

PROJECT ASSISTANCE COMPLETION REPORT
PROJECT 519-0303-G-00-5510-00
WATER MANAGEMENT - FUSADES

I. SUMMARY OF THE PROJECT

The Water Management Project was authorized on August 26, 1985 with a PACD of August 30, 1990, and a total life of project funding of \$18,744,000. The Project consisted of three components: (1) Project Support Activities (\$730,000), (2) Public Support for Irrigation Development (\$4,563,000), and Private Sector Irrigation Development (\$13,450,000) designed to establish private sector capability to provide technical and financial assistance for participating farmers, packers/processors and exporters of labor intensive, non-traditional crops grown under irrigation.

Components 1 and 2 were elements of a Grant Agreement with the GOES for which the Project Assistance Completion Date (PACD) was extended to August 31, 1992. This report deals only with Component 3, the private sector component, which was implemented under a Cooperative Agreement with FUSADES. The PACD for this part of the Project was extended to September 31, 1991 to allow full disbursement of credit already contracted.

A. Goal and Purpose of the Project

The goal of the Project was to generate employment, income and foreign exchange for El Salvador. The purpose of the Project was to promote diversified, irrigated farming in El Salvador through institutional strengthening, technology transfer, training, and credit assistance.

B. Project Components

According to the original project design, the Project would support the organization of, and technical assistance to, a private sector irrigation association (CORPREX), and technical and financial assistance for participating farmers, packers, processors, and exporters of non-traditional irrigated export crops. However, the development of CORPREX was not successful and on June 1, 1987, full responsibility for implementing the private sector component was given to FUSADES which was divided into three areas: (1) technical assistance and training to the private sector; (2) the field agent program; and, (3) the irrigation and export marketing credit fund.

1. Technical Assistance and Training to the Private Sector:

FUSADES, through the Agriculture Diversification Program - DIVAGRO - provided technical assistance in irrigation system

design, irrigation system management, production, harvesting, and training to farmers. Approximately 80 person months of specific short term technical assistance was financed. DIVAGRO successfully used its three demonstration areas to teach irrigation and farming practices.

2. The Field Agent Program:

Private sector businesses related to agriculture employed field agents for the purpose of dissemination of technology and training farmers. The Project expanded the capability of private sector firms to reach farmers with effective services through a better trained and expanded pool of private sector field agents. It also provided short course training opportunities for 60 agents and contributed 50% of the salary of additional field agents for the first two years of their employment.

3. The Irrigation and Export Marketing Credit Fund:

A credit fund was established under the Project to support the development of irrigated agriculture and the export of irrigated crops through an agile financing mechanism appropriate for long-term and high-risk investment in irrigation and export processing/packing operations. FUSADES established and disbursed a \$10,735,000 colón denominated credit fund in a special, non-interest bearing account in Banco Hipotecario. Loans were made from the irrigation and export marketing credit fund for two purposes. Under Model "A", loans were made to farmers to finance irrigation feasibility studies, and the design, purchase, installation, and operation of irrigation and land leveling equipment. Under Model "B", financing was provided for projects that are organized around packing and processing plants that exploit the market for irrigated products. FIDEX continues to operate the credit line with interest and principal reflows.

II. FINANCIAL STATUS

Financial statement as of 9/30/91:

Element No.	Name	Total Obligat.	Disburs.	Pipeline/ Unliquid.
1	Support to FUSADES/Oper.Exp.	294,500	294,145	355
2	Technical Assistance AGRIDEC	554,141	554,141	0
3	Technical Assistance LT	1,122,465	1,106,783	15,682
4	Training	139,833	139,833	0
5	Support to FUSADES/Vehicles	42,156	42,156	0
6	Support to FUSADES/Personnel	444,354	444,354	0
7	FUSADES Support/Field Agents	118,451	118,451	0
8	Credit Fund	10,735,000	10,607,239	127,761
	TOTALS	13,450,900	13,307,102	143,798

III. PROJECT ACCOMPLISHMENTS

A. Planned EOPS:	<u>Progress to Date</u>	
1. Salvadoran farmers adopt precision irrigation on approximately 2,500 has. for production of high labor, high value non-traditional export crops.		2,727 has.
2. Salvadoran enterprises are utilizing FUSADES to engage in exporting non-traditional agricultural products to extra regional markets.		39
3. Sixty private sector field agents trained and providing support services to farmers in precision irrigation technology.		45
4. 1,400 farmers applying skills in on-farm water management.		1,582
B. Major Outputs	<u>Planned</u>	<u>Accomplished</u>
1. Value of the exports of NTAE (000 \$)	-	16,121
2. Labor created (000 person days)	-	882
3. Total credit approved (000 \$)	10,735	10,735

IV. EVALUATIONS AND AUDITS

A. Evaluations

The Project's first evaluation was carried out by Checchi and Company Consulting, Inc., in November 1987, by a two person team, to examine selected design elements of the Project and determine if they should be reprogrammed. Findings dealing with the private sector component substantially changed the Project by transferring to FUSADES the functions originally assigned to a private sector irrigation association (CORPREX). With this transfer, FUSADES became the sole implementing entity for the private sector component.

