GOP cancellation of the grain plants bid had precipitated the series of problems and special reviews which continues to this date. During this series of events, relations between AID and the GOP were so strained as to prevent the completion of the joint evaluation. Later, preoccupation with resolving the problems of the grain plants bid absorbed virtually all the attention and efforts of both IMA and USAID.

The finalization and submission of this evaluation was postponed a number of times with the expectation that resolution of the problems was just around the proverbial corner. This has proven not to be the case. It should be noted that this PES does not attempt to present all the significant information related to the implementation of the project. That would be too huge a task, given the complexity of the problems encountered. Anyone interested in a full exposition of the project should consult AG and IIS reports, GC opinions and special USAID and AID/W reports.

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PROJECT APPRAISAL REPORT (PAR)

1. PROJECT NO. 525-0178	2. START DATE 3/1/76	3. END DATE 12/31/76	4. COUNTRY Panama	5. PAR SERIAL NO. 11/13/77 77-2
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GRAINS AND PERISHABLES MARKETING SYSTEMS

6. PROJECT DURATION 76	7. FISCAL YEAR 79	8. DATE OF REVIEW N/A	9. DATE OF NEXT R/P N/A	10. DATE OF PAR N/A
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11. AGENCY ACTING AS AGENT This Prior FY: \$ N/A	12. Current FY Estimated Budget: \$ N/A	13. Estimated Budget to completion After Current FY: \$ N/A
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14. NAME	15. CONTRACT, PASA OR VOL. AG. NO.
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See pages 42 - 65 of attached evaluation

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
TABLE AID W HOST		
	Evaluation for Loan No. 525-T-042	
X	1. Begin to recruit competent national professional personnel so that each technical advisor has capable counterparts upon arrival. A detailed scope of work should be prepared for each technical advisor prior to arrival and arrangements for office space, transportation, etc., should be made.	ASAP
X	2. Assess its staff to determine appropriate candidates for training and the need for language training. It must be remembered that non-academic training requires a 90-day lead time and academic training requires 180-day lead time.	March 31, 1977
X	3. Firm up its construction plans and determine whether (a) additional resources which will be needed to finance additional facilities can or should be obtained, (b) whether construction should be postponed of some of the facilities and if so which, or (c) look around for a private group with which to contract perishables storage and handling if the cold storage component is postponed.	June 30, 1977
X	4. Investigate and determine the feasibility of management assistance, i.e., a professional marketing man to directly advise the Director General.	June 30, 1977

D. TRAINING REQUIRELS	E. DATE OF MISSION REVIEW
REVISED OR NEW <input type="checkbox"/> PROF <input type="checkbox"/> EXP <input type="checkbox"/> PRO AG <input type="checkbox"/> PI/CT <input type="checkbox"/> PI/IC <input type="checkbox"/> PI/OP	March 1, 1977

PROJECT MANAGER: TYPE, NAME, SIGNED INITIALS AND DATE Gene Miller	MISSION DIRECTOR: TYPE, NAME, SIGNED INITIALS AND DATE Paul Saenz
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EVALUATION OF MARKETING LOAN

525-T-042

USAID/IMA

March 1 thru December 31, 1976

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FOREWORD

This evaluation was undertaken primarily to determine if the marketing project targets for outputs are being achieved in a timely manner. A serious attempt was made to identify project successes and failures and to pin point the underlying causes.

The evaluation team examined the relevance of the project, reviewed the project design, and measured the performances of inputs and implementing agents.

A meaningful measurement of purpose and goal was impossible to achieve at this time due to the short-time span this project has been in the implementation stage.

Irving G. Tragen, Director
USAID PANAMA

Paul Saenz, Deputy Director
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January 15, 1977
Panama City, R. P.

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SUMMARY

The execution of this project has been satisfactory to date. Important potential problem areas have been identified. IMA has, or will, take corrective action as needed.

No change in project purpose or goal has taken place nor is any contemplated. Input revisions relating to construction, i.e., location and capacity changes, were authorized in June 1976 in order to conform with GOP priorities and operational loss patterns. The revisions entailed only one major input change, i.e., that of planning for a fifth grain facility, whereas, only four were specified in the CAP.

AID/IMA held a joint meeting on December 24, 1976, to discuss project status. In this meeting Minister Paredes established as number 1 GOP priority the construction of 5 large grain facilities and an onion warehouse.

A fifth grain facility (Bayano) which has been approved plus the possibility of a new onion warehouse (not originally planned), coupled with inflation and Harris-Solarium's recommendation that all grain facilities be enlarged will result in a change in inputs and/or create a need for additional financing.

In view of the serious losses incurred in the grain and onion operations the proposed changes appear to be justified. It now appears likely that the GOP will want to delay construction of the 4 cold-storage plants so that construction of the grain facilities may proceed on schedule. Precise construction changes have not yet been agreed upon. However, this aspect of the project is still ahead of schedule.

The technical assistance program suffered a 9-month delay in the area of financial assistance which seriously hampered IMA in its efforts to develop accurate and up-to-date financial reports and sound financial management. This in turn has forced IMA management to rely on intuition rather than facts when formulating financial policy. However, a financial consulting team is scheduled to be on board April 1. The planned level of technical assistance is deemed adequate to meet IMA's most pressing needs. However, additional technical assistance would prove beneficial to the project. Perhaps the most important addition would be that of a competent business advisor to assist the Director General in his day-to-day decision making.

Training is one of the most important components of this project. Without an intensive training program permanent improvements cannot be expected. The training plan is well conceived and addresses IMA's major problem areas. IMA is confronted with a serious shortage of qualified, trainable people. It is imperative that IMA assess its staff as soon as possible to determine potential candidates and need for language training. The new facilities will require a new expertise that no IMA employee now possesses. Plant managers will require additional training. It is likely that IMA will have to hire additional professionals for selected management positions if the training requirements are to be met.

Comparing the financial picture of IMA as reflected by financial statements for the period Jan. 1 - Sept. 30, 1976, with that described in the CAP, it is apparent that, while accounting data is perhaps more reliable and available on a more timely basis than before, IMA's basic financial problems have not been alleviated. Continuing losses, but at a slightly lower rate have resulted in a negative capital position and necessitated government guaranteed bank loans to continue operations

From the financial statements of IMA for the period Jan. 1 - Sept. 30, 1976, it is possible to derive a condensed cash flow statement which perhaps helps highlight some of the problems IMA continues to encounter (figures are in millions of Balboas):

Sources of Cash

Net borrowings from banks and increase in Accounts Payable	9.3
Gross margin on sales less net cost of inventory spoilage	1.6
Profit on sale of imported commodities and other miscellaneous income	1.2
Liquidation of working fund advances and net decrease in Accounts Receivable	1.2
Government subsidies received	<u>.3</u>
Total Sources	<u>13.6</u>

Uses of Cash

Build-up of Inventory	6.2
Salaries and Administrative Expenses	3.9
Financial Expenses	2.0
All other sources and uses, net	<u>.3</u>
Total Uses	<u>12.4</u>
Net Increase in Cash	<u>1.2</u>

This summary clearly shows that the gross margin on sales is not enough to cover the interest payments (financial expenses) necessitated by large scale borrowing and the high levels of inventory carried, much less IMA's operating expenses. To some extent this, of course, represents deliberate government policy through indirect subsidies to farmers. Since IMA still does not have a cost accounting system that segregates sales and purchases by commodity, it is not possible to ascertain how much of these losses represent deliberate policy and how much inefficiencies in operation. However, it is clear that to date government subsidies have not come close to meeting IMA's losses. It is also of interest to note that the profit on sales of imported commodities contributed almost as much to the cash flow as did the gross margin on sales of domestic commodities, a much larger part of IMA's business. 1/

The financial statements again emphasize the need for a clear separation of the functions of IMA as an income transfer arm of the government and as a buying and selling organization which is supposed to at least come close to being self-supporting. The financial structure of a government organization meant to operate from general revenues is obviously quite different from that of a commercial venture.

As a commercial venture, IMA can only remain viable as long as the government is willing to subsidize its operations, either directly or through guaranteed bank loans. The Minister of Planning and the National Financial Commission have approved the transfer of \$10.0 million from IMA's loan payable to a contribution to capital. The National Treasury will, in effect, assume IMA's \$10.0 million liability and the Institute's accounting will make an entry to its capital account as of December 31, 1976. In any case, the government must have sufficient data on which to base rational decisions in the future hence an adequate cost accounting system for IMA is needed more than ever in view of the government's serious financial situation.

1/ Profit on the sale of imported commodities was not included in gross margin on sales because the sale of such commodities is not a part of IMA's normal operations, and therefore, is considered extraordinary income. In addition, this profit should decrease greatly over the next few years provided the marketing project and other agricultural projects are successful and Panama becomes self-sufficient in food production.

Most of the ratios shown in IMA's analysis are somewhat misleading because debt is such a major part of their financial structure. For example, it is true that the current ratio improved from .72 at 9/30/75 to 1.76 at 9/30/76, but this is primarily due to the fact that long-term debt was substituted for short-term debt. The same improvement could have been brought about by a fresh influx of capital investment by the government without saddling IMA with the future burden of debt service. In either event, the improved current ratio can only be a temporary phenomenon unless IMA's operations are changed. It should also be mentioned that the 9/30/75 current assets are taken from a report of the Contraloria General and are adjusted for a large write-off of spoiled inventory and uncollectable receivables. It seems probable that the 9/30/76 current asset figures are not adjusted to the same extent and are somewhat overstated. We were not provided with the exact terms of the long-term debt, some of which may be due within a year and therefore be classifiable as short term.

While the ratio analysis in general may not be particularly valuable in the case of IMA, there is a ratio which does highlight a specific problem. The ratio of interest is the Accounts Receivable/Sales ratio, which, again using an average of beginning and ending receivables (short and long term) was .15, i.e., about 2 months' worth of sales were being carried as receivables at any time. More than half of these receivables are long-term receivables from government institutions and represent another large carrying cost to IMA.

In summary, our analysis of IMA's financial position shows that IMA is burdened by being capitalized through bank borrowing instead of direct investment, leading to high interest costs and high debt servicing costs; by holding large receivables, which has a high financial cost in addition to the cost of spoilage and bad debts; and by earning insufficient margin on goods sold to even come close to meeting the cost of deliberate subsidies and market control operations in addition to IMA's high operating costs. An improved accounting system does not answer these problems, but the financial consultants, who are expected to arrive shortly, can at least help the government make rational decisions on whether IMA should be self-sufficient or not and how - and which of - its operations should be subsidized.

GOP continues to formulate price policy on the basis of "cost of production" studies. Despite its superficial appearance of reasonableness and simplicity, "cost of production" is not an acceptable

technique for establishing price levels. Moreover, IMA's price structure does not adequately cover the cost of storage and handling. However, appropriate charges cannot be determined at present because financial records are not available for accurate cost accounting. Many millers' refusal to buy rice during 1975-1976 was indicative of the insufficient margins due to price policy -- Consumer unrest in September 1976 was indicative of too high a price due to price policy. IMA does not have the capability with its present staff to develop essential data for use in formulating economic policies.

Recommendations

1. IMA should immediately recruit competent national professional personnel so that each technical advisor has capable counterparts upon arrival. A detailed scope of work should be prepared for each technical advisor prior to arrival and arrangements for office space, transportation, etc., should be made.
2. IMA should begin now to assess its staff to determine potential candidates for training and the need for language training. It must be remembered that non-academic training requires a 90-day lead time and academic training requires 180-days lead time. The training committee should start its selection process no later than March 31, 1977.
3. IMA should, as soon as possible, firm up its construction plans and determine whether (a) additional resources which will be needed to finance additional facilities can or should be obtained, (b) whether construction should be postponed of some of the facilities and if so which, or (c) look around for a private group with which to contract perishables storage and handling if the cold storage component is postponed.
4. IMA should investigate and determine the feasibility of management assistance, i.e., a professional marketing man to directly advise the Director General.

SECTION I
EVALUATION OF MARKETING LOAN
No. 525-T-042

A. Introduction

This project evaluation is timely inasmuch as it marks the first anniversary of IMA as well as nearly one year of project implementation. It is appropriate, therefore, to begin this evaluation with an overview of IMA. The following statement is a translation of a newspaper article that appeared in the Panamanian press on December 15, 1976.

