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**ANNEX I**

**FINAL EVALUATION OF THE  
AGRIBUSINESS DEVELOPMENT PROJECT  
(NO. 519-0327)  
(DIVAGRO)**

## ACRONYMS

AID	Agency for International Development (U.S.)
ADP	The Agribusiness Development Project (519-0327)
CLUSA	Cooperative League of the U.S.A.
CRECER	Equitable Rural Economic Growth Project (No. 519-0397)
DEES	Economic and Social Studies Department of FUSADES
DIVAGRO	The Agricultural Division of FUSADES
FIDEX	The Export Finance Department within FUSADES
FUSADES	Salvadoran Foundation for Economic and Social Development
LOP	Life of the Project
MZ	manzana = 0.7 ha
NGO	A private, non-profit, non-government organization
NTAEs	Non-Traditional Agriculture Export Products
PROESA	Association of Salvadoran Producers and Entrepreneurs
PROXSAL	Salvadoran Producers and Exporters Organization
QAP	FUSADES' Quality Assurance Program
SARs	Semi-Annual Reports
UCRAPROBEX	Union of Coffee Producers, Processors and Exporters
USAID	United States Agency for International Development

# AGRIBUSINESS DEVELOPMENT PROJECT EVALUATION REPORT

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	1
I. INTRODUCTION .....	5
A. PROJECT BACKGROUND .....	5
B. PREVIOUS EVALUATION .....	7
1. Mid-term Evaluation .....	7
2. Final Evaluation of FUSADES .....	8
II. ANALYSIS .....	9
A. SUITABILITY OF PROJECT DESIGN AND IMPLEMENTATION STRATEGY .....	9
B. PROJECT IMPACT .....	10
1. NTAE Investment Projects .....	10
2. Other Impact on NTAE Promotion Activity .....	12
3. Gender Impact .....	13
4. The Formula for Success .....	14
C. PROJECT MANAGEMENT .....	16
D. WHY GREATER IMPACT WAS NOT ACHIEVED .....	18
E. SUSTAINABILITY OF PROJECT BENEFITS .....	20
1. FUSADES .....	20
2. DIVAGRO .....	20
3. DIVAGRO-Assisted Projects and Enterprises .....	21
4. FUSADES' support to future NTAE development .....	21
III. CONCLUSIONS AND LESSONS LEARNED .....	21
A. CONCLUSIONS .....	21
B. LESSONS LEARNED .....	23

## EXECUTIVE SUMMARY

The Agribusiness Development Project (519-0327) was initiated in 1987 through a Cooperative Agreement with the Salvadoran Foundation for Economic and Social Development (FUSADES), at a funding level of \$20.0 million and with an original completion date of September 30, 1992. Subsequently, both the funding level and the completion date were extended to \$33.0 million and September 30, 1995, respectively. FUSADES' counterpart contribution was established at \$11.0 million. The implementing agent for the project was DIVAGRO, the agricultural division of FUSADES.

The goal of the Project was to increase employment and foreign exchange earnings by expanding nontraditional agricultural production and exports. The Project purpose was to increase the production and export of non-traditional agricultural products (NTAEs). To this end, the Project provided technical assistance, training, and credit resources to individuals and private enterprises involved in production, processing, and export of non-traditional products. Only traditional export crops such as cotton, coffee, sugar and marine shrimp were excluded from Project assistance.

The project had four major components:

- a) A \$10.0 million credit fund (later reduced to \$5.6 million)
- b) Agricultural research, extension, and technology transfer
- c) Export marketing information and assistance
- d) A laboratory for NTAE quality assurance

In addition to carrying out these four primary activities, DIVAGRO was charged with the tasks of stimulating local and foreign investment for the production and marketing of NTAEs and for establishing contacts with foreign importers and brokers.

The FUSADES/DIVAGRO strategy for expanding the NTAE sector was based on the creation of a strong agricultural production, post-harvest handling and export capability in the hands of competent entrepreneurs. These enterprises were to provide the discipline and business acumen needed for Salvadoran exports to compete in foreign markets.

DIVAGRO worked to stimulate NTAE development and investment under difficult circumstances, principal among which were: a) the country was in a state of civil war, and b) the agricultural sector had undergone an agrarian reform program in which most of the best agricultural land had been transferred to cooperatives and other small producer groups, and c) government policies did not encourage investment in non-traditional agriculture.

An additional factor contributing to the general decline in agriculture at the time was that within the cooperatives themselves, the lack of financial resources and the limited management capacity of its members constrained them from fully exploiting their land.

The FUSADES program, or "model" was carried out in an environment of political uncertainty and physical insecurity, with land tenure in a state of flux. Private agribusiness operators no longer had control over the most basic agricultural resource: land.