The second evaluation was performed by Development Assistance Corp., during March 1990, by a team of two outside specialists. In contrast with the first, this second evaluation noted that significant progress has been made in almost every aspect of the Project.

In terms of credit, FIDEX, the lending arm of FUSADES, increased their loan approvals from 5 to 12 for irrigation equipment and from 5 to 25 for processing facilities by the time of the second evaluation. During the same period, the total loan portfolio grew to \$8,958,683. Besides fielding the 41 field agents working for processors and farmers, DIVAGRO, the FUSADES agricultural research and extension arm, set up a data bank and library that are the best in the country for irrigated agriculture. Both agencies, DIVAGRO and FIDEX greatly benefitted from in-country training and international short courses and study tours.

B. Audits

Price Waterhouse performed a financial audit of the USAID/El Salvador projects managed by FUSADES, including the Water Management Project, at the end of 1991. The final report (Audit Report No. 1-519-92-29-N, dated April 29, 1992) contains three recommendations dealing with questionable costs, inadequate accounting and control procedures, and use of program income.

The audit recommendations apply to internal controls and administrative procedures used by FUSADES in general for all projects. ANR is collaborating with the Office of the Controller to insure that the audit recommendations will be closed in a timely fashion.

V. SUMMARY OF LESSONS LEARNED

A. Lessons Learned

1. There appears to be no viable alternative approach to profitable non-traditional agriculture than irrigation. The technology of efficient surface irrigation is complex and requires considerable time, repetition of the basics, and patience on the part of the extension agents to train both technicians and, through them, producers at the farm level.

2. Due to its high investment per unit of area, farmers are hesitant to engage in precision irrigation. Therefore, irrigation alternatives, such as furrow irrigation must be promoted.

3. FUSADES/DIVAGRO has developed the technical capability to design, supervise, and assist NTAE irrigated projects, not only in irrigation techniques but also in post-harvest and marketing.

4. Due to the GOES constraints in the promotion of NTAE, the private sector must develop the water management capacity and must develop the proper mechanisms to transfer the technology.

5. Despite the efforts of five years of technology transfer and promotion of irrigation in FUSADES/DIVAGRO, farmers are not yet fully convinced of the value of it.

6. Technology transfer is a slow process requiring access to the best available world-wide knowledge of production and marketing. Testing under local situations and promotion of good technical packages is paramount for success. The extension technicians must have in depth experience in production and meeting market demands for each commodity produced. Access to technologies developed in similar areas can speed technology transfer.

VI. RECOMMENDATIONS

1. Improve and formalize coordination between agencies involved in the Project, especially between the private and the public sectors.

2. Focus more on the production of high value and employment generating crops with irrigation, rather than on irrigation per se.

3. Strengthen the formal and informal linkages between packers, processors, technicians and farmers.

4. Continue the main elements of the DIVAGRO/FIDEX program through the 519-0327 Project.

VII. POST-PROJECT MONITORING AND FOLLOW-UP ACTIONS

The private sector component of the Project (519-0303) successfully closed on 09/30/91. At that time, DIVAGRO had an active technical assistance program for both farmers and food processors and FIDEX was providing loans for the production and processing of non-traditional products. The technical assistance program was well established within DIVAGRO, has served a very valuable purpose and should be continued. The three (now four) demonstration farms provided valuable information on the best varieties and species to be grown in this country, and permitted determination of the cost and profits of commercial production.

USAID/El Salvador will continue its support to the development of private sector irrigated agriculture through FUSADES. Post Project monitoring will be accomplished through the on-going Agribusiness Development Project 519-0327.

Only one follow-up action remains: submission of a final voucher for liquidation of outstanding advances totalling \$144,000. A bill for collection will be issued for any amount not liquidated and these funds will be deobligated.

Note: Activities under the Public Sector component of this Project (519-0303) will terminate on August 31, 1992. A separate Project Assistance Completion Report will be prepared on the Public Sector component.