

SPD-ABA-558
LA/DP

UNITED STATES GOVERNMENT

Memorandum

5/90/65

65156

TO : Mr. Robin Gomez, LA/DR/FIN

DATE: 1 June 1976

FROM : Edwin A. Anderson, DOM *E.A.*

Please return to
LA Evaluation Staff

SUBJECT: Loan 519-T-019 Grain Marketing
Assessment and Logical Framework

Pursuant to State 094988 attached, please find subject assessment and Logical Framework.

ENTERED
11/15/76

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ASSESSMENT OF EL SALVADOR GRAIN MARKETING LOAN NO. 519-T-019

Introduction

The purpose of this assessment of the Grain Marketing Loan is to set forth and clarify the program objectives including a revision of the logical framework. This is necessary due to changing circumstances since the original authorization and in light of the recent amendment to the Loan Agreement. This assessment is intended to provide a more adequate basis on which to evaluate the loan.

A. Background

The goal of the loan program was to increase income and employment of the small grain producer of El Salvador. The purpose of the program was to establish a basic grains marketing program to: a) assist in the development of the administrative and operational capabilities of the National Marketing Institute (IRA); b) provide a network of storage facilities; c) provide working capital for the grain inventory system; and, d) assist in the development of a marketing price policy. The loan was authorized at a level of \$6.5 million in August, 1973 and signed in November, 1973. A secondary, but important purpose of the program is to provide facilities to store a buffer stock which will serve to cover shortages in bad crop years. This would dispel a fear, on the part of the poor whose diet is primarily basic grains, that sufficient grain will not be available and thereby induce diversification into higher value cash crops.

Due to two important changes which occurred since authorization, the loan was amended. These changes were: increased cost of providing the physical facilities due to inflation, and loan-funded working capital no longer required due to increased Borrower financing of the working capital fund. (This is discussed in greater detail in Action Memorandum for the Deputy U. S. Coordinator dated November 29, 1975). The amended Loan Authorization was signed on December 5, 1975 and the amended Loan Agreement was signed on April 8, 1976. The following table presents the financial plan as established in the original CAP and Annex I of the Loan Agreement and as amended:

Financial Plan by Use of Funds
As Originally Presented and As Amended
(000 Dollars)

	ORIGINAL PER CAP			AS AMENDED		
	AID	GOES	TOTAL	AID	GOES	TOTAL
<u>USE</u>						
Storage Facilities	1,623	1,063	2,686	3,775	1,063	4,838
Other Equipment	519	-	519	660	-	660
T.A.	500	-	500	649	-	649
Training	100	-	100	100	-	100
Working Capital	3,500	4,000	7,500	-	16,500	16,500
Operating Costs	-	1,691	1,691	-	1,691	1,691
Contingencies	-	-	-	1,316	-	1,316
<u>TOTAL PROJECT</u>	<u>6,242</u>	<u>6,754</u>	<u>12,996</u>	<u>6,500</u>	<u>19,254</u>	<u>25,754</u>

B. Program Goal

The program goal continues to be increased income and employment of small grain producers. The CAP does not provide indicators nor means of verification, however, the attached Logical Framework does quantify goal achievement. Since data for a direct measurement of income changes do not exist, an indirect measurement will be used. (See Logical Framework attached).

C. Program Purpose

1. Assist in the Development of the Administrative and Operational Capabilities of the National Marketing Institute (IRA).

This purpose is an essential element of the program and will be accomplished primarily through in-country on-the-job training of IRA personnel.

Under the original project design as discussed in Section V, E of Part Four of the Capital Assistance Paper, four areas of training were identified:

- a. In-country training courses for facilities managers and other key people involved in grain storage handling;
- b. Advanced training in the U.S. for key IRA personnel involved in grain storage and marketing;
- c. Two potential candidates for BS-MS training;
- d. Short-term additional training outside El Salvador for personnel involved in item a to begin approximately two years after operation of the new program.