## **IMPACT**

The most important accomplishments of the Project were the following:

- a) The Project supported the development through credit, technical assistance and market identification, of a small but healthy export industry for flowers and ornamental plants, which currently exports about \$3.0 million annually.
- b) The Project supported the development, primarily through the credit fund of two food processing plants exporting frozen and canned foods, which draw on the agrarian reform cooperatives and other small producers for most of their raw material inputs. Exports from these two companies are approximately \$2.0 million annually.
- c) The Project supported the establishment of two shrimp larvae production facilities, which export between \$1.0 and \$1.5 million annually.
- d) The Project funded FUSADES' construction and operation of a modern analytical laboratory for product quality control which also has the capability to produce significant quantities of planting stock through tissue culture techniques.
- e) The Project financed most of the cost of establishing and operating a farm wholly-owned by FUSADES which currently produces and exports fresh pineapples to specialty markets in the United States. The farm also serves as a demonstration center for commercial crop production.
- f) The Project generated new technology for NTAE production which has been adopted on a limited basis in El Salvador.

## **CONCLUSIONS**

- a) DIVAGRO did not establish an on-going program for the continued development of NTAEs. The successful enterprises which resulted from the Project have a modest impact

on income, employment and foreign exchange earnings but they hardly justify seven years of effort and an investment of \$33 million.

b) The DIVAGRO "model", or program for NTAE sector development which supported the private sector in all aspects of non-traditional crop production, post-harvest handling, processing and marketing was valid. However, when it realized the agribusiness environment prevailing in El Salvador at that time was not conducive to implementing its program, DIVAGRO lacked the initiative or will to adapt it to the prevailing conditions.

c) While the ornamental horticulture industry was well suited to FUSADES' strategy for NTAE development, its potential is limited. On the other hand, large-scale agroindustry like the Del Tropic freezing plant provided a model that combined the entrepreneurial focus of FUSADES with the land and productive capacity of the Agrarian Reform cooperatives. The option of combining post-harvest entrepreneurship with the productive capacity of the cooperatives was not pursued by DIVAGRO.

d) FUSADES disagreed with two important USAID-initiated policies which constrained Project implementation, but did not vigorously attempt to change either of them. These were the restriction on non-traditional crop production for local markets, and the requirement that DIVAGRO develop an aquaculture industry based on cultivated shrimp.

e) La Colina Farm is a FUSADES-owned commercial enterprise whose principal function is to generate income to support the institution. This activity comes at the expense of DIVAGRO's development function.

## LESSONS LEARNED

Since the Project has ended it would be superfluous to make recommendations, thus a look at lessons learned:

a) The implementing organization should have the flexibility to modify its strategy for carrying out a project, or the project should be redesigned when unalterable obstacles make it impossible to implement it as originally designed.

b) There is no substitute for effective USAID project monitoring. Even under the Cooperative Agreement mode of implementation, an involved project officer is a valuable input into the process.

c) USAID and/or the implementing organization should be prepared to either terminate or make wholesale revisions to projects which cannot be implemented as designed. FUSADES' senior managers are unanimous in their belief that their NTAE program was

not viable under the civil war conditions and political instability during the 1980s and the early 1990s. Why, then, did the Project continue?

**RESPONSE TO REVIEWER'S COMMENTS:**

The draft evaluation report was circulated to USAID Officials as well as to the management and staff at DIVAGRO who were involved in implementing the Agribusiness Development Project. In most cases the final report was modified as appropriate to include the additional information provided by the reviewers. In other cases the comments received are simply quoted in footnotes to the relevant sections of the report. In all cases the evaluation team has attempted to fairly reflect the comments of the reviewer in the final evaluation report.

## I. INTRODUCTION

### A. PROJECT BACKGROUND

The Agribusiness Development Project (ADP) (No. 519-0327) began on September 29, 1987 with an initial AID funding of \$20 million, including a \$10 million credit line, and with a five-year project life. The project completion date was originally set for September 30, 1992. A Cooperative Agreement was written with the Salvadoran Foundation for Economic and Social Development (FUSADES) to carry out the project, which funded the Foundation's support to private-sector efforts to increase the production and export of non-traditional crops. FUSADES' counterpart contribution was set at \$11.0 million.

In July of 1989 the project life was extended for an additional two-year period and project funds were increased by \$13 million, bringing the total USAID grant to \$33 million. In August of 1993 the Credit Fund was reduced to \$5.6 million, with \$4.4 million re-allocated to FUSADES to provide additional technical assistance. The completion date of the amended project was originally set for September 30, 1994, but later was extended to March 31, 1995. A further "informal" six-month extension was granted until September 30, 1995 in order to complete the final evaluation and close-out audit.

The goal of the Project was to increase employment and foreign exchange earnings and the Project purpose was to increase the production and export of non-traditional agricultural products. To this end, the Project provided technical assistance, training, and credit resources to individuals and private enterprises. Only traditional export crops such as cotton, coffee, sugar and marine shrimp were excluded from Project assistance.