IMA'S FIRST ANNIVERSARY

This date marks one year of existence for the Government's Agricultural Marketing Institute (IMA). The Institute was created by organic Law No. 70 on December 15, 1975.

The Director General of the Institute expressed his pleasure with the results of the first year's operation.

During the year IMA developed a strong national marketing structure that was able to guarantee the success of the price stabilization activities of the Institute.

The transformation from the "old Division to the new "Institute" has permitted IMA, as an autonomous Institute, to serve the public not only as a price stabilization vehicle, but as a dynamic force in the export market, and an effective medium to guide the importation from abroad, therefore, preventing the escape of capital.

Equally important has been the excellent relations that have been maintained between the Institute and other agricultural institutions, including the private business sector.

B. Project Purpose

The basic purpose of this project is to increase the efficiency and effectiveness of the agricultural marketing system and expand its outreach to small and medium-size farmers.

1. Conditions Expected at the End of the Project

By 1973, the public marketing system with sufficient technically-trained personnel will: (1) be purchasing all price-supported agricultural commodities meeting established quality standards at their minimum established buying prices, subject to marketing quotas where applicable, from all small and medium size producers desiring to sell to the government's buying entity; (2) have reduced its grain storage/handling losses from an estimated 17% of average inventory in 1975 to 10% (to 5% by 1980); (3) have reduced losses of perishables between producer and consumer by 15% below the estimated 1975 proportion (by 50% in 1982); (4) be able to quantify (and distinguish between) subsidies and operating costs; (5) be capable of programming facilities utilization and financial requirements on an annual basis in accordance with detailed production/marketing plans (including imports and exports) for the principal products handled; (6) be capable of setting support prices and determining subsidies in accordance with their probable impact on production and consumption.

2. Verification of the Conditions Expected at the End of the Project

The types and sources of evidence to be used to verify the conditions marking the end of this project are: (a) periodic field surveys, (b) analysis of I.M.A.'s financial records, and (c) observation.

3. Assumptions for Achieving Purpose

The important assumptions that were made, and must be realized if this project is to achieve its purpose, were as follows:

- a. Current GOP plans for expansion of road network will be implemented.
- b. Production targets, assumed as basis for determining storage capacity needs, will be reached.
- c. Support or target prices will continue to be sufficiently high to provide an incentive for expanding production, but not so high as to limit consumption among low income groups and/or result in unmanageable surpluses.

C. Project Inputs

The inputs of this loan consist of two major components designed to overcome the inefficiencies of the marketing system. They are: (1) the provision of basic physical infrastructure and (2) strengthening of the technical and administrative capacity of IMA.

1. Physical Infrastructure

According to the original plan as described in Annex I of the Loan Agreement the physical infrastructure financed under the Project consisted of the following:

- a. The construction or renovation and equipping of country buying points for grains, fruits, and vegetables. Approximately fourteen (14) buying points for grains and semi-perishables will be constructed, each with a capacity for storing 5,000 cwt. and equipped with receiving and sampling equipment.
- b. Three (3) collection centers for fruits and vegetables will be constructed as follows: (1) Boquete, Chiriquí - 11,000 cubic feet of refrigerated storage space and grading facilities; (2) Cerro Punta, Chiriquí - same size and facilities as Boquete collection center; (3) El Valle, Coclé - 4,300 cubic feet of refrigerated storage space and space for product grading.
- c. The construction and equipping of collection stations for buying and storing grains and semi-perishables. Three (3) collection stations will be established in the Darién Province and each will be equipped with receiving, drying and sampling equipment: (1) El Real - 10,000 cwt. storage capacity with a grain dryer; (2) Garachiné - 50,000 cwt. storage capacity; (3) Rio Inlesia - 50,000 cwt. storage capacity and a 20 cwt./hour rice mill.
- d. The construction and equipping of four (4) terminal plants for receiving, drying and storing grains: (1) Chanquinola, Boer del Toro - 100,000 cwt. bulk, 50,000 cwt. bag capacity; (2) Las Tablas, Los Santos - 100,000 cwt. bulk, 50,000 bag capacity; (3) Santiago, Veraguas - 200,000 cwt. bulk, 50,000 cwt. bag capacity; (4) Panama City, Panama - 100,000 cwt. bulk, 50,000 cwt. bag capacity.
- e. 100% existing cold storage centers will be improved. The Panama City and Chitré cold-storage plants will be equipped

with humidity/temperature control systems, sliding doors, subdivided cold rooms, fork-lifts and pallet-rack systems. The David cold-storage plant will be equipped with a fork-lift and pallet-rack system.

- f. Cold- storage and sub-zero facilities will be constructed and equipped for handling and storing perishable commodities as follows: (1) Colón, Colón - 62,000 cubic feet of refrigerated storage, including a 2,000 cubic foot sub-zero room, and equipped with a folk-lift and pallet rack system; (2) La Chorrera, Panamá - 47,000 cubic feet of refrigerated storage, including a 2,000 cubic foot sub-zero room and equipped with a folk-lift and pallet-rack system; (3) Santiago, Veraguas - 32,000 cubic feet of refrigerated storage, including a 2,000 cubic foot sub-zero room; and (4) Perdomo, Coclé - same as Santiago plant.
- g. Dock facilities will be constructed in Darién Province. A floating dock, approximately 7 x 16 meters, will be located at El Real; and a wharf, founded on piling, approximately 12 x 20 meters will be located at Río Iglesia.
- h. The Project will also provide the following transport equipment for IMA's grains and perishables marketing operations:
 - (1) 8 three-quarter ton dual-wheel traction pick-up trucks;
 - (2) 5 six-wheel ten-ton refrigerated vans;
 - (3) 9 two-and-a-half ton refrigerated vans;
 - (4) 8 half-ton refrigerated panel trucks;
 - (5) 10 five-ton grain-utility trucks;
 - (6) 10 ten-ton bulk/bag combination trailers and 3 tractors;
 - (7) 3 100-150 ton shallow draft vessels.
- i. A plant will be established for manufacturing wire-bound crates and boxes for perishable products. The plant will have a capacity for manufacturing approximately one million wire-bound crates per year.

2. Institutional Development

As stated in Annex I the second component of the Project is concerned with strengthening IMA's technical and administrative capacity for developing and executing sound marketing policies and programs aimed at encouraging the production of quality products at minimum cost to the consumer. Specifically, the Project will provide both training and technical assistance to IMA for developing and implementing an official grades and standards system for the major grains and perishables produced in Panama. A second institutional goal is the establishment of cost accounting and financial control systems within IMA. Additionally, the Project will provide technical advisors and training to IMA personnel for improving the handling, conditioning and storage techniques for both grains and perishables as these commodities move through the marketing channels from producers to consumers. Assistance will also be provided to IMA for analyzing production costs at the farm level.

The Project will provide technical assistance to IMA as follows:

- General marketing advisor - 24 man months
- Fresh produce marketing specialist(s) - 12 man months
- Grades and standards technician for perishables - 12 man months
- Grades and standards technician for grains - 12 man months
- Grain-handling technician - 7 man months
- Financial management, budgeting and cost accounting consultants - 24 man months
- Farm cost-of-production analyst - 3 man months

IMA will provide secretarial and support facilities, including transportation, for the technical advisors financed under the Project. IMA will also designate counterparts for each of the advisors provided under the Project.

In-country training will be provided by the technical advisors in their fields of specialization. In addition, the Project will provide up to 200 man-months of out-of-country training.

3. Implementation Targets

The inputs described in C - are listed by budget categories as follows:

FINANCIAL PLAN

I t e m s	GOP (000-\$)	USAID (000-\$)	Combined Total (000-\$)
Land	500	-	500
Grain facilities	2,193	3,000	5,193
Perishable facilities	422	511	933
Vehicles	-	1,144	1,144
Ships (ocean)	110	110	220
Box plant	135	135	270
Accounting equipment	-	100	100
Technical assistance	-	470	470
A & E consultant	-	500	500
Training	-	230	230
T o t a l	3,360	6,200	9,560

4. Assumptions for Providing Inputs (Base Line Data)

In order to verify that the income level of medium and small-size farmers has been improved as a result of this project certain base-line data was deemed necessary.

A.I.D., through the Department of Statistics and Census for Panama contracted for the development of essential base-line data. The preliminary data shows the following:

a. Grain Summary

(1) Rice

Off-farm sales of rice have held fairly constant over the past four years, ranging from a high of 75.7% of total production in 1974/75 to a low of 69.4% of the total in 1973/74.

Inasmuch as off farm sales, which represent the bulk of production, have been fairly constant, that amount not sold retains a constant relationship also. Home consumption ranged from a high of 27.5% of the total 1975/76 to a low of 22.2% of the total in 1974/75. Rice held for seed maintained a very narrow range, 2.1 - 3.4% of the total.

Rice producers sold their rice to a variety of buyers. However, only 4 classes of buyers were of major importance. Those being in order of importance were IMA (54%); private dryers/mills (16%); truckers/intermediates (14%); and processing plants (9%). These buyers bought over 93% of all rice offered for sale.

(2) Corn

Farm disposition of corn shows an entirely different situation than rice, as might be expected. Approximately 1/3 of total production is consumed on the farm as human food, 1/3 as feed for livestock, and 1/3 is sold. About 2-3% is held for seed.

Corn producers sold their corn to the same class of buyers as did rice producers (omitting sales to processing plants). IMA, private dryers/mills and truckers/intermediates bought 88% of all corn offered for sale.

(3) Beans

The greatest part of bean production is consumed on the farm; nearly 66% of total production was utilized in this manner during 1975/76. About 1/4 to 1/3 of total production is offered for sale, with less than 2% held over for seed. Very little edible beans are fed to livestock; probably only that amount which is unfit for human consumption.

The bean buyer of importance was the trucker/intermediate. This class of buyer purchased about 44% of all beans sold. IMA bought 16% and private dryers/mills bought 26%. These three classes of buyers bought 86% of all beans sold.

(4) Farmers Reason for Selling to Particular Buyers

Farmers did not sell their grain on the basis of price alone. In fact, cash payment was determined to be the most important benefit that induced farmers to sell to

a particular buyer. Nearly 1/2 of all farms sold their grain to a cash buyer. Only about 20% of farms sold on a price basis. The only other important factor that caused farmers to sell to certain buyers was ease of transportation. Premium payments for higher quality commodities, surprisingly, was a totally insignificant sales factor. Less than 2% of farmers sold their products to a particular buyer for quality payments. Unfortunately, IMA has a policy of not paying cash for its purchases which limits the effectiveness of its price stabilization program.

(5) Income and Farm Sales

Total combined gross income for 87,904 grain farms from farm and off-farm sources amounted to \$107.9 million during agricultural year 1975/76. This resulted in a per farm average annual gross income of \$1,227.34. Expenses, unknown, but undoubtedly substantial, leave the farmer with a much smaller net income.

Total gross farm income resulting from sales of agricultural produce amounted to \$47.3 million. Farm income was 43.9% of total income.

Per farm average annual gross income derived from sale of agricultural produce was a relatively low \$538.31.

Nearly 23% of all grain farms are totally dependent on agricultural income.

(6) Production Combinations

Farms classified as grain farms not only produce grains, but they often produce other crops. Nearly 19% grow yucca; 4.7% grow otee; over 15% grow ñame; and 32% grow platano.

(7) Credit

Only 1,407 farms reported receiving credit from the BDA. This means that less than 2% of the grain farms received BDA credit.

Rice farmers as a group received over 73% of all BDA credit extended to producers of grain; corn farmers received 25% of all BDA credit extended and bean farmers received about 2%.

Sales of grain to IMA because of loans from the BDA were substantial. Of the 1,407 farms that received BDA credit, 892 farms (63 %) sold their grain to IMA.

b. Vegetable Summary

Off-farm sales of vegetables represented more than 90% of total production for all vegetables listed in the survey. Home consumption of vegetables was very low for all vegetables. The amount of vegetables fed to livestock and/or held for seed was negligible.

IMA bought more than 40% of the total vegetable crops of potatoes (80.1%); onions (45.7%); melon (46.0%); and watermelon (41.0%). Tomatoes and hot peppers were also purchased by IMA in substantial quantities.