In reviewing the training element in detail, the Mission and IRA have concluded that the most critical need for training remains that under category a and b above. The in-country training of IRA personnel will begin in early 1977 when the new facilities are nearing completion. A follow-up course will be held later in the year. After that session, it is anticipated that IRA will have sufficient technical and administrative capacity to carry on its own training without substantial loan-financed assistance. It should be noted that the training sessions will not be starting from scratch. IRA has had approximately seven emergency buying stations in operation this crop year. Therefore, IRA personnel are familiar with various aspects of grain storage and handling. Secondly, category b training has been implemented. To date two individuals have been sent to the Kansas State University Grain Marketing Course and three others will attend the course this Summer.

Regarding category c training, IRA's current plan calls for

training one and possibly two candidates to the M.S. level. These candidates will not, of course have an impact during the disbursement period of this loan. The Mission feels, however, that this type of training is essential for the long-run success of IRA.

Category d training will be implemented if courses of this nature develop. One possibility may be regional grain marketing courses/seminars. However, this is probably too far in the future to be financed under the AID loan.

2. Provide a Network of Storage Facilities

This of course is the heart of the program. The marketing program depends heavily on the greatly increased storage available to IRA. The loan will finance the construction and equipping of approximately 35,650 metric tons (MT) of storage capacity to be implemented in two phases. Phase I, involving 26,210 MT of storage (11 regional buying centers and one terminal plant) is in process and will be completed in late CY 1976. Phase II involving 9,440 MT (three regional buying centers and the expansion of six Phase I regional buying centers and the terminal plant) would be implemented in CY 1977.

In addition to the IRA-AID facilities, the storage capacity of IRA will be increased by approximately 6,180 MT (two terminal plants) to be financed by CABEL) and 40,000 MT (expansion at the terminal plant sites) of emergency storage capacity being built by IRA with its own funds during CY 1976. The total new storage capacity of IRA by the end of CY 1976 will be approximately 71,000 MT. This, combined with its existing storage will provide total storage for some 100,000 MT of basic grains in appropriate owned storage. With the implementation of Phase II of the AID program, IRA would have over 110,000 MT of storage capacity.

Given IRA's decision to expand their storage by 40,000 MT with their own resources in CY 1976, the Mission contracted Mr. James Lemley to evaluate the need for this expanded storage to determine whether it was consistent with the purposes of the AID loan and whether AID should proceed with financing Phase I of the IRA-AID program. It is noted that the CAP estimates for the minimum amount of the storage required to effectively implement a grain price stabilization program ranged from 5 percent to 20 percent of total basic grains production. The CAP used a median figure of 12-13 percent as the basis for the calculation of the storage to be constructed under the IRA-AID program.

Using that percentage, and based upon the production data from the 1971 Agriculture Census, the CAP determined that a minimum of 84,000 MT of permanent IRA-owned storage capacity would be necessary to begin implementation of the grain price stabilization program.

As a result of the Lemley analysis and the Mission review of the storage needs of IRA, it has been determined that the total increased

storage capacity as a result of the aforementioned expansion with IRA's own funds is fully consistent with the AID program for the following reasons:

- a. A trend of increasing production of basic grains over the last 10 years can be identified and said trend can be expected to continue. Therefore, IRA will require more total storage capacity than envisioned in the CAP;
- b. The CAP indicated that the amount of storage required to carry out a grain price stabilization program was impossible to calculate accurately but was at least 12-13 percent of the total commercial production of basic grains and one study (Kansas State) indicated 20 percent was necessary. With the AID, CABEI and IRA-financed facilities, IRA will have the capacity to store approximately 19-20 percent of the total production of basic grains. This higher percentage is fully consistent with the purpose of the AID loan.
- c. The new IRA-financed facilities will be terminal plant facilities located at existing or new terminal plant sites. The AID loan will build at least 11 regional buying centers thereby increasing small farmer access to IRA and contributing directly to the purpose of the AID loan. Phase I of the IRA-AID program therefore is more than just increased storage capacity.
- d. A decision on Phase II of the IRA-AID program will be made at a later date.

Therefore, AID will proceed with the implementation of Phase I of the IRA-AID program and will implement Phase II if a subsequent analysis indicates that it is necessary.