Agricultural research was also a key element; four agricultural experimental farms were established and in operation for most of the life of the Project. These farms carried out field trials on crop varieties and demonstrated growing selected crops using the latest production technology. Project amendment No. 4, dated July 31, 1989, authorized the construction of a quality assurance program (QAP) laboratory and an aquaculture experiment station to complement and broaden the Project's scope of action. In-house technical assistance was provided to producers and exporters to help solve a range of production and marketing problems, such as contracting for international transportation, establishing quality control procedures and the safe use of pesticides. International experts were contracted to carry out feasibility studies, to provide specialized technical assistance and to complete marketing studies for new export products.

FUSADES was created in 1983 with the aim of promoting economic and social development as a means of improving the standard of living for all Salvadorans. The foundation functions as a study and research center and as a development facility in the economic and social arenas. Business and social programs are carried out by its members on a voluntary basis. The foundation's activities are financed in part by member contributions, but principally by support

from national and international organizations. FUSADES was chosen as the implementing organization for the Project based on its status as a private foundation, on satisfactory past performance in implementing other agro-related projects for USAID and in part by default, since there were no other organizations judged to have adequate administrative and technical capability to implement this Project.

DIVAGRO, the agricultural diversification department within FUSADES, was the program unit responsible for implementing the Agribusiness Development Project. This organization previously implemented the private sector components of USAID's Agrarian Reform Sector Support Project (No. 519-0265) and its Water Management Project (519-0303).

DIVAGRO was charged with carrying out three elements of agricultural diversification:

- a) Developing and promoting new exportable agricultural commodities;
- b) promoting investment in the production and processing of non-traditional agricultural exports (NTAEs), and
- c) providing technical assistance to producers and processors of NTAEs.

It was planned that after the Project ended, DIVAGRO would leave behind companies and producing groups with substantially improved capabilities to grow, process and ship NTAEs. Additionally, it was assumed that the composition of FUSADES' membership would provide a direct conduit to the entrepreneurs of the agribusiness sector and stimulate their interaction with the Project, thus increasing its chances of success.

Performance objectives of the original four-year project were set at \$21.3 million in foreign exchange earnings, and 6,000 person-years of employment to be generated by Project-assisted enterprises over the life of the Project (LOP). However, when the Project was amended, the export projections were revised upward in light of reported previous success and the expected impact of expanded technical assistance. Expected Project accomplishments were increased to the following:

By the end of 1994:

- a) Employment generation would be 12,600 jobs (full-time equivalents).
- b) There would be 23,300 hectares in NTAE production,
- c) foreign exchange earnings would be \$49 million annually, and

d) \$12 million would have been saved by import substitution resulting from the local sale of NTAEs which failed to meet export standards.

Attached Table 1 compares Project objectives with actual accomplishments over the LOP, as amended, and Table 2 compares the authorized LOP level of funding with actual expenditures.

## B. PREVIOUS EVALUATION

### 1 Mid-term Evaluation

In June, 1992 a mid-project evaluation was carried out by the consulting firm Management and Business Associates of Miami, Florida. Major findings and recommendations of the evaluation were the following:

a) DIVAGRO's performance in achieving log frame targets met expectations through the time of the mid-term evaluation.

b) The evaluation team found that planning for the quality assurance laboratory (QAT) was deficient in that the organization had neither a business plan nor a marketing strategy. It was recommended that QAP develop a business plan with a detailed market analysis and a strategy for cost recovery on a fee-for-service basis.

c) The team concluded that the agribusiness credit component of the Project was an effective means of generating rural employment, especially for women. It was recommended that DIVAGRO play a more active role as intermediary between FIDEX (FUSADES' export finance department), other sources of credit and the agribusiness community

d) It was recommended that DIVAGRO undertake a commercial venture of its own, through an independent subsidiary, to better link itself to the market in which it worked.

e) The team recommended that DIVAGRO develop a strategy of marketing itself to the broader donor community to ensure that funds would continue to be available to maintain core services.

f) During the 30 months which remained from the mid-term evaluation until the project completion date, the evaluators recommended that DIVAGRO focus on the following activities:

Restructuring the organization in matrix form, similar to that of a consulting company whose work is organized around projects. This would permit greater responsiveness to client demands and provide closer linkage between market-

defined NTAE products, field research at the demonstration plot, and technical assistance provided to producers.

Implementing tactical and strategic measures aimed at achieving self-sufficiency.

## 2. Final Evaluation of FUSADES

A final evaluation of FUSADES was also done by the firm Marketing and Business Associates in June, 1995, which examined the several components of four USAID Projects implemented by the foundation:

- a) Project 519-0327 - Credit component of the Agribusiness Development Project;
- b) Project 519-0303 - Credit component of the Water Management Project;
- c) Project 519-0287 - Private Sector component of the Industrial Stabilization and Recovery Project, and
- d) Project 519-0336 - Private Sector Initiatives Project in support of business associations.

The evaluation of the Agribusiness Development Project was made to assess the impact of FUSADES' loan portfolio on the creation of agribusinesses and its contribution to NTAE development. The evaluation team noted USAID development assistance carried out through FUSADES totaled approximately \$115 million by the end of 1994, and concluded that the foundation played an important and possibly crucial role in sustaining and strengthening democratic institutions during the civil war. Further, it was felt that USAID's support to the foundation had an impact on the transition to peace, strengthening of democratic institutions and building a strong post war recovery.

Agribusiness loans were administered by FIDEX, the Export Finance Department within FUSADES. The evaluation team concluded that the weaknesses demonstrated in the sample of investment projects examined were due to El Salvador's general lack of comparative advantage for the development of NTAEs. While it was felt that El Salvador could possibly succeed in some NTAE niche markets, it was felt that the country's disadvantages vis a vis Guatemala, Nicaragua or Costa Rica accounted for its limited agricultural loan portfolio.

According to the evaluators, a lesson learned from the experience with NTAE development in El Salvador is that the "suitability" of a country for a specific project should be carefully assessed and reviewed prior to committing economic, financial and personal resources to it.

A second lesson learned was related to program sustainability. The evaluators expressed their belief that USAID should consider devoting a portion of its yearly budget to building an endowment to assure continued funding of foundations such as FUSADES. The team felt that FUSADES would be in a difficult situation when USAID support ended and was gambling on the success of one project, La Colina, in order to survive.

## II. ANALYSIS

### A. SUITABILITY OF PROJECT DESIGN AND IMPLEMENTATION STRATEGY

Agribusiness assistance addressed six requirements for developing export-oriented agriculture: a) credit, b) market access, c) transport, d) product quality control, e) production technology transfer and f) the creation of an enabling business environment.

**Credit:** The credit line was an essential component of the project. In view of the public control of the Salvadoran banking system, the designers evidently concluded that banks would give priority for agricultural loans to the reform sector rather than to the entrepreneurial sector which was the target group in the FUSADES model. The credit line, supported by technical assistance funded under the project, was designed for such lending.

The Project provided a \$5.4 million loan fund, initially \$10 million, to be made available to eligible firms or individuals. This activity made investment and working capital credit available to domestic and foreign investors to stimulate the establishment of new or expanded agribusiness operations. The fund furnished loan financing to specific projects in colones and dollars. USAID credit guidelines established a minimum loan level, in the combined amount of foreign exchange and local currency, of \$50,000. Credit funds were managed by FIDEX, which during the life of the project was converted to a commercial bank, BANFIDEX, among whose largest shareholders are past and present members of the Board of Directors of FUSADES.

**Market assistance** was provided to exporters of NTAE products through market intelligence and analyses; establishing contacts with and screening foreign brokers and importers; and by providing product specifications required by foreign markets. DIVAGRO's Miami representative provided on-going contacts with U.S. and other foreign buyers, and assisted in negotiations between them and Salvadoran producers.

**Transportation** assistance was provided by negotiating service agreements with both air and sea freight carriers and by facilitating transport logistics and documentation for exporters during the early stages of their export activity.

**Quality assurance** of non-traditional exports was provided by the construction of a QAP laboratory to ensure that fresh fruit and vegetable exports conformed to established tolerance levels for chemical residues.

**Production technology transfer** was provided through the development of technology packages, including economic and feasibility analyses; research and validation for NTAE crops; commercial testing of suitable varieties; and, on-farm demonstrations. Entrepreneurs and companies were assisted in a wide variety of products in several commodity lines by providing needed inputs at one or more stages. The package of technical/technological assistance was individually tailored to the needs of each client. The DIVAGRO program unit was the focal point for providing these types of varied assistance, either by contracting short term consultants or directly through its own technical staff. Short term training for individuals and groups involved in activities that contributed to the Project's goal and purpose were financed under the Cooperative Agreement.

**Creation of a favorable business environment:** With the support of FUSADES, DIVAGRO lobbied for a favorable legislative climate through informal relations with those government agencies whose operational mandates had an impact on diversification activities. In addition, marketing data and technical information were shared with government officials, who were frequent participants in DIVAGRO's seminars. In addition, FUSADES used its Economic and Social Studies Department (DEES) to study economic development problems in El Salvador and to recommend policy initiatives conducive to economic growth and strategies for export and investment.

Project designers further planned that the Agribusiness Development Project would serve the needs of small farmers through linkages with projects which were positioned to reach the agrarian reform cooperatives. These projects included Agrarian Reform Financing, Cooperative Production and Marketing Rural Small Enterprises and Rural Enterprise Development. Participation of women-owned and operated farms in the Project was to have taken place through outreach to the Agrarian Reform cooperatives.

The integrated project design, with its components for credit, production technology transfer and export marketing assistance, was highly suited to the accomplishment of Project goals and objectives. Furthermore, DIVAGRO's implementation plan drew on the highly successful agricultural diversification efforts of Fundacion Chile, the Chilean export promotion agency, which was contracted early-on by DIVAGRO to help develop that plan.