The trader/intermediate was a significant buyer of all vegetables except potatoes and beets. This class of buyer bought more than 50% of all the onions, carrots, table tomatoes, hot peppers, head lettuce, cabbage, celery, watermelon and cucumbers, offered for sale.

Processing plants were the major buyers of beets (83.9%) and they made some purchases of carrots (11.1%).

Cooperatives were active buyers of potatoes, carrots, beets, celery and head lettuce.

All other classes of buyers were reported as generally insignificant to market activity.

Price was more of a factor in the sale of vegetables than in the sale of grains. Fifty percent of all onion and celery sales were based on price. Only 11.1% of watermelon sales were based on price. Cash sales and sales consummated due to ease of transport were important selling considerations for nearly all products. The only category that did not register as an important sales factor for any vegetable group was the category "premium payment for quality" - only melons (9.4%) were affected by quality considerations.

Total combined gross income for all vegetable farms from farm and off-farm sources amounted to \$2.1 millions during the period Oct. 1 - Dec. 31, 1975. This resulted in a per farm average annual gross income of \$2,617.68.

Total gross farm income resulting from sales of agricultural produce amounted to \$4.7 million. Farm income was 58.8% of

total income.

Per farm average gross income derived from sale of agricultural produce was \$1,509.46. This amount is about 3 times that received by grain farmers.

Nearly 37 percent of all vegetable farms are totally dependent on agricultural income.

D. Project Outputs

The major results that are expected as a result of this project are described below:

1. Sufficiently trained GCI marketing personnel for operating an improved marketing system.
2. Construct or renovate and equip country buying points for grains, fruits, and vegetables.
3. Construct and equip collection stations for buying and storing grain and semi-perishables.
4. Construct terminal plants for receiving, drying and storing grains.
5. Improve storage/distribution centers for fruits and vegetables.
6. Construct cold storage and sub-zero facilities for "working" and storing perishables.
7. Sufficient public transport for bulk and bagged grains and perishables.
8. Construct dock facilities in Danier Province.
9. Establish a plant for manufacturing shipping crates for fruits and vegetables.
10. Upgrading quality of farm products.
11. Establish a cost accounting system within IMA.

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E. Magnitude of Outputs

1. IMA's accounting staff will have receive in-country training in budget, cost accounting, and inventory control procedures; supervisory and operational personnel assigned to grains and fresh produce will have received in-country training in grading and handling these products; supervisory personnel assigned to grains and fresh produce will also travel to U.S. and third countries for short/long term training and observation of modern techniques for marketing these commodities; other IMA staff members will receive in-country training in farm cost-of-production analysis and in-country/foreign training in market surveys and analysis.
2. a. 14 buying points for grains and semi-perishables established and operating by CY 77, each with a capacity for storing 5,000 cwt. and equipped with 1,000 lb. scale, moisture meter, and grain sampler. 1/
b. 3 buying/handling points for fruits and vegetables established and operating by CY 77, 1 with 4,300 cu. ft. and 2 with 11,000 cu. ft. each of storage capacity and equipped with manual grading facilities. 1/
3. Collection stations established and operating in Darién Province by CY 77 as follows: (a) El Real - 10,000 cwt. warehouse with 50 HP grain dryer, 1,000 lb. scale, moisture meter, and grain sampler; (b) Garachiné - 50,000 cwt. warehouse with same equipment as (a); (c) Río Iglesia - 50,000 cwt. warehouse with same equipment as (a) plus a 20 cwt./hr. rice mill. 1/
4. 4 terminal plants will be constructed and operating by CY 77 as follows:
 - a. Changuinola, Bocas del Toro: 100,000 cwt. bulk, 50,000 cwt. bag capacity with augers, cleaners, dryers, conveyors, and fork lift.
 - b. Las Tablas, Los Santos: 100,000 cwt. bulk, 50,000 cwt. bag capacity with equipment similar to (a) above.
 - c. Santiago, Veraguas: 200,000 cwt. bulk, 50,000 cwt. bag capacity with equipment similar to (a) above.

1/ As originally envisioned in the CAP, the dates for completion were one year earlier. However, the dates were revised during development of the time phased implementation plan called for in Section 3.03 of the Loan Agreement.

- d. Panama City, Panama: 200,000 cwt. bulk, 50,000 cwt. bag capacity with equipment similar to (a) above.
5. By CY 77, the Panama City and Chitre cold storage plants will have been equipped with humidity/temperature control systems, sliding doors, sub-divided cold rooms, fork lifts, and pallet-rack systems. The David plant will also be equipped with a new fork lift and pallet rack system.
6. a. BY CY 77, new refrigerated cold rooms will have been constructed and operating as follows:
(1) Colon: 4 cold rooms, 1 sub-zero room with a capacity of 13,500 cwt.; (2) La Chorrera: 3 cold rooms, 1 sub-zero room, with a capacity of 10,000 cwt.; (3) Santiago: 2 cold rooms, 1 sub-zero room, with a capacity of 7,000 cwt.;
Penonome: 1 cold room and 1 sub-zero room, with a capacity of 7,000 cwt.
b. The Colon and La Chorrera plants will also be equipped with fork lifts and pallet rack systems.
7. By March 1978, the following transport equipment will be operational: 1/
 - a. 5 six-wheel ten-ton refrigerated vans;
 - b. 9 two-and-half ton refrigerated vans;
 - c. 8 half-ton refrigerated panel trucks;
 - d. 10 five-ton grain utility trucks;
 - e. 10 ten-ton bulk/bag combination trailers and 3 tractors;
 - f. 3 100-150 ton shallow-draft vessels.
8. By CY 77 one floating dock 7 x 16 meters will have been constructed at El Real; and a wharf, founded on piling, 12 x 80 meters will have been constructed at Río Iglesia. 1/
9. By 1977, a plant will have been established and operating in Eastern Panama with a minimum capacity for manufacturing one million wire-bound wooden crates per year.

1/ Ibid.

10. By 1978, (a) an official grades and standards system will be uniformly enforced nation-wide; (b) all commodities purchased by IMA will meet the minimum established grades and standards.
11. By 1976, a cost accounting system will have been established within IMA for providing timely and accurate data for management. As a minimum, the system will have established a basis for appropriately allocating all direct costs so as to identify operating profits or deficits by products or groups of products.

F. Verification of Outputs

The means of verifying the magnitude of the outputs indicated in the above are (1) review of IMA's personnel records, (2) observation, (3) inspection by engineers grain handling and fresh produce marketing specialists, (4) reports of IMA's market inspectors and USAID spot checks, and (5) periodic audits of IMA's records and accounts.

G. Assumptions for Achieving Outputs

The external factors that must be realized if the planned outputs are to be obtained on time are:

1. Most of the persons trained under the Project will remain employed with Mercadeo for at least three years after their training.
2. (a) Prices for goods and services will not increase by more than 35% during the project's implementation period, (b) GOP counterpart funds will be available as necessary.
3. The private trade will use the new shipping crates.
4. Producers, middlemen, and consumers will accept the new grades and standards.

H. Goal

1. Program and Sector Goal

The broader objectives to which this project contributes is the improvement of income for small and medium-size

farmers. It is also anticipated that the real cost of domestically-produced foodstuffs will be reduced and that the diets of low income rural and urban people will be improved.

2. Measures of Goal Achievement

The objectively verifiable indicators that will measure goal achievement are:

- a. (1) Over the period 1975 to 1980, an increase in the real income of small and medium farmers of 20%.
(2) Over the period 1975 to 1980, a reduction of the number of subsistence farmers (full-time farmers producing less than \$500 of food commodities at 1970 prices) by 20%.
- b. By 1980, approximately 20% increase in volume per year of retail marketings of protective foods (fruits, vegetables) and 10% decrease of average real price.

3. Verification of Goal Achievement

Verification of goal achievement will be measured in two ways, (1) (a) Annual analyses of IMA's records and surveys of marketings. (b) Comparison of 1980 census data with that of 1970. (2) (a) Retail price comparisons from records of IMA, Office of Price Regulation, and Contraloria. (b) Surveys of comparative quantities of selected products marketed thru various types of wholesale and retail outlets.

4. Assumptions for Achieving Goal Targets

The following assumptions are deemed essential if the project is to make its expected contribution to the program and sector goals.

- a. (1) Production inputs (credit seed, fertilizer, water, T.A., etc. available to facilitate production increases. (2) GOP policies, including marketing continue to favor low income farmers.
- b. (1) Low income rural and urban populations will purchase protective foods when made available to them at fair retail prices, reflecting expected high price elasticity of demand among lower

income consumers. (2) Realistic price support levels will be maintained; i.e., levels which do not materially and consistently exceed landed cost of food imports.

I. Analysis of Project Activities

1. Project Inputs

a. Preparatory: In October 1975 IMA appointed a Project Manager of the marketing loan who immediately assembled a staff and within six months successfully executed the following project components, i.e., conditions precedent.

- (1) A plan for a system of maintenance for all vehicles, machinery, equipment and facilities to be financed for the Project.
- (2) A detailed time-phased implementation plan for the Project.
- (3) A financial plan for the Project setting forth the timing and amounts of Loan and Borrower counterpart funding for the Project.
- (4) A technical assistance program, including provision for establishing a cost accounting system for improving the grains and perishables operations.
- (5) A current profit and loss statement and balance sheet for Borrower's implementing agency prepared by the Controller General of the Republic.

After a thorough review of the above C.P. documentation, the Mission approved all five components by Implementation Letter No. 6, dated March 12, 1976.

IMA developed within the same time frame an approved training plan which specified the nature and duration of such training and criteria for selecting trainees within the framework of an employee development plan.

The IMA/USAID Project Manager resigned his position in May 1976. IMA appointed a new Project Manager shortly thereafter. This changeover resulted in minor project implementation delays.

b. Technical Assistance

The seven technical assistance positions shown in the CAP and Loan Agreement were the result of intense negotiations between the Mission and the GOP.

The first technical assistance plan and a proposed revision to the technical assistance plan were thoroughly examined. These documents provided an excellent detailed time-phased overview of the Project.

IMA's technical assistance plan provided for all seven of the positions described under project inputs/Institutional Development, page 5.

The plan and related components were reviewed to determine if, (1) qualified counterparts for the advisors are available within IMA, (2) the planned technical assistance correctly addresses all the problem areas, and (3) the timing of the assistance meshes with construction and training plans.

An appraisal of planned technical assistance needs versus actual execution follows:

- (1) A&E firm. Contracted and on board as planned. See Section II, page 48, for performance evaluation.
- (2) General Marketing Advisor. Contracted and on board as planned. See Section II, page 56, for performance analysis.
- (3) Financial Advisor. There has been a delay in filling this position.
 - (a) As of this time the financial advisor has not yet been contracted. But IFBs were sent out, four firms were prequalified. The proposals have been evaluated and contract negotiations have begun with the number one firm. It is anticipated that the contractor will be working by April 1, which is approximately 9 months after the originally planned starting date.
 - (b) Why the delay and what is its impact?
It appears that the greatest cause for the delay

was possibly due to IMA's lack of capacity to determine what was needed, coupled with a new administration's natural resistance to a "ready made" program. In addition, the Controller General's Office promised to provide two people to study the situation and make recommendations. This never occurred thereby contributing to the delay. The Director of IMA recently stated that he was anxiously awaiting the arrival of the financial technical assistance.

Even though IMA is a marketing institution, it is involved in commercial activities and thereby requires up to date and accurate financial reports so that sound fiscal policies and decisions can be rendered. As evidenced by some of the other evaluation factors, it is apparent that IMA has been deficient in financial expertise for some time. This deficiency was properly identified in the Capital Assistance Paper. Lack of proper financial direction can prevent an organization from making decisions from a position of knowledge and consequently large sums of money may be lost. If a financial advisor had been contracted earlier, IMA might have already been on the road to a better financial position. It is still apparent that they are not yet sophisticated enough to provide the desired financial information within the Institute.

- (c) Establishment of goals, objectives, and policies are desirable in order to establish the direction an organization wishes to follow. IMA has established an objective of price support. Budgets have been developed and absolute quantities of monies have been set aside for purchases. Targets and goals have been programmed for the Institute. Logically, after establishing goals, objectives and policies, an organization must have adequate financial data to analyze the impact of their decisions. This thereby, results in the need for a cost accounting system, and capable personnel (aided by the financial advisor) to interpret the data. Without the financial objectives, goals and policies being formally defined and periodically reviewed, it is quite possible that IMA has, in the past, made some unsound policy decisions.

As pointed out in the preceding section the project began to experience delays in mid-year 1976. In addition to the delays previously stated, IMA underwent organizational changes that were also of a delaying nature. These additional delays were due primarily to IMA's removal from the Ministry of Agriculture and redesignation as an autonomous entity. The Mission encouraged the change even though project delays were expected because IMA's operational efficiency was expected to improve as a result. The delays were aggravated because IMA had three different administrators during the changeover period.

The new administration brought new concepts and a desire for change. However, technical assistance did not receive the attention it warranted at this time due to IMA's need to focus on several critical internal problems, i.e., industry unrest, extraordinary large purchases of rice, and related shortage of storage space and greater than normal financial requirements.

When IMA's attention was again focused on technical assistance requirements it was determined that changes were necessary. Basically, changes were in order due to several factors:

- (1) Approved changes in facilities (see section on Construction and Procurement for details).
- (2) Technical assistance needs of IMA went beyond the loan.
- (4) The severe operational losses of IMA would require an immediate and concentrated focus on grain handling.

In June 1976, IMA undertook to redesign the technical assistance plan. As a consequence of this reappraisal the remaining technical assistance positions were reprogrammed in the following manner.

- (1) Contracting for perishables marketing expert; expert on board by February 28, 1977.
- (2) Contracting for grades and standards expert; expert on board by August 31, 1977.
- (3) Contracting for grain handling expert; expert on board by August 31, 1977.

- (4) Contracting for cost of production expert; expert on board by August 31, 1977.

The initial technical assistance plan envisioned a total of 94 man-months of technical assistance. The plan outlined above calls for 92 man-months, still within an acceptable range of technical assistance utilization when compared to the original plan. IMA's present technical assistance plan deviates from the original in the following ways and for the following reasons.

- (a) The grain-handling expert was reprogrammed from 7 months to 12 months. This was deemed necessary because of severe limitation in ability to properly store and handle grains. This limitation led to excessive grain losses during 1976.
- (b) Additional technical assistance for price analysis work was deemed advisable inasmuch as IMA experienced great difficulties in their price stabilization program during 1976. This position was reprogrammed from 3 months to 12 months.
- (c) IMA has tentatively combined the two grades and standards positions into one, and reprogrammed the time from 24 months (total) to 8 months because of anticipated budget limitations.

Only the changes discussed under (c) reflect a decrease in time and/or positions. While maintaining the grades and standards technical assistance at the previous level is highly desirable it is the opinion of the evaluators that the priorities have been correctly identified and that the other technical assistance is necessary for IMA's longrun success.

Perusal of the base-line data offers additional justification for the changes as these data point out that product quality is not an important consideration when producers sell their product. Given this factor and weighed against the dire need for improvement in price policy and storage/handling techniques the priorities are judged appropriate.

Generally, the plan conforms to needs and timing aspects of the project. However, IMA does not have sufficient qualified counterpart personnel to adequately fulfill the objectives of the technical assistance program.

It is recommended that IMA/AID re-evaluate technical assistance needs up to and July 1, 1977. This would be an excellent time to consider extending the time frame for the grades and standards advisor and incorporate other technical assistance as deemed necessary.

(Note: The proposed financial plan designates additional funds for technical assistance, see new proposal, page 38).

c. Training

An important component of this project is training for institutional development. In-country training will be provided by the technical advisors in their fields of specialization. In addition, up to 200 man-months of out-of-country training for 57 participants has been programmed for 1977 and 1978.

The AID approved out-of-country training plan which IMA developed and which specified the nature and duration of such training and criteria for selecting trainees within the framework of an employee development plan is presented in Annex 1.

The IMA training plan per se has been adjudged to be an acceptable plan which encompasses all the major institutional deficiencies now apparent.

The problems that are evolving within IMA are not with the plan itself but are related to implementation. Basically, the problems stem from the same institutional weaknesses which the project was designed to improve, i.e., a manpower pool that does not meet a minimum criterion from which to select participants or candidate requirements for training.

The training program and related components were reviewed to determine if:

- (1) The present workforce of IMA is sufficient in depth and expertise to provide the number of participants required.
- (2) The planned training addresses the known weak points in the present staff.
- (3) The training backstops the technical assistance plan.

- (4) The training corresponds to the loss pattern.
- (5) Preliminary training activities, i.e., candidate selection, language training, etc. is being carried out.
- (6) The timing of the training meshes with construction and technical assistance.

The latest available listing of IMA's workforce shows that there are 262 people employed by IMA. Approximately 10% of the workforce are classified as professionals, 16% as clerical/secretarial, and 74% as non-professional/laborers. It is estimated that only about 5-7% of the workforce have had the advantage of specialized or advanced training.

Undoubtedly, IMA has sufficient numbers of employees from which to choose participants for the training program. However, it is doubtful if there are sufficient capable people in IMA to permit the training program to be carried forward and at the same time carry on the day to day activities.

The staffing pattern for the operation of Silos de Panama was examined and is used as an example to portray the general employment practice of IMA. There are 79 people now employed at this facility. Six are characterized as professional/semi-professional, 5 as clerical/secretarial, and 67 as laborers. A similar facility located in the United States would employ no more than 20 people (less if fully automated).

This observed employment practice may well be a result of an employment generation policy and therefore fulfills certain GOR objectives. The comparison was made only to show that administrative costs are high and could be greatly reduced.

Close examination of the training plan shows that the plan does, (1) address the known weak points in the present staff, (2) backstop the technical assistance plan, (3) correspond to the loss pattern (principally rice and onions), and, (4) is timed to mesh with construction and technical assistance.

A more exhaustive evaluation was not possible at this time because the project has not reached a major implementation plateau - the training advisors are not yet on board and the first group of participants are not scheduled for out-of-country training until mid 1977.

To date the training inputs have been generally provided as planned. IMA appointed an in-house training committee in October 1976. Acceptable training programs have been developed for all needed training areas; appropriate third country and U.S. institutional contacts have been made; definite time schedules have been agreed upon; yet, selection of participants, documentation, language training, and other in-house preparatory activities have not been pursued in a timely manner.

In a meeting held on December 24, AID officials expressed their concern to the Minister of Agriculture and the Director General of IMA about the need for immediate attention regarding technical assistance and training.

The Minister promised action and indications are that IMA is now actively seeking technical assistance and proceeding with candidate selection for training.

The underlying training problem, too few qualified people to choose from, remains as a serious obstacle and will be difficult for IMA to overcome. Very few employees of IMA speak English -- many of the preplanned training programs can only be carried out in the United States. It is possible that U.S. training can be accomplished through translation, but this is an expensive alternative and can only be used when relatively large groups are trained in one body.

At this time, one candidate has been selected for academic training and is scheduled to depart for the U.S. on June 1. It is imperative that IMA begin now to assess its staff to determine additional potential candidates and the need for language training.

In addition, the new facilities will require a new expertise that no IMA employee now possesses. It is mandatory, therefore, that training be given serious attention. All plant managers will require additional training and it is likely that IMA will have to hire additional professionals if the training requirements are to be met.

d. GOP - Key Inputs

Substantial GOP inputs are specified in the project design. Principally, the GOP must provide sufficient working

capital to enable IMA to purchase all price-supported agricultural commodities meeting established quality standards, subject to marketing quotas, where applicable, from all producers desiring to sell to IMA. IMA must also continue to operate in such a manner to assure that the debt burden of IMA does not impair its operational viability.

In order to ascertain if key GOP inputs are being provided in a timely manner an examination of IMA's financial condition and price stabilization policy was undertaken. The evaluation results are discussed below.

(1) Financial Analysis

IMA prepared and has presented financial data for January 1 thru September 30, 1975, and for January 1 thru September 30, 1976.

These data have been analyzed and selected comparisons have been made to show important changes and/or differences that occurred during the period. (See Annex II for financial tables).

(a) Balance Sheet

Current assets for 1976 show an increase of \$6,810,227 over 1975 due primarily to the build-up of rough rice inventories over the period (9 months). In non-current assets, the deferred reserve for quality losses in inventories for heat and insect damage has been eliminated, write-off for inventory losses are currently charged to operations. The item left pending by the auditors of the Contraloría, "Débitos y Créditos por Examinar" in the amount of \$511,136 has been recently analyzed and the proper accounting entries have been made.

Accounts receivable from governmental agencies has been reduced by \$610,840 and a machine ageing of the account has been initiated.

The subsidy item of \$333,413 appearing in 1976 represents an entry in the accounts receivable from the government for payments made to rice processors under Resolution No. 15 - IMA of June 25, 1976, for compensation of the partial devaluation inventories of rough and milled rice held August 31, 1976 due to the government edict reducing the retail price from 23¢ per pound to 21¢ per pound.

The liabilities and capital section of the balance sheet shows significant changes. The bank overdraft has been eliminated. Short-term financing has decreased by \$5.0 million. In an attempt to improve its financial policy, IMA increased its long-term financial obligations.

The capital section shows a net loss between the two periods of approximately \$4.0 million. In the letter of transmittal of the December 31, 1975 financial statements, Cesar A. Cordoba, Administrative Director of IMA, explains capital losses as follows: "... The audit examination of IMA established accumulated operating losses stemming from the creation of DNMA (1973) to date of \$4,506,736 that, in fact, eliminated all retained profits and absorbed the capital of the Institute."

(b) Profit and Loss Statements

In comparison with the first nine months of 1975, operations in 1976 revealed significant changes with trends indicating improvements for the Institute's operational activities. A decrease in sales of \$1,600,000 is noted, however, the change in cost of sales for the first nine months of 1976 is encouraging. Discounting the one time charge of \$1,267,007 to cost of sales for the estimated inventory losses due to damaged merchandise, gross profits for the first nine months of 1976 would show almost \$1.0 million instead of a \$267,438 loss.

Undoubtedly the Institute's operation has not reached a level of efficiency that will respond to the objectives of guarantying markets for agricultural products at remunerative prices. The format of the profit and loss statement leaves much to be desired. A breakdown of the results of the price policy that usually produce losses does not exist. This is of vital necessity to the Institute in its execution of government policy. Conscious of its many deficiencies in its operation, IMA has initiated a program to improve its level of technical and professional personnel. In September 1975 IMA employed 1,086 people - by December 1976 this number was down to 902, a net reduction in personnel of 184. More important than the actual decrease in personnel was the replacement of departing employees with better qualified employees.

(c) Analysis

The Audit Department of the Contraloria General included in its examination of the financial status of IMA of September 30, 1975, certain analysis and commentaries on the financial situation of the Institute. This analysis is compared with the results of September 30, 1976.

(d) Capital

The analysis of capital shows the capacity of the Institute to acquire short-term indebtedness given the relation of net capital and long-term debt to total assets. In the past year, the improvement in the capacity to acquire short-term debt is in the order of 11.52% to 55%.

In the Institute's portfolio of loans payable, it is noted that for September 1975 only 13% of loans were on a long-term basis. For the same date for 1976, the long-term loans have increased to 67% of the loan portfolio. In effect, this is an indication that the financial policy of IMA is gradually changing to permit the repayment of loans without endangering the future liquidity of the Institute.

Until February 1977, the deficit position of its capital was a grave problem for the administration. The unwarranted delays in the funds of the government, as established in Article 14 of the Law #70, caused a reversal in the capital situation from September 30, 1975 compared to the same date in 1976. It is noted that a total loss of capital for the period amounted to \$4,669,938. In this period, for the first time, a subsidy from the government in the amount of \$593,816 was pledged to the financial fund. During February the Minister of Planning and the National Financial Commission approved the transfer of \$10.0 million from IMA's loan payable to a contribution to capital. The National Treasury will, in effect, assume IMA's \$10.0 million liability and the Institute's accounting will make an entry to its capital account as of December 31, 1976. The \$10.0 million will be paid back to the National Treasury out of IMA's operations margin at some unspecified future date.

(e) Liquidity

In September 1975, the relation of current assets to current liabilities was 1:0.72. This relation had improved substantially by September 1976 when it was recorded as 1:1.76. Short-term loans, under current assets, were reduced from 109.69% in 1975 to 44% in 1976. In comparison, the liquidity ratios for 1976 are encouraging. However, problems in the accounts receivable and inventories are recognized and must be dealt with.

The ageing of accounts and notes receivable indicate a deterioration in grains and salt. In September 1976, 93% of these accounts and notes receivable were within the 60-day column with only 6% in the 151-days or more column. However, in 1975, 50% are in the 60-day column and 22% in the 151-days or more.

Fully aware of this problem, IMA has initiated procedures to expedite the preparation of ageing information, thereby enabling the administration to take immediate action in collections. For the first time an ageing of the accounts receivable from governmental agencies has been initiated. This has resulted in the accounts receivable being more than 100% collectible.

Due to the shortcomings of the present procedures for physical inventory, a reserve was established for damaged inventories of grains and cereals. The charge to operations for the first nine months of 1976 was for \$1,267,007. Physical inventories are still not taken at regular intervals. In view of this, action has been initiated within IMA to establish a discipline in this very important current asset control.

IMA is aware of the importance of the accounts receivable in the acid tests relative to liquidity. Comparison of 1976 to 1975 shows small improvement in this respect. A 1:0.24 to 1:0.44 is noted for the periods of September 1975 and 1976.

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(f) Capacity to Acquire New Loans

The capacity of the Institute to acquire new loans continues to be very limited. To alleviate this situation it becomes imperative for IMA to determine its operational deficits directly attributed to the implementation of government price policy and request timely reimbursement. In great part these deficits stem from the pricing policy established by GOP to encourage agricultural production. In the same manner, the cost of maintaining inventory reserves for the Government must be ascertained with accuracy and promptness permitting the Institute to charge these costs and receive payment from the Central Government.

(2) Price Stabilization Policy

GOP has three general criterion for establishing its agricultural prices: that they be stable, remunerative for producers, and fair to consumers.

In addition to the three general criterion mentioned above, the agricultural sector has the following policy goals:

- (a) Increased income for the agricultural sector.
- (b) Increased employment opportunities and productivity.
- (c) Increased participation of agriculture in the total economy.
- (d) Leveling of economic and social differences between regions.
- (e) Provide consumer protection.
- (f) Import substitution.

The principal challenge to GOP during 1975/76 was the level of prices to producers. How does one determine what remuneration the producer should have? Clearly, from the consumers' viewpoint, the price to be paid to producers must be adequate to bring forth the desired production. Once this is established, the interests of consumers would be best served by fixing maximum selling prices to cover

costs of storage and handling and allow a reasonable margin of profit to the intermediary - how well did GOP accomplish all these tasks during the past year?

(a) Prices Paid to Producer

The agricultural sector has accepted the notion that it should be possible to calculate the costs of production, and to assure producers that their costs would be covered by the minimum price. Despite its superficial appearance of reasonableness and simplicity, cost of production is not an acceptable technique for establishing price levels even in the area of public utility regulations (enterprises which keep complete and accurate records) endless argument is possible over what items of expense should be allowed to be deducted from gross income to determine net income; and then, what should be the allowable rate of return on invested capital. If IMA wishes to follow this technique it must carry out a stratified sample of farm production costs and know the costs of each class of producer. This must be done in order to determine which producer class will benefit from IMA's pricing policy.

Within this setting the agricultural sector supported the price for rice for the agricultural year 1975-76 at \$10.00 per cwt. For the year 1976-77 the price was lowered to \$8.90 per cwt., but in September 1976 the price was raised to \$10.50 per cwt. The justification for the increase was stated to be the need for indemnifying the producer for (1) higher production costs and (2) drought damage.

The announcement that prices were to be raised was made in September (just prior to harvest) when the major production cost components had been incurred months before. The following table shows the support prices for selected products since 1972-73.

SUPPORT PRICES OF SELECTED PRODUCTS

Year	Rice		Beans		Onions		Corn	
	\$/CWT	Index	\$/CWT	Index	\$/CWT	Index	\$/CWT	Index
1972/73	6.50	100	10.75	100	8.50	100	4.50	100
1973/74	7.00	103	17.50	163	11.00	138	6.00	133
1974/75	10.00	154	30.00	279	13.20	165	6.50	142
1975/76	10.00	154	15.00	150	13.00	163	8.50	142

Special emphasis has been placed on raising support prices to more remunerative levels and to broaden IMA's purchasing power. The increased support levels were of most benefit to producers during agricultural years 1973-74 and 1974-75. The increase in rice for 1973-74 with respect to the year before was 8%, and 54% for 1974-75 compared to 1972-73. For corn these increases were in the order of 33% and 42% respectively. The following table shows that the new pricing policy had a positive impact on the farmer.

INDEX OF PRODUCTION OF SELECTED PRODUCTS

<u>Year</u>	<u>Rice</u>	<u>Beans</u>	<u>Onions</u>	<u>Corn</u>
	- percent -			
1972/73.....	100	100	100	100
1973/74.....	130	112	156	124
1974/75.....	144	100	175	134
1975/76.....	148	134	162	146

Rice production in 1975-76 was 48% over the base year 1972-73. The increase for corn was 34% for the same period.

The GOP's new pricing policy resulted in IMA becoming a positive force in the marketing of agricultural products. This is borne out by the following table.

PROCUREMENT INDEX OF SELECTED PRODUCTS, IMA

<u>Year</u>	<u>Rice</u>	<u>Beans</u>	<u>Onions</u>	<u>Corn</u>
	- percent -			
1972/73.....	100	100	100	100
1973/74.....	166	450	49	116
1974/75.....	244	2,350	71	111
1975/76.....	411	950	138	111

IMA's purchases since 1972/73 have increased dramatically (311% for rice and 850% for beans). These increases have naturally created storage and handling problems for IMA who is burdened with obsolete facilities.

(b) Costs of Storage, Handling and Distribution

IMA is authorized under Law No. 70 to charge for the services the Institute performs. IMA is expected to charge sufficient fees to cover all costs of storage and handling.

It is impossible to determine at this time if IMA's price structure adequately covers the cost of storage and handling. Indications are that they are not, (see the financial analysis section). Appropriate charges are indeterminate at present because IMA does not have the facility for accurate cost accounting. A real cost accounting system is an element of this Project which has not reached the implementation stage.

An important element of IMA's marketing program is the determination of a price structure that allows a reasonable margin of profit to the intermediary. IMA's official buy/sell margins are shown in the following table.

OFFICIAL BUY/SELL OPERATING MARGINS (\$)

<u>Commodity</u>	<u>1975/76</u>	<u>1976/77</u>
Rice.....	0.80	1.70
Corn.....	0.75	0.94
Beans.....	2.43	2.00
Imported Beans...	9.76	1.00

Source: Programa de Actividades 1976/77

(3) Organizational Revision

Most of the foregoing discussion has raised issues which economic and statistical analysis can evaluate, and which should be evaluated by sound, objective procedures, by adequately-trained personnel, so that policy makers can exercise their responsibilities with full awareness of the probable consequences of alternative courses of action.

The revision of IMA's organizational functions reflects an effort to cope with its many operational problems. The financial segment, ever increasing in complexity as the Institute strives to finance its own

activities, was separated from the administrative services section in order to strengthen it. Administrative services are also currently in the process of being strengthened to perform in a more efficient manner.

Effectively, the reorganizational process of IMA is in the final stages of implementation.

In order to improve the mechanics necessary to develop meaningful programs, IMA has converted the Office of Investigation and Development to the Planning Office. The following describes the four departments in the Office and their functions:

(a) Department of Programs

Preparation of new plans and programs for the Institute. Development of annual activities and operation program, coordinating systems, and evaluation activities.

(b) Department of Economic Studies

Provide market analysis, structure of markets, cost studies, and research for the purpose of establishing price data for services and products.

(c) Department of Technical Studies

Provide research for the improvement of storage, handling and processing of agricultural products. Additionally, prepare, with producer and public and private institutions, grades and standards for agricultural commodities.

(d) Department of Investment Projects

Implementation and control of investment projects with national and international financing organizations.

IMA will incorporate the following activities into the Planning Office's scope of responsibility.

(a) Activity - Class 1

The work for the annual budget and program should include an appraisal of likely market conditions for the

basic food crops during the coming year (with attention to their position within a longer run context), projections of the normal prices likely to prevail, an estimate of the possible minimum prices to be set for crop years beginning within the calendar year, and estimates of likely IMA involvement, quantities, purchases, etc. at these prices.

(b) Activity - Class 2

The special commodity papers, one for each of the basic food crops, are to be timed to aid the general manager and Directive Council in deciding upon the minimum and maximum prices to be announced for the crop year. It would bring to a focus analyses, statistical tables, studies of the supply and demand situation and prospects, a summary of macro-economic assumptions affecting supply and demand, relevant foreign market conditions, and a set of projections and the implications of alternative levels of minimum and maximum prices.

(c) Activity - Class 3

The periodic (weekly or biweekly) situation reports should contain a standard table of statistical information, i.e., current prices, stocks, imports and exports, production data, and key statistics for neighboring countries and world market, with comparisons. It should include a brief highlight essay on any significant recent development in prices, supply or distribution affecting the prospects for any of IMA's current or near future programs.

(d) Activity - Class 4

The economic group should normally be working on one or more special projects aimed at improving its services: such subjects as the statistical base on which it makes its projection, special analyses of critical issues, such as problems of seasonality, the location of purchasing activities, establishment or modification of price differentials, the effects of imports and exports, the improvement of estimating equations, etc.

(4) Statistics

The following statistics will either be gathered by IMA or made available to it for use in planning and policy making activities.

- (a) Supply and Utility Balances are regularly prepared for the following products: rice, corn and beans, sorghum, coffee, onions, potatoes and some other vegetables. The goal for this work is to realize balances for the 33 most important products in marketing. The objective of this consists in providing the analysts, technicians and directors with a research source containing subject information.
- (b) Principal movements of agricultural products between provinces are being tabulated through both the Risacua Gate in Chiriqui and Registros de Autoridad Portuaria in Panama City with particular attention paid to produce from Chiriquí and agricultural products from El Darién. These amounts are used as production and supply indicators for products not being reported in timely fashion in the official statistic information.
- (c) Import and Export information is obtained from Registros de Información de la Dirección de Operaciones (IMA) and from the Dirección de Comercio Internacional (IMA). In addition, Statistic and Census publishes a yearbook summarizing the pertinent information.
- (d) Surveys are made for potatoes and onions which include planted area, production forecast and estimated harvest.
- (e) Other surveys are conducted in order to obtain inventory levels in farms and warehouses for rice, corn, sorghum, coffee, potatoes and onions.
- (f) The Price and Marketing Information Office collects daily retail and wholesale prices at the public markets in the cities of Panama and David. This service is being reviewed for its future expansion.

- (g) IMA's purchase and sale information is obtained from records of the Operations Department. This service is also under study in order to expedite the gathering of information directly from the Finance Department and also to increase the number of products, in particular perishable products.
- (h) Information on meat exports are maintained.
- (i) Regular statistics are maintained relating to international price information obtained utilizing the Wall Street Journal and from other records maintained by the Dirección de Comercio Internacional.
- (j) A monthly wholesale prices service is provided but it needs expansion relative to providing prompt and timely information on national and international prices.
- (k) Production forecasts are provided by the Census Department. IMA develops forecasts on onions and potatoes for internal purposes.
- (l) Periodic situation reports and surveys of agricultural products are maintained.

e. Construction and Procurement

Since Loan signature the construction and procurement activity has undergone one major revision. The approved changes are as follows:

- (1) Add a 250,000 quintal storage facility in David;
- (2) Add a 200,000 quintal storage facility in Bayano;
- (3) Delete a 150,000 quintal storage facility in Changuinola;
- (4) Reduce by 150,000 quintals a storage facility in Santiago;
- (5) Reduce by 50,000 quintals a storage facility in Panama;
- (6) Reduce by 40,000 quintals a storage facility in Garachiné;

- (7) Reduce by 40,000 quintals a storage facility in Río Iglesia;
- (8) Delete a 5,000 quintal storage facility in Alto Bayano;
- (9) Delete the purchase of 100-150 ton shallow draft vessel;
- (10) Delete the construction of a wharf at Río Iglesia.

These changes were requested because of the following reasons:

- * A better knowledge of the existing facilities and the proposed installations in the main rice production areas. This includes changes from (1) to (5) (as shown on page 34).
- * A better knowledge of agricultural production in the Darién area which requires a reduction of design capacity. The result is the changes indicated in 6, 7, 8, and 10 (as discussed on pages 34 and 35).
- * The addition of a 250,000 qq plant in David allows sufficient facilities in an area of expansion and principal rice production. IMA's purchases in the David area are substantially greater than purchases in any other province in the Republic. The present capacity (nearly all rented) places IMA in an extremely undesirable cost situation.
- * The addition of a facility in Bayano with a capacity of 200,000 qq. will satisfy demands in this area which has considerable potential for increased rice production. There exists a potential for farming more than 5,000 ha., using irrigation, with possibly two harvest seasons annually, producing about 90 qq. per hectare - thus justifying the construction of this installation.
- * The elimination of the 150,000 qq. facility in Changuinola results from a policy change and turn over of all investment to the Integrated Development Corporation of Bocas del Toro which in the short-term, will satisfy current production needs in the area.
- * The reduction in capacity of the facility in Santiago by 100,000 qq. resulted from the recent construction of the 50,000 qq. facility in Soná and the 250,000 qq. installation in Penoncé.

- * The reduction of 50,000 qq. in the Panama facility is based on the closeness and the capacity storage of the facility in Chepo, which permits an immediate supply of rice to Panama City.
- * The reduction of 40,000 qq. in Garáchiné and Río Iglesia is based on a more exact understanding of production capacity generated in these areas.
- * The facility to be constructed in Bayano will permit elimination of 5,000 qq. from the storage capacity in Alto Bayano.
- * The elimination of one of the shallow-draft vessels will not decrease the capacity for transporting products from Darién to Panamá.
- * The identification of La Palma as a logical point for handling products in the area of the outlet of the Tuira River makes it necessary to construct another dock since an appropriate one is not fully available.

Input Effect on Outputs

Several changes in project inputs have been made over the past year. Each change has been described in detail in the section immediately preceding. Justification for each change was analyzed and it was determined to be rational, providing the basis for a sounder project.

If the inputs are provided on schedule it is reasonable to expect that the outputs will be produced on schedule.

One external factor that now looms important, and must be realized if the planned outputs are to be obtained on time; that is, will GOP counterpart funds be available? Panama's present financial crunch could seriously affect the project if counterpart funds are not forthcoming as needed.

3. Transformation of Outputs to Purpose

a. Testing Project Purpose Against Conditions Expected

Inasmuch as several major revisions of outputs are now contemplated it will be impossible to fully achieve the project purpose within the present time frame. The specific output revision that materially affects the project purpose is the proposed delay in the cold-storage construction program in order to construct the large grain storage facilities and onion warehouse. IMA will not be able to reduce the losses

of perishables between producer and consumer by 15% below the estimated 1975 proportion as planned. However, in view of large losses incurred in grain and onion handling, this is justified. All other conditions expected at the end of the project remain valid.

Several input/output alternatives are available to IMA at this time. Each alternative has its own financial and priority constraints. One such input/output plan is presented at the end of this section. This revised plan is in discussion stage and has not been subjected to intensive analysis.

b. Testing Output and Purpose Level Assumptions

Past experience and familiarity with local developments leads the evaluators to believe that the purpose level assumptions are valid. IMA must, however, exercise care in the future to assure that support prices are not set so high as to limit consumption among low income groups.

c. Achievement of Conditions Expected with Outputs Provided

The output levels as planned will lead to all but one of the set of conditions which are expected at the end of the project. That one condition (reducing perishable losses) will not be totally attainable without additional outputs. Additional funding must be forthcoming if this condition is to be realized (see proposed financial plan - Note: Training in perishables will continue as planned).

The above three steps have shown that the conditions expected at end-of-project will not achieve the project purpose unless the GOP is able to increase its counterpart contribution, or external sources of financing become available.

4. Transformation of Purpose to Goal

There is sufficient evidence throughout the world to convince the evaluators that when the efficiency and effectiveness of the Agricultural Marketing System in Panama has been improved the incomes of small and medium-size farmers will also be improved.

a. Testing Measures of Goal Achievement Against Goal

The indicators of Project impact are reasonably related to the goal.

b. Contribution of Purpose to Goal

The extent of the marketing problems in Panama are great. The CAP adequately portrayed the losses and their causes. This evaluation report provides an additional insight to the extent of losses suffered by IMA (see financial section).

The GOP has realistically focused in on their major loss items, grains and onions. It is their understandable desire to attack the "worse" problems first, then proceeding with the construction plan as money permits.

The evaluators are satisfied that the inputs remain of critical importance to the agricultural marketing plan of the GOP. The accomplishment of the grain marketing plan alone will prove extremely beneficial to the small and medium-size farmer.

c. Proposed Financial Plan (12-28-76)

On December 17, 1976, Harris-Solarian submitted to IMA a schedule of revised construction costs based upon their preliminary designs for the 5 large grain facilities. These cost estimates were considerably higher than anticipated due to several factors including increased total plant capacity, upgraded design, and underestimation of the rate of inflation that has occurred since Loan signature.

The following financial plan is a tentative proposal, prepared by the Loan-financed Marketing advisor, for IMA and is based upon data provided by the A&E firm. This plan has not been approved by IMA or AID. Essentially, the expected impact would be that of delay in the construction of the four cold storage plants. Further impact analysis will be undertaken by the Mission when a formal request for change has been received in the Mission.

(1) Land

Land costs for Panama, David, Santiago, and a new onion warehouse are estimated to be \$300,000. (This amount was reduced from the original plan because IMA is using land already owned by the government for all other grain facilities.)

(2) Terminal Grain Plants

Harris-Solarian estimate the costs of the five terminal grain plants to be \$6,295,000.

(3) Country Elevators

The original plan has been adjusted by the elimination of three country elevators each having 5,000 cwt. capacity.

(4) Vehicles and Equipment

The number of vehicles has been reduced, but sufficient vehicles have been retained for efficient grain movement. All auxiliary equipment has been retained as originally planned. Laboratory equipment has been increased by \$30,000 to improve IMA's capacity to analyze grain for water content, etc., at the time of purchase.

(5) New Installation

IMA has suffered severe losses in the past in onions through improper curing, drying and storage. It is estimated that the losses for 1976 were in excess of \$209,000. According to preliminary cost estimates submitted by Harris-Solarian, new onion facilities will cost approximately \$400,000.

(6) Accounting Equipment

Accounting equipment has been reduced by \$50,000.

(7) Engineering Services

The Harris-Solarian contract was signed for \$549,000 or \$49,000 over plan. This item has been increased by \$49,000.

(8) Technical Assistance and Training

The concern of Minister Paredes and AID regarding adequacy of technical assistance and training has resulted in an increase of \$30,000 in technical assistance and \$70,000 for training. An additional \$120,000 has been reserved for a consultant to work directly with the Director General of IMA.

(9) Marine Ships and Box Plant

Under the proposed plan all of the ships and the box plant would be eliminated with the expectation that they will be included in a later loan request.

PROPOSED FINANCIAL PLAN

LOAN Nº 525-T-042

(\$-000)

<u>INVESTMENT CLASS</u>	<u>IMA</u>	<u>AID</u>	<u>TOTAL</u>
I <u>Land</u>	300	-	300
II <u>Grain Facilities</u>			
A. <u>Terminal Plants</u>			
Chiriquí	690	944	1,634
Bayano	572	784	1,356
Panamá	572	784	1,356
Las Tablas	497	681	1,178
Santiago	<u>377</u>	<u>518</u>	<u>895</u>
	<u>2,708</u>	<u>3,711</u>	<u>6,419</u>
B. <u>COUNTRY BUYING STATIONS</u>			
Garachiné	13	16	29
Río Iglesia	13	16	29
El Real	13	16	29
Muelle Flotante	<u>9</u>	<u>11</u>	<u>20</u>
	<u>48</u>	<u>59</u>	<u>107</u>
C. <u>Small Buying Points</u>			
13 in Total	<u>161</u>	<u>208</u>	<u>369</u>

SECTION II

PERFORMANCE ANALYSIS

	<u>IMA</u>	<u>AID</u>	<u>TOTAL</u>
D. <u>Vehicles and Equipment</u>			
Trailers	-	54	54
Tractors	-	81	81
Trucks	-	100	100
Pick-ups	-	40	40
Fork Lifts	-	60	60
Conveyors	-	30	30
Laboratory Equipment	<u>-</u>	<u>30</u>	<u>30</u>
	<u>-</u>	<u>395</u>	<u>395</u>
III <u>Special Installations</u>			
Drying and Storage for Onions	143	257	400
VI Accounting Equipment	-	50	50
V A & E Services	-	600	600
VI <u>Technical Assistance and Training</u>			
Technical Assistance	-	500	500
Training	-	300	300
Consultant to Director General (Marketing)	<u>-</u>	<u>120</u>	<u>120</u>
	<u>-</u>	<u>920</u>	<u>920</u>
	<u>-</u>	<u>-</u>	<u>-</u>
TOTALS	<u>3,360</u>	<u>6,200</u>	<u>9,560</u>
%	35.1%	64.9%	100%

PERFORMANCE ANALYSIS

I. ACTION AGENT - Cooperating country (The Agricultural Marketing Institute - IMA)

Evaluation for period: March 1, 1976 to December 31, 1976

A. Important outputs dependent predominantly on the Host Government:

1. Construct or renovate and equip buying points for grains, fruits and vegetables.
2. Construct and equip collection stations for buying and storing grains and semi-perishables.
3. Construct terminal plants for receiving, drying and storing grains.
4. Improve storage/distribution centers for fruits and vegetables.
5. Construct cold storage and sub-zero facilities for "working" and storing perishables.
6. Construct dock facilities in Darien Province.
7. Establish a plant for manufacturing shipping crates for fruits and vegetables.

B. Actual performance during the period as compared to plans:

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plan</u>	<u>Effect on Project</u>
1a. Preparation, review and approval of detailed scope of work for engineering consultant services.	Actual performance of the action was carried out on schedule and within designated time frame.	None.
2a. Effectiveness of evaluation team responsible for short-listing and final selection of consultant to submit technical proposals.	Actual performance of this action by the evaluation team was carried out on time within designated time frame.	None.
3a. Evaluation team's review and analysis of technical proposals and selection of consultant for contract negotiations.	Delay of approximately one month caused by changes in IMA administrative staff and also changes in project construction sites which were based on re-evaluation of overall program requirements.	Delay resulted in adjustment to implementation schedule and an extension of approx. one month prior to initiating formal contract negotiations
1b. Effectiveness of consultant contract negotiations.	Actual performance of this action was carried out on schedule and within designated time frame.	None.

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plans</u>	<u>Effect on Project</u>
2b. Prices negotiated within estimates and budget limit-	The consultants initial cost proposal of \$649,856 was negotiated down to \$551,000 (including bank charges). This amount exceeded the budget estimate by \$51,000. It is anticipated that this amount will be made up from economies in other areas of the financial plan. Although the \$551,000 amounts exceeds the estimate the figure is still considered to be an acceptable negotiated amount.	None.
3b. How actual contract time relates to IMA estimates.	<u>Contract Timing:</u> Design: 34 wks. 36 wks. Construction: 40 wks - 52 wks. Total contract time reduced by one month with the contract period estimated to end mid March 1978.	None.
4b. Agreements and/or concessions made by IMA in order to negotiate contract amount down.	In order to realize a savings in the negotiated contract amount IMA agreed to provide the following services in lieu of the consultant: Reproduction (xerox and drawings) Furnished office space Three field engineers - construction phase. One draftsman - construction phase.	None.

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plans</u>	<u>Effect on Project</u>
Sb. Final legal review and execution of consultant contract.	Delays were experienced in carrying out this action because of extra time needed to determine the type of retention clause to be inserted in the contract.	The additional time required by IMA legal staff to make this ruling resulted in the contract not being signed on time and the program schedule had to be adjusted.
1c. Provision of technical information (maps, plans, field topography of chosen sites, soil perforations and corresponding laboratory analyses) to the consultant in a timely manner as called for in the contract.	Actions to contract with technicians required to execute the soil investigation were not initiated until after the contract performance phase began. These actions should have been carried out well in advance so the consultant could be provided with pertinent site data at the very beginning of the contract period. Some delay in preparation of the Master Plan of Action for construction was experienced. In addition to the above, some delay resulted from IMA not having firm locations identified for all the sites where grain and perishables facility construction is to be performed.	Effect of not having relevant technical data available immediately was a loss of valuable time during the initial week of the contract design phase. It is anticipated that this time can be made up without having an adverse impact on the overall schedule of consultant contract activities.

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plans</u>	<u>Effect on Project</u>
2c. Provision of office space, equipment and vehicular support to the consultant in a timely manner, as called for in the contract.	The office space was not immediately made available to the consultant and this resulted in some inconvenience during the initial week of the design period. No major adverse impact or delays were experienced.	None.
1d. <u>IMA Construction or Buying Points (Puestos de Compra)</u> Completion of final standard design and specifications for 5000 and 10,000 qq. units to be constructed at 14 designated locations.	To date final standard designs and specifications have not been submitted to AID for review and approval prior to the start of construction. The original schedule called for design and specs. to be completed in order for construction to begin in November 1976.	The effect of delay in executing this action will be critical to the project activity if construction does not get underway this dry season (Dec. 76-April 77).
2d. Site visits to the proposed locations of the buying points in order to make determination re overall feasibility for construction and agricultural product production in the area selected. Acquisition of land titles	To date only about half of the proposed sites have been visited by IMA and/or USAID staff. Plans are being made to visit the remainder of the proposed sites, but delays in carrying out these visits could have an adverse impact on the overall construction program for the buying points.	The effect of delays in making necessary field visits to the construction sites might be the prolongation of construction activities beyond the current dry season.

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plans</u>	<u>Effect on Project</u>
<p>3d. <u>Contractual agreement</u> with IMA local hire engineer responsible for:</p> <ul style="list-style-type: none">a. Scheduling construction material procurement.b. Identification of skilled and semi-skilled labor requirements for construction.c. Construction management and supervision.	<p>The hiring of a local engineer by IMA was not originally called for in the initial project plan. IMA has contracted the services of a competent engineer to provide essential management and supervisory services for the execution of IMA construction activities. These services should expedite construction activity and help to avoid delays in implementation.</p>	<p>None.</p>
<p>4d. <u>Construction of Floating Dock</u> (Muelle Flotante)</p>	<p>Preliminary/final design layout and cost estimates for the proposed dock facility are now being prepared in order to execute construction this dry season in accordance with the project schedule prior to commencement of construction, final design, specs and cost estimates must be submitted to AID for review and approval.</p>	<p>None.</p>

<u>Factors/Consultant Selection Phase</u>	<u>Actual Performance Compared to Plans</u>	<u>Effect on Project</u>
5d. <u>Construction of Box Factory</u>	In accordance with the project schedule action is being taken to identify and locate a feasible construction site. Development of a construction and equipment program must be carried out early in CY 77 to avoid delay in having this project element available and functioning in order to meet scheduled box/crate production requirements.	None
6d. Project vehicle and equipment procurement.	The project schedule calls for IMA to procure project related vehicles and equipment. A program for advertising, bidding, purchase and delivery of these items is being developed according to the overall project implementation plan. In order to avoid delay in delivery, IMA must complete all specifications and bid documentation during the early part of CY 77.	

RATING: (Actual performance during the period as compared to plans)

UNSATISFACTORY		SATISFACTORY			OUTSTANDING	
1	2	3	4	5	6	7

RATING: (Importance for Achieving Project Purpose)

LOW		MEDIUM			HIGH	
1	2	3	4	5		

FACTORS PERSONNEL	Not Applicable	Actual Impact			Check if Important	FACTORS OTHER FACTORS	Not Applicable	Actual Impact			Check if Important
		Negative	As Planned	Superior				Negative	As Planned	Superior	
1. Competence/Continuity of Project Leadership		✓			✓	1. Cooperation within Host Government					✓
2. Ability to Implement Project Plans			✓			2. Host Government Cooperation with Non-Government Organizations			✓		
3. Use of Project-Trained Manpower			✓			3. Availability of Reliable Data/Statistics			✓		
4. Technical Skills of Project Personnel			✓			4. Adequacy of Project Funding			✓		
5. Planning and Management Skills			✓			5. Legislative Changes Relevant to Project	✓				
6. Technical Man-years Available			✓			6. Adequacy of Project-Related Organization		✓			
7. Continuity of Staff		✓			✓	7. Physical Resource Inputs	✓				
8. Willingness to Work in Rural Areas			✓			8. Maintenance of Facilities and Equipment			✓		
9. Adequacy of Pay and Allowances			✓			9. Political Conditions Specific to Project			✓		
10. Counterpart Acceptance of and Association with Project Purpose						10. Resolution of Bureaucratic Problems			✓		
			✓			11. Receptiveness to Change			✓		
11. Management of Commodities	✓					12. Actual Dissemination of Project Benefits			✓		
						13. Intent Capacity to sustain and/or Expand Project Impact After U.S. Inputs are Terminated			✓		

ACTION REQUIRED: (What actions(s) should be taken to improve the performance of the cooperating country - IMA)

1. The continuity of IMA management staff is vital to the success of project operations during the upcoming construction phase. Therefore, every effort should be made to avoid changes in personnel.
2. In order for IMA to provide the services which have been identified for the construction phase, an expanded and strengthened organizational staff of field inspection engineers and construction management staff will have to be made available within the time frame stipulated in the consultant contract schedule (Master Plan) and the overall project implementation plan.
3. Counterpart funding allocated to IMA by GOP for 1976 was \$100,000 and for 1977 the sum of \$ 2 M was budgeted. The loan agreement stipulates that GOP counterpart funds shall be \$500,000 land and \$2,550,000 cash. IMA should insure that this money remains available to it.

CHANGES IN CONSTRUCTION PROGRAM

Changes in facility location and capacity approved by Implementation Letter No. 8, and rationale for revisions which have been made by IMA during the evaluation period are explained in the Construction and Procurement section, page 32.

- II. Action Agent - Contractor: Harris-Solarian, Engineering Consultant, Joint Venture (Design and Construction Supervision Phases of Project Activity). Evaluation for period of October 11, 1976 to December 31, 1976.

Funding:

1. Cumulative Obligations through prior fiscal year.	2. Estimated Budget current fiscal year	3. Estimated Additional Budget current fiscal year
	\$128,971.50	\$422,028.50

Action Required: What action(s) should be taken and by whom to improve performance.

1. It is believed that in order to more effectively perform its contractual and technical requirements during the remainder of the design phase and the construction phase, the engineering consultant will have to show increased interest and involvement in the policy aspects of the project. This can be accomplished through increased communication and coordination with IMA management staff having responsibility for formulating policy to meet project objectives.
2. A complete and thorough Master Plan of Action has been developed. The consultant will have to take action to insure that performance requirements are adhered to within the time schedule. Specific action requirements should be discussed and alternative courses explained in sufficient detail to avoid delays in (IMA) decision making.

III. Action Agent: USAID/Panama

Outputs dependent substantially on USAID actions

1. Construct or renovate and equip buying points for grains, fruits and vegetables.
2. Construct and equip collection stations for buying and storing grains and semi-perishables.
3. Construct terminal plants for receiving, drying and storing grains.
4. Improve storage/distribution centers for fruits and vegetables.
5. Construct cold storage and sub-zero facilities for "working" and storing perishables.
6. Construct dock facilities in Darien Province.
7. Establish a plant for manufacturing shipping crates for fruits and vegetables.

USAID/PANAMA

B. ACTUAL PERFORMANCE OF USAID DURING THE PERIOD (Compare it to commitments made to host Country in the ProAg)							C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE				
Unsatisfactory		Satisfactory			Outstanding		Low	Medium			High
1	2	3	4	5	6	7	1	2	3	4	5
D. PERFORMANCE FACTOR RATING FACTORS							Not Appli- cable	Actual Impact			Check if Im- portant
								Negative	As Planned	Superior	
1. Responsibilities Defined and Assigned in USAID									✓		
2. Authorities Defined and Assigned in USAID									✓		
3. Effective Communications within USAID									✓		
4. Effective Communications with Other Action Agents									✓		
5. Mobilization of Mission Staff as Needed									✓		
6. Coordination with Related Project(s)									✓		
7. USAID Performance per Terms of ProAgs/Contracts/PASA's									✓		

IV. Action Agent: AID/Washington

A. Important outputs dependent substantially on AID Washington

1. Construct or renovate and equip buying points for grains, fruits and vegetables
2. Construct and equip collection stations for buying and storing grains and semi-perishables.
3. Construct terminal plants for receiving, drying and storing grains.
4. Improve storage/distribution centers for fruits and vegetables.
5. Construct cold storage and sub-zero facilities for "working" and storing perishables.
6. Construct dock facilities in Darien Province.
7. Establish a plant for manufacturing shipping crates for fruits and vegetables.

B. ACTUAL PERFORMANCE DURING THE PERIOD AS COMPARED TO PLANS							C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE				
Unsatisfactory		Satisfactory			Outstanding		Low	Medium		High	
1	2	3	4	5	6	7	1	2	3	4	5
D. PERFORMANCE FACTOR RATING FACTORS						Not Applicable	Actual Impact			Check if Im- portant	
1. Provision of Personnel						✓	Negative	As Planned	Superior		
2. Provision of Commodities						✓					
3. Provision of Adequate AID/W Technical Backstopping								✓			
4. Contract Negotiation								✓			

Action Required: What mission action(s) should be taken to stimulate improved AID/W performance.

1. Improve communications to speed up opening of L/Comms
2. Improve communications to speed up publication of required Commerce Business Daily Advertisements

Performance Analysis

Evaluation

for Period: 3-1-76 to 12-31-76

INPUT PARTICIPANT TRAINING

Training Program: U.S. Third Country

A. TRAINING

1. Cumulative Obligations Through Prior Fiscal Year

2. Estimated Budget, Current Fiscal Year

3. Estimated Additional Budget to Completion, After Current Fiscal Year

\$ Zero

\$ Zero

\$230,000

B. IMPORTANT OUTPUTS DEPENDENT SUBSTANTIALLY ON THIS TRAINING

Sufficiently trained GOP marketing personnel for operating an improved marketing system.

C. ACTUAL PERFORMANCE DURING THE PERIOD AS COMPARED TO PLANS							D. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE					
Unsatisfactory		Satisfactory			Outstanding		Low	Medium		High		
1	2	3	4	5	6	7	1	2	3	4	5	
E. PERFORMANCE FACTOR RATING FACTORS							Not Applicable	Actual Impact			Check if Important	
								Negative	As Planned	Superior		
PREDEPARTURE												
1. English Language Ability (U.S. Training)								X				
2. Host Country Funding									X			
3. Orientation								X				
4. Participant Availability								X				
5. Trainee Selection								X				
POST-TRAINING												
1. Relevance of Training to Project							X					
2. Recognition of Degree Equivalency							X					
3. Appropriate Facilities and Equipment for Returned Trainees							X					
4. Employment Appropriate to Project							X					
5. Supervisor Receptiveness							X					

F. ACTION REQUIRED: What action(s) should be taken to make the participant element more effective?

1. Assessment of staff to determine potential candidades.
2. Start language training as required.

PERFORMANCE ANALYSIS

IMA - Financial Activities

For period: 7-3-76 to 12-31-76

A. Important factors dependent predominantly on the Host Government.

1. Qualified and experienced management.
2. Establishment of cost accounting and financial control systems.
3. Contracting and utilization of financial consultant assistance.
4. Counterpart funding.

B. Important factors dependent predominantly on A.I.D.

Coordination, review and approval.

C.

PERFORMANCE RATINGS

<u>FACTORS</u>	<u>Accomplished</u>			<u>Impact/Significance</u>			<u>ACTION REQUIRED</u>
	N/A	YES	NO PARTIAL	HIGH	MED.	LOW	
1. Contracting of Financial advisor.			X	X			1. IMA to proceed with contracting of financial consultants. 2. Timely submission to AID of financial documents.
2. Has IMA established financial objectives, goals, policies, etc. and are they periodically reviewed.			X	X			
3. Timeliness of financial reports		X		X			
4. Establishment of cost accounting system and ability to identify costs, losses, inventory of each commodity.			X	X			
5. Need for stronger different CPs.	X				X		
6. Frequency of inventories condition accuracy, etc.			X		X		
7. Are producers timely paid.		X			X		
8. Availability and budgeting of counterpart funding.			X	X			
9. Analysis of financial statement.	X				X		

ANNEX I.

REPUBLICA DE PANAMA
INSTITUTO DE MERCADEO AGROPECUARIO

PROGRAMA DE ADIESTRAMIENTO

Académico		Numero de Participantes	Total Meses/ H.	77	78	79
<u>Postgrado</u>						
<u>Comercialización</u>						
Aspecto económico	USA	2	16	8	8	--
Aspecto técnico	USA	2	16	8	8	--
<u>Técnico Administra-</u> <u>dor</u>						
<u>Grupos</u>						
Administrador de bodegas rurales	Panamá	20	60	60	-	--
Mercadeo y alma- cenamiento	USA	10	20	10	6	4
Análisis de labo- ratorio y normas de calidad	USA	3	12	4	4	4
Administrador de plantas	Colombia	6	24	8	8	8
<u>Perecederos</u>						
Normas de calidad y embalaje	USA	2	8	4	4	--
Administrador y manejo de plantas	A.L.-USA	6	12	6	6	--
Técnica del pro- ceso de pre-enfri- amiento y almace- naje		2	8	4	4	--
Curación, secado y almacenamiento de papas y cebolla	USA	2	12	6	6	--
Organización y Promoción	A.L.-USA	2	8	4	4	--

INSTITUTO DE MERCADO AGROPECUARIO

ANNEX II.

COMPARISON OF FINANCIAL DATA
SEPTEMBER 30 - 1975 & 1976

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	1975		1976		Difference
<u>ASSETS</u>					
<u>Current</u>					
Cash Fund for Procurement	1,410,861		774,116		(636,745)
Cash in Bank	1,445,857		2,673,163		1,227,306
Loans, etc.	75,429		208,779		133,350
Accounts Receivable	1,532,637		1,426,948		(105,689)
Less Reserves	<u>277,012</u>		<u>312,247</u>		<u>35,235</u>
	1,255,625		1,114,701		(140,924)
Inventory	10,336,578		15,942,177		5,605,599
Less Reserves	<u>2,034,456</u>		<u>1,448,671</u>		<u>(585,785)</u>
	8,302,122		14,493,506		6,191,384
Other	627		36,483		35,856
Total Current	<u>12,490,521</u>		<u>19,300,748</u>		<u>6,810,227</u>
<u>Deferred</u>					
Accounts to be examined	511,136		---		(511,136)
Doubtful Accounts	263,989		263,989		---
Damaged Inventory	2,034,456		---		(2,034,456)
Prepaid Insurance	<u>---</u>		<u>83,472</u>		<u>83,472</u>
Total Deferred	2,809,581		347,461		(2,462,120)
<u>Long Term</u>					
Accounts Receivable					
State Institutions	1,944,499		1,333,659		(610,840)
Salt coops.	23,603		19,035		(4,568)
Subsidies	<u>---</u>		<u>333,413</u>		<u>333,413</u>
Total Long Term	1,968,102		1,686,107		(281,995)

	1975	1976	Difference
Fixed			
Land	182,676	182,676	---
Construction in Progress	400,443	773,587	373,144
Office Equipment	396,997	449,411	52,414
Machinery & Equipment	820,418	931,924	111,506
Other Building & Equipment	252,039	284,422	32,383
Buildings	1,034,599	1,034,599	---
Tools	12,988	29,277	16,289
Vehicles	510,948	627,683	116,735
Ships	147,989	300,289	152,300
Total	3,175,978	3,657,605	481,627
Less Depreciation	<u>1,385,286</u>	<u>1,641,263</u>	<u>255,977</u>
Total Less Depreciation	<u>1,790,692</u>	<u>2,016,342</u>	<u>225,650</u>
Total Fixed Assets	2,373,811	2,972,605	598,794
TOTAL ASSETS	<u>19,642,015</u>	<u>24,306,921</u>	<u>4,664,906</u>

INSTITUTO DE MERCADEO AGROPECUARIO

COMPARISON OF FINANCIAL DATA
SEPTEMBER 30 - 1975 & 1976

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	1975		1976		Difference
<u>LIABILITIES AND CAPITAL</u>					
<u>Current</u>					
Overdraft	2,325,221		—		(2,325,221)
Accounts payable	1,012,003		1,477,670		465,667
Other Accounts Payable	---		190,113		190,113
Interest to Pay	342,575		716,901		374,326
Loans to Pay	<u>13,700,000</u>		<u>8,552,525</u>		<u>(5,147,475)</u>
Total Current Liabilities	17,379,799		10,937,209		(6,442,590)
<u>Long Term</u>					
Loans to Pay	<u>1,980,566</u>		<u>17,750,000</u>		<u>15,769,434</u>
Total Liabilities	<u>19,360,365</u>		<u>28,687,209</u>		<u>9,326,844</u>
<u>Capital</u>					
Initial	6,656,036		6,656,036		—
Adjusted - 1975	(1,869,650)		(1,825,066)	44,584	
Adjusted - 1976			(14,405)	14,405	
Additional			<u>74,416</u>	<u>74,416</u>	
	<u>(1,869,650)</u>		<u>(1,765,055)</u>		<u>104,595</u>
Subtotal	4,786,386		4,890,981		104,595
<u>Less</u>					
Loss to September 1975	4,504,736				
Loss to December 1975			5,998,748		
Loss to September 1976					
	<u>4,504,736</u>		<u>9,271,269</u>		<u>4,766,533</u>
Actual Capital 30-9-75	281,650		(4,380,288)		4,098,638
Total Liabilities and Capital	<u>19,642,015</u>		<u>24,306,921</u>		<u>4,664,906</u>

INSTITUTO DE MERCADO AGROPECUARIO
 PROFIT AND LOSS STATEMENT
 FROM 1 DEC. THRU 31 SEPT. - 9 MONTHS - 1975-76

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	<u>1975</u>	<u>%</u>	<u>1976</u>	<u>%</u>	<u>DIFFERENCE</u>
Gross Sales	13,850,619		12,191,404		(1,659,215)
Less: Returns	46,465		18,673		27,792
Net Sales	<u>13,804,154</u>	100.00	<u>12,172,731</u>	100.00	<u>1,631,423</u>
Cost of Sales					
Cost of Product	14,251,287	102.24	10,925,040	89.75	(3,326,247)
Product Losses	361,755	2.62	248,122	2.04	(113,633)
Damaged Product	-		1,267,007	10.41	1,267,007
Total Cost of Sales	<u>14,613,042</u>	<u>105.86</u>	<u>12,440,169</u>	<u>102.20</u>	<u>(2,172,873)</u>
Gross Profit (Loss)	<u>(808,888)</u>	<u>(5.86)</u>	<u>(267,438)</u>	<u>(2.20)</u>	<u>(541,450)</u>
Other Income					
Difference	174,750	1.27	1,125,230	9.24	950,480
Miscellaneous	66,959	.48	40,720	.34	(26,239)
Total Other Income	<u>241,709</u>	<u>1.75</u>	<u>1,165,950</u>	<u>9.58</u>	<u>924,241</u>
Sub-Total	<u>(567,179)</u>	<u>(4.11)</u>	<u>898,512</u>	<u>7.38</u>	<u>(1,465,731)</u>
Expenses					
Personnel	1,391,321	10.08	1,921,994	15.79	530,673
Administration	1,172,696	8.49	924,836	7.60	(247,860)
Depreciation	123,645	.90	198,613	1.63	75,032
Doubtful Accounts	277,013	2.01	17,101	.14	(259,912)
Total Expenses	<u>2,965,675</u>	<u>21.48</u>	<u>3,062,544</u>	<u>25.16</u>	<u>96,869</u>
Profit (Loss) in Operations	<u>(3,532,854)</u>	<u>(25.59)</u>	<u>(2,164,032)</u>	<u>(17.78)</u>	<u>(1,368,822)</u>
Cost of Financing	971,832	7.04	1,702,305	13.98	730,473
Loss for the Period	<u>(4,504,736)</u>	<u>32.63</u>	<u>(3,866,337)</u>	<u>(31.76)</u>	<u>(638,399)</u>
State Subsidies	0		593,816	4.88	593,816
Net Loss for the Period	<u>(4,504,736)</u>	<u>32.63</u>	<u>(3,272,521)</u>	<u>(26.88)</u>	<u>1,232,215</u>

INSTITUTO DE MERCADEO AGROPECUARIO

ANALYSIS OF FINANCIAL INDICATORS

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	Sept. 1975	Dec. 1975	June 1976	Sept. 1976
<u>CAPITALIZATION</u>				
Net Capital	281,650	(1,155,053)	(2,687,245)	(4,380,288)
Long-Term Debt	<u>1,980,566</u>	<u>1,999,566</u>	<u>10,572,000</u>	<u>17,750,000</u>
TOTAL	<u>2,262,216</u>	<u>844,513</u>	<u>7,884,755</u>	<u>13,369,712</u>
Total Current	19,642,015	20,798,420	30,773,584	24,306,921
<u>% OF ASSETS PLEGGED FOR SHORT TERM</u>	<u>11.52</u>	<u>4.06</u>	<u>25.62</u>	<u>55.00</u>
<u>LIQUIDITY</u>				
Current Assets	<u>12,490,521</u>	<u>14,695,411</u>	<u>25,489,160</u>	<u>19,300,748</u>
Current Liabilities	17,279,799	19,953,907	22,887,863	10,937,209
<u>TOTAL LIQUIDITY</u>	<u>1:0.72</u>	<u>1:0.74</u>	<u>1:1.11</u>	<u>1:1.76</u>
Current Assets	12,490,521	14,695,411	25,489,160	19,300,748
Less Inventories	<u>8,302,122</u>	<u>12,530,642</u>	<u>18,930,081</u>	<u>14,493,505</u>
TOTAL NET	<u>4,188,399</u>	<u>2,164,769</u>	<u>6,559,079</u>	<u>4,807,242</u>
Current Liabilities	17,379,799	19,953,907	22,887,863	10,937,209
Liquidity - Acid Test	<u>1:0.24</u>	<u>1:0.11</u>	<u>1:0.29</u>	<u>1:0.44</u>
<u>INDEBTEDNESS</u>				
Total Liability	<u>19,360,365</u>	<u>21,953,473</u>	<u>33,460,829</u>	<u>28,687,209</u>
Total Current	19,642,015	20,798,420	30,773,584	24,306,921
Capacity for Indebtedness Promised -	<u>98.57</u>	<u>105.55</u>	<u>108.73</u>	<u>118.02</u>

INSTITUTO DE MERCADERO AGROPECUARIO

ACCOUNTS RECEIVABLE

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September 1975	Total	AGE - DAYS					151-More
		1-30	31-60	61-90	91-20	121-150	
Fruits & Vegetables	311,549	187,661	35,132	6,282	44,502	37,972	
%	100	60.23	11.28	2.02	14.28	12.19	
Grains & Salt	550,865	513,408	1,309	591	---	35,557	
%	100	93.20	.24	.10	---	6.46	
Promissory Notes	670,223	336,054	137,544	85,402	---	111,223	
%	100	50.14	20.52	12.74	---	16.60	
September 1976							
Fruits & Vegetables	173,297						
Grains & Salt	360,895	145,368	36,876	50,758	---	49,649	
%	100	40.28	10.22	14.06	---	13.76	
Promissory Notes	941,001	355,131	174,089	60,267	---	241,419	
%	100	37.74	18.50	6.40	---	25.66	
October 1976							
State Institutions	1,338,664	67,029	84,081	29,493	20,151	1,137,910	
%	100	5.01	6.28	2.20	1.51	85.00	