In addition to the construction of facilities, loan technical assistance resources will be used to assure the proper utilization and maintenance of these facilities.

The vehicle and radio communication elements will proceed as planned in the CAP.

3) Provide Working Capital for the Grain Inventory System

Although not loan funded (see Amendment), sufficient working capital for grain purchase is crucial to the program purpose. For the 1975/76 crop year, IRA was given a Central Bank line of credit equivalent to 36 million dollars plus budgetary allocations of 4 million dollars for working capital. Approximately 20 million was spent for grain purchases during the crop year. In May 1976, the GOES announced a 12 million dollar increase in the Central Bank line for IRA. The

working capital available to IF' is considered to be adequate. The amended Loan Agreement includes a covenant requiring the Borrower to make available to IRA such resources as may be necessary to carry out the grain price stabilization operation. (For further discussion see above cited memorandum for the Deputy U.S. Coordinator).

4. Assist in the Development of a Marketing Price Policy

The CAP suggests that price policy should be based on a model designed to project the equilibrium wholesale price for the coming year. The problem, however, is that this model depends on accurate supply and demand projections which are not currently available. Technical assistance is being provided to the MAG by USDA/PASA to develop techniques which will provide the necessary data to make supply projections. The data for the demand projections are considerably more difficult to obtain. Alternative methods of price determination have been suggested. These methods include historical price trends, pegging the internal price to world futures market prices, and a cost of production - plus a margin technique. All of these methods have serious drawbacks, the most important of which is the recent (last two-three years) sharp fluctuation in both world and domestic prices of basic grains as well as the prices of imported production inputs, particularly fertilizer. In any case, the price prediction model only establishes a base price which is then modified using subjective judgements. These judgements include whether GOES desires to stimulate increases in output, relationship to imports, politics, etc. In short, there is no easy method to determine the right price. However, with the improvement in the available data on production and as IRA gains experience in buying and selling, price determination will become more effective. This will require some time and is not likely to take place within the disbursement period of the loan.

Direct technical assistance to IRA in the development of a price model was provided by L. F. Herrmann prior to the signing of the Loan Agreement and by Dr. Gene F. Miller, USDA/PASA Agricultural Economist for approximately two years after the loan was signed. In addition, the Mission contracted Dr. Robert M. Finley to analyze the problems of the Herrmann model and price modeling in general in relation to the program. Based on the above and given the problems inherent not only in price prediction models, but also in the factors which influence the minimum price announced by IRA each year, the Mission has determined that continued direct technical assistance to IRA in the development of a "more perfect" price model would not have a very great impact on the price stabilization problem as a whole. Rather, the Mission will work with the Ministry of Planning, the Planning Office of the Ministry of Agriculture and with IRA to evaluate:

- a. The real effects of IRA's price policy during a particular year.
- b. Alternative price policies to determine which is the most effective response to the objective of the GOES at the least cost.

The Mission believes that this indirect approach coupled with the experience (and inevitable errors) gained during the next several years with IRA's price policy will do more to rationalize said policy than any further work in price model building. It is anticipated that up to one man-year of technical assistance financed under the loan could be used for this activity.

The CAP did not provide indicators nor means of verification for the purpose level. We have attempted to specify EOPS and means of verification in order to facilitate evaluation.

Likewise the inputs and outputs are described in the attached Logical Framework.

DSteen/am
May 17/76

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

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

Life of Project:
From FY 74 to FY 12/31/77
Total U.S. Funding: 6.5 million
Date Prepared: 5/76

Project Title & Number: Grain Marketing 519-T-019

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>Increase income and employment in grain production on the smaller farms.</p>	<p>Measures of Goal Achievement: (A-2)</p> <p>20% increase in the output of basic grains by small (less than 5 Mz.) grain producer from 1975 to 1980.</p>	<p>(A-3)</p> <p>MAG statistical reporting service (PASA financed under the Loan)</p>	<p>Assumptions for achieving goal targets: (A-4)</p> <ol style="list-style-type: none"> 1. No natural disaster occurs. 2. Profit margins not reduced by increased cost of production. 3. Adequate credit is available to target producer. 4. Sufficient demand for basic grains exists.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: 12/31/77
From FY 74
Total U.S. Funding: 6.5 million
Date Prepared: 3/76

Project Title & Number: Grain Marketing 519-T-019

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (E-1)</p> <p>Establish basic grain marketing program to include:</p> <p>a) network of storage facilities;</p> <p>b) working capital fund for grain inventory system;</p> <p>c) development of administrative and operational capabilities of the national marketing institute (IRA); and</p> <p>d) development of marketing price policy.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <ol style="list-style-type: none"> 1. Access of small grain producer to market improved through IRA buying centers. 2. IRA's losses due to poor storage and handling are reduced to no more than 5% of IRA plant capacity. 3. Adequate funds provided by GOES. 4. IRA's transportation system functioning as required by program needs. 5. IRA's Planning and Economic Studies Department making policy recommendations to Board of Directors. 6. IRA intervening in market in a capable and timely way to purchase grain. 7. Intra-year price fluctuations reduced by 50% 	<p>(B-3)</p> <ol style="list-style-type: none"> 1. IRA records & observation 2. " " " 3. Central Bank/IRA agreements and Annual Budget. 4. IRA records & observation 5. IRA records. 6. IRA & MAG records and observation. 7. MAG statistic reporting service. 	<p>Assumptions for achieving purpose: (B-4)</p> <ol style="list-style-type: none"> 1. GOES funding in addition to IRA's budgeted working capital is sufficient to meet grain purchasing needs. 2. Operational budget is sufficient to attract personnel and maintain equipment. 3. That the IRA/MAG statistical reporting service continues to function and collect necessary data.

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LOGICAL FRAMEWORK

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Date Prepared: 5/76

Projec. Title & Number: Grain Marketing 519-T-019

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS		MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)		(C-3)	Assumptions for achieving outputs: (C-4)
1. Construction & Equipment	Capacity (M.T.)		1. A & E Contractor reports.	1. Inputs are available on a timely basis.
	<u>Silo</u>	<u>Warehouse</u>	2. Construction Contractors reports.	2. No circumstances which might cause construction delays occur.
		<u>Stage I</u>	3. USAID and IRA Records	3. No circumstances which might cause delays in arrival of equipment.
Santa Ana	4710	1000	4. Observation	
San Miguel ^{1/}	4080	1000	5. T.A. Contracts Reports	4. Qualified personnel available conduct in-country training program and provide the T.A.
Ahuachapán	1260	260		
Ciudad Barrios	1260	260		
Mercedes Umaña	1260	260		
Metapán	1890	260		
San José del Cañar	1890	260		
Santa Rosa de Lima	1260	260		
San Vicente (C. Panamericana)	1260	260		
Sensuntepeque	1890	260		
Sitio del Niño	1890	260		
Sonsonate (KM. 12)	1890	260		
Suchitoto	1260	260		
Zacatecoluca	1890	260		
Sub-Total	27,690	5,120		
		<u>Stage II</u>		
Sub-Total	8,500	520		
Total	36,190	5,640		
2. Training Program details will be provided in IRA's training plan.				
3. Technical Assistance details will be provided in IRA's T.A. Plan.				
(Both the T.A. and Training Plan will be forwarded ASAP)				

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 74 to FY 12/31/77
Total U.S. Funding: 6.5 million
Date Prepared: 5/76

Project Title & Number: Grain Marketing 519-T-019

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)			(D-3)	Assumptions for providing inputs: (D-4)
	AID	GOES	TOTAL		
1. Facilities & Equipment	3,775	1,063	4,838	1. Controller's Records	1. Adequate Funding Available
2. Other Equipment	660	--	660	2. IRA's Records	2. Equipment, materials and supplies available on timely basis.
3. T.A.	649	--	649		3. Qualified personnel available when needed.
4. Training	100	--	100		
5. Working Capital	--	16,500	16,500		
6. Operating Costs	--	1,691	1,691		
7. Contingencies	1,316		1,316		
TOTAL PROJECT	6,500	19,254	25,754		