## **B. PROJECT IMPACT**

### **1. NTAE Investment Projects**

The most successful areas of NTAE investments were the production and export of flowers and ornamental plants, and the support of agroindustrial operations. Over the course of the Project, DIVAGRO assisted a total of 50 investment projects. FIDEX made 42 loans to 16 entrepreneurs and private companies, for a total of \$5,547,584. In general the portfolio has performed well, although in dollar terms the loans with major problems are among the largest disbursed. The

following is a summary of the performance of DIVAGRO-assisted projects by agroindustrial group.

**Flowers and ornamental plants:** Of the 24 projects assisted by DIVAGRO,

- five requested financial assistance through FIDEX, one of which is in arrears,
- one has been abandoned, and
- over 95% have expanded operations.

**Agroindustry:** Of the 9 projects assisted,

- five requested financial assistance through FIDEX, one of which defaulted on a \$1.7 million loan,
- eight continue to operate at the same or expanded levels.

In contrast, the experience with newer and/or riskier activities, which did not attract the same category of entrepreneurs fared considerably worse.

**Melon production and export:** Of the 11 melon production and export projects,

- five requested financial assistance through FIDEX, three of which defaulted on the loan, and one paid the loan but ceased operations,
- eight are no longer operating, and
- one has reduced its area of production.

**Aquaculture:** Of the 6 aquaculture projects,

- all requested financial assistance through FIDEX, of which two were rejected, two are in receivership, one is seriously in arrears and one is current.
- Two are presently operating.

Of the thirty-six enterprises which continue to operate, only two are large operations, Del Tropic and Bon Appetit, which produce frozen and canned foods, respectively. Both look to the agricultural sector, and in particular to the cooperative sector, for most of their raw materials. Del Tropic has a limited capacity to provide technical guidance and assistance to producers and normally acts in liaison with CLUSA or other technicians who work directly with the

cooperatives. The enterprises that produce and export ornamental plants are self-contained. There is little or no exchange of technology within the group, and no spill over of technology to outsiders. A similar situation exists with respect to the two facilities which produce and export shrimp larvae.

Table 3, at the end of this Annex, summarizes the current status of DIVAGRO-assisted projects. Attached Table 4 summarizes the current loan portfolio.

## 2. Other Impact on NTAE Promotion Activity

Over the life of the Project, four agricultural and one aquaculture experimental stations were to have been established. The latter, which was contemplated for freshwater shrimp, never materialized. Whether the plan was abandoned for lack of interest, lack of resources or its technical inappropriateness in El Salvador is not clear; each reason appears in relevant documentation. Of the four agricultural experiment stations, only one remains: La Colina. However, while there is some investigative and validation work carried out on vegetables for the local market and ornamental plants for planting stock, with field days held to demonstrate crops and technology, the farm is a FUSADES owned commercial enterprise whose principal function is to generate income to support the institution.

In this role, La Colina has embarked on an innovative pineapple export program which air freights field-ripened fruit to buyers in the USA. Currently, about 1,000 20-lb boxes are shipped weekly, which command double the price of traditional pineapples. Both demand and production capacity are expanding. The production activity is complemented by a modern packing facility which has enough installed capacity to receive product from other producers, if this were to be developed. On a much smaller scale, the farm also generates income from exports of watermelon and ornamental plants, and from vegetable sales to local supermarkets.

As in the "Fundacion Chile" model, it was initially planned that DIVAGRO would provide a full range of export services to promote NTAEs, including the certification of export quality. This quality assurance program was to have been developed along the lines of the "Good Housekeeping seal of approval" in the United States, where an independent organization certifies the quality of consumer items. It was in this context that the QAP laboratory was conceived and constructed. While there was a perceived need for laboratory services, the design capacity and cost of the laboratory were not based on an assessment of the magnitude of those needs, nor of the potential demand for services. As it now stands, the QAP laboratory is donning the mantle of a "white elephant". The laboratory is actively promoting its services to industry and agriculture in El Salvador and regionally in Central America. It is capable of carrying out soil, water, foliage, microbiology and pesticide residue analyses, and a tissue culture unit is available for propagating high-value plant varieties. At present, there is inadequate demand to cover operating costs, although the FUSADES sustainability plan projects that the laboratory will be self-financing in 1997. FUSADES is contemplating the possibility of its achieving viability by

fomenting government regulations which would force the private sector to use its services. While some case can be made for increased monitoring of the quality and purity of food products for health reasons, there is a real danger of a situation evolving where make-work regulations are instituted on a national level to enable FUSADES to earn sufficient income to pay the operating expenses of the laboratory.

### 3. Gender Impact

The Social Analysis Update section of the amended project paper for the Project extension does specifically identify women as being one of the targeted populations, as agricultural workers, owners and operators of small farms and as the primary labor force in processing plants. However, no specific objectives nor targets were set according to gender.

Project monitoring data, as reported in the Semi-Annual Reports (SARS) were dis-aggregated by gender. According to these reports, FUSADES activities in the area of NTAEs had created 27,346 full time job equivalents by the end of the Project in March 1995. If the figures are accurate, the impact was more than double the number of jobs planned for. Of the total jobs created, 64 percent were reportedly held by women.

The evaluation team did not have access to data which could confirm these figures, so the reader should exercise caution in interpreting project monitoring data from DIVAGRO. However, the team visited a number of DIVAGRO-assisted projects and the findings from these visits are reported below.

One exporter of ornamental plants reported that 90 percent of approximately 80 full-time, permanent employees were women. In general, they were spouses of nearby coffee plantation workers who provided a much-needed second income, which was actually about 50 percent larger than their husband's minimum wage income. These women were considered skilled workers who would perform each of the tasks required at the farm, including cutting, classification, packing, and weeding ornamental plants. We were told that there was little turnover among these employees. In addition, approximately 150 other employees were hired during peak labor periods for tasks such as weeding which could be done by unskilled workers. When asked why women were such a large proportion of the work force, the manager responded that he found that women were more conscientious than men in working with the delicate ornamental plants.

The team also visited two production facilities for shrimp larvae. These were heavily male operations and each factory employed only one female employee.

A company exporting frozen vegetables reported that approximately 70 percent of food handlers in its plant are women, while nearly all of its stevedores are men. The plant's quality assurance manager is a woman, as is the assistant manager for administration, as well are several supervisors.

The team was told by several of the businesses visited that women were actively sought to fill positions, particularly in the packaging and handling of final products.

FUSADES itself was included in the analysis of gender impact because of its unique character as both a promotor and as a participant in both the production and export of NTAEs. The "Quality Assurance Program" laboratory reported some 32 employees at the time of the team's visit. About two-thirds of its employees were women. The same proportion of women was found among both professional and non-professional employees. When asked whether project activities may have affected the way women and men are perceived, one female professional indicated that women had traditionally been prominent among laboratory staff because of the low pay scale, and that this was no exception.

SAR reports indicated that some 300 women were employed at La Colina, representing about 65% of the total. However, a brief review of payroll records for the first week of July 1995 indicated that there were 250 men (78%) and 70 women (22%) among the 320 workers employed by the farm. All but two of the women were identified as either packers or laborers. One of the remaining two worked in the kitchen and the other in cleaning.

From the field visits and interviews with executives of the various companies, it is clear that the client businesses producing NTAES and the implementing organization itself (FUSADES) provided numerous employment opportunities for women. In some cases these opportunities were lost when the firms themselves failed.

DIVAGRO has not made special efforts to "target" female beneficiaries. Nevertheless, it was clear that women were critical to the success of the firms producing ornamental plants, which accounted for a large part of FUSADES' portfolio. It seems clear that women do play an important part in FUSADES-assisted activities in El Salvador, although not as large a role as project reports suggest. While the jobs generated for women represent an important achievement, there is room for improvement in the types of jobs women hold. In nearly each case, they predominated at the lowest levels of the organization.

#### 4. The Formula for Success

This Project provided only limited information which could be used to identify those factors that cause some investments to succeed and others to fail. The investment projects assisted by DIVAGRO can be divided into four categories and ranked in descending of success as follows:

- a) Ornamental plants
- b) Agro-processing
- c) Aquaculture (saltwater shrimp)
- d) Melon production

The production and export of ornamental plants is clearly the most successful area which DIVAGRO supported. This sub-group demonstrates the following characteristics:

- The companies are owned by entrepreneurs who are generally successful in other businesses;
- the companies are financially solid (only 20% requested financing);
- the companies tend to be small, self-contained production/export units (maximum of 50 mananas with the majority between 3-10 mananas), and
- they sell into a relatively stable, high value market.

The unique characteristics of the processing industries are as follows:

- Multiple owners or partners, with experienced owner-managers;
- their companies financially solid, with high bank credit rating;
- the major part of their raw materials was purchased from other producers, and
- they sell into a stable, low value market.

For the aquaculture activities the following held true:

- These projects were generally developed by individuals or by families with little or no experience in aquaculture;
- their companies were completely dependent on project financing;
- final products were sold into fluctuating, developing markets, and
- the investors relied heavily on technical assistance for project design and implementation.

Finally, the melon deals can be described as follows:

- These projects had many different modes of ownership and participation, although most participants had previous experience in melon production and export;
- the entrepreneurs were dependent on project financing for both operating and investment capital;
- market prices were erratic and uncertain; and
- the shippers exported a both their own products and those purchased from outsiders.

The experience gained from the investments in non-traditional agricultural products confirms the following elements for success:

- a) Competent management and technical expertise;
- b) the ability to produce reasonably high yields of export-quality product;
- c) favorable market conditions, and
- d) adequate financial support.

The failed investment projects experienced one or more of the following difficulties:

- a) Poor market conditions, (low prices and fluctuating demand);
- b) inadequate financial support, in many cases due to the inexperience and ineptitude of FUSADES/FIDEX in financing development activities, and
- c) inadequate financial reserves (Agricultural investments are often risky and the balance sheet must be viewed in the medium and long run, as long as management and markets are judged to be sound).

### **C. PROJECT MANAGEMENT**

DIVAGRO's approach to the development of the NTAE sector focused primarily on the agroindustrial phase of the production/marketing chain, with emphasis on crop post-harvest handling or processing operations. Preference was given to self-contained operations such as the production and export of ornamental plants or shrimp larvae, where the producing company also exported its own products, and to certain processing operations where the factory controlled an

amount of production sufficient to ensure a base level of exports, which often was supplemented by outside purchases. In general, DIVAGRO did not work to create linkages between processors or exporters with contract growers.

DIVAGRO's program fully placed responsibility for success squarely on the agribusiness entrepreneur. The process of establishing a new enterprise was the following:

- a) An individual or company expressed an interest in a production and export activity that was eligible for assistance under Project guidelines.
- b) If the applicant did not have a feasibility plan for his project, one was elaborated by staff technicians or contracted by outside consultants in collaboration with the entrepreneur.
- c) DIVAGRO provided technical assistance and training to the applicant in his field of endeavor.
- d) Loans were provided to approved applicants.
- e) The applicant's project was monitored by a DIVAGRO technician who, depending on the project and the technician, also provided technical assistance.
- f) Modifications to the project were made at the discretion of the owner.
- g) DIVAGRO provided services for locating markets and buyers, and assistance in export documentation.

The success of the FUSADES approach was dependent on the selection of capable and responsible entrepreneurs, who identified viable projects, who were financially secure, and who had gained considerable business and management experience, albeit in different industries. Projects ran into trouble where the entrepreneur had inadequate technical skills, when poor harvests and/or prices caused heavy losses, and in a few cases, when the individuals involved were dishonest.

DIVAGRO did not provide comprehensive technical assistance to the assisted projects, and "hand holding" was minimal. Neither did DIVAGRO create institutions, nor mechanisms to provide on-going assistance to producers and exporters of NTAE crops, for which DIVAGRO had the mandate and responsibility to promote and develop.

#### D. WHY GREATER IMPACT WAS NOT ACHIEVED

The DIVAGRO model is a valid one and could well have played an important role in the development of NTAEs, but in spite of the resources at its command, its high caliber of personnel and its mandate to develop the sector, it failed to do so. In light of the economic upheaval that resulted from ten years of war, FUSADES' strategy of looking to the entrepreneurial class for stability, expertise and resources was eminently reasonable. Certainly, this group was needed to make its contribution to recovery.

FUSADES directors and key administrators interviewed by the evaluation team held similar views with regard to the project's focus and mission and were unanimous in their recognition of the poor results obtained, and the reasons for the lack of success.

The Agribusiness Development Project was essentially a domestic investment promotion activity focused on the rural sector. Its targeted population was private businessmen, and present and past agribusiness operators. FUSADES' Project managers believed that the development of agroindustry was key to the development of an NTAE sector, and that private operators experienced in agribusiness would be the driving force behind agroindustrial development. However, given the business environment prevailing in El Salvador at that time, especially in the rural sector, private operators were reluctant to invest in agriculture.

There were a number of reasons why there was not greater interest in agribusiness investments:

- a) The lack of personal security in rural areas.
- b) The uncertain investment climate which prevailed at the time.
- c) The uncertainty of private land ownership under Phase III of the Agrarian Reform Program.
- d) The best agricultural lands were held by the Agrarian Reform cooperatives.
- e) The absence of government policies encouraging investment in non-traditional agriculture.

An additional factor contributing to the general decline in agriculture at the time was that within the cooperatives themselves, the lack of financial resources and the limited management capacity of its members constrained them from fully exploiting their land.

The dilemma faced by DIVAGRO in implementing the Project was that the players with financial resources and entrepreneurship generally would not invest in NTAE development, while those who controlled the land could not invest, due to their inherent weakness and limited resources.

The team believes that this was a difficult, but not an impossible situation. It called for DIVAGRO to look to innovative solutions, some of which would have required it to ignore the general hostility of FUSADES' members toward agrarian reform and to synthesize the reality of agricultural production by rural cooperatives into a viable economic program. However, DIVAGRO failed to act to overcome this dilemma. It spent a considerable amount of money and lost seven years' of opportunity in its attempts to promote agricultural investments to a reluctant constituency.

Another deficiency in Project implementation was that DIVAGRO never developed a plan which would enable it to make the transition from an NTAE/agribusiness project to an NTAE/agribusiness program. It did not identify the intended beneficiaries of technology transfer, thus it did not develop technology appropriate to the new productive sector; nor did it develop a sustainable methodology for technology transfer that could survive beyond the PACD.

**What is the legacy of the Agribusiness Development Project after seven years of effort and thirty-three million dollars in expenditures?**

- FUSADES has a showcase farm which seems to be well positioned in the specialty pineapple market, which produces and exports small amounts of other fresh products and has a foothold in the local quality vegetable market.
- There is a small, healthy export industry involving ornamental plants, two reasonably secure agro-processors and two laboratories producing and exporting shrimp larvae.
- A quality assurance laboratory is now operating that can make an important contribution to NTAEs through its tissue culture operation. This will require an innovative approach for market identification, and is likely to require a long term effort to ensure success.
- An NTAE market information service is presently available. However, it can be effective only with increased demand for its services. This will depend on relatively sophisticated clients, and/or significant input from FUSADES personnel to guide the commonplace user.

**What did the Agribusiness Development Project not leave behind?**

- Functioning institutions or mechanisms to provide continued support to the NTAE sector.

## E. SUSTAINABILITY OF PROJECT BENEFITS

The sustainability of the NTAE program must be analyzed from three points of view: a) The sustainability of FUSADES as an institution, since policy dialog, economic analysis and market information will continue to be carried out by the parent organization, b) the sustainability of DIVAGRO as the agricultural diversification arm of FUSADES and c) the sustainability of DIVAGRO-assisted projects and enterprises.

### 1. FUSADES

As recommended by the mid-term evaluation, over the past two years FUSADES has taken a serious look at different means to ensure the sustainability of its work. In late 1993, the foundation hired the InterAmericas Consulting Group of Miami, Florida to help it develop a self-sufficiency plan. After an intensive process of analysis FUSADES redefined and reconfirmed its mission and goals, identified program areas consistent with those goals, identified projects suitable for the various program areas, and defined the organization's role in each project. The size and scope of the organization were defined in light of its mission and goals, and projections were made of the amount of funds that would be required to support the organization.

The financial projections indicated that FUSADES could register a \$500,000 deficit in 1995, which was expected to grow progressively larger. It was concluded that and that a cost reduction strategy was necessary, and that FUSADES' self-sufficiency depended on its ability to recover costs by charging fees for commercial services. The foundation's staff was reduced from 291 people at the end of 1993, to the present level of 249 employees. FUSADES' President recently confirmed that the foundation is now financially self-sufficient and is currently operating at a positive cash flow. An important part of FUSADES' income comes from interest earned from a Bahamian trust of approximately \$20.0 million. The trust was capitalized with funds from the credit components of the USAID Water Management, Agribusiness Development and Industrial Stabilization and Recovery projects. Interest earned from trust and loan balances provides a reasonably secure income which the foundation uses to cover part of its operating costs. Other income is derived from service fees and member contributions.

### 2. DIVAGRO

As recommended by the mid-term evaluation, DIVAGRO has created a commercial agricultural enterprise which is expected to provide financial self-sufficiency and to act as a "development nucleus" by demonstrating commercial farming practices. La Colina ostensibly will be sold to private investors after the operation proves viable. DIVAGRO developed the La Colina farm by purchasing 350 m<sup>2</sup> of land and consolidating all material and equipment from the other demonstration farms. Project funds were used to finance on-farm infrastructure.

DIVAGRO's financial self-sufficiency is riding on the success or failure of La Colina, although its likelihood of success appears high. The farm is well managed by an expatriate pineapple technician, has apparently reached financial break-even and is debt-free. As an agro-enterprise La Colina seems to be in good financial health, but its role as a development mechanism has been abandoned.

### 3. DIVAGRO-Assisted Projects and Enterprises

The modus operandi of DIVAGRO was "laissez-faire". The surviving enterprises are generally sound and their sustainability is a function of the hazards of business rather than any fatal, internal flaw. Of fifty NTAE projects supported by DIVAGRO, a total of thirty-six continue to operate and are considered sustainable.

### 4. FUSADES' support to future NTAE development

FUSADES will most likely support NTAE development in the future through the activities of DEES, its Department of Economic and Social Studies. This Department promotes trade and economic policies which favor exports, and is presently developing a "position paper" on recommended policies for agricultural development in El Salvador. In addition, PRIDEX, the commercial information center, will be able to provide general market information and market intelligence on foreign NTAE markets. The agribusiness loan portfolio, currently administered by the Banco Salvadoreño, will also be available to fund agricultural and agribusiness projects oriented to export markets. However, additional agribusiness loans which may be made by the custodial commercial bank will surely become more "commercial" and less "developmental". A developmental loan facility for NTAEs no longer exists in El Salvador.

DIVAGRO has evolved into a commercial farming operation whose future role is expected to be almost entirely profit oriented, and its activities in NTAE development will likely be minimal. With La Colina fully operational, most of the DIVAGRO staff is employed at the farm, with many others supporting the operation from DIVAGRO's office in San Salvador. Extension services and technical assistance to NTAE producers are presently carried out by two DIVAGRO agronomists with limited experience, but with some training in the production of ornamental plants and vegetable crops. Conceivably, DIVAGRO's minimal activity in extension and TA may be eliminated entirely if the organization runs into economic difficulty.

## III. CONCLUSIONS AND LESSONS LEARNED

### A. CONCLUSIONS

- a) Based on DIVAGRO's quarterly reports, the Project exceeded the objectives for job creation and the number of hectares of NTAEs grown. However, it was not clear in project documents if the desired number of hectares was continuous, sustained production

or the cumulative total amount over a seven year LOP. Annual foreign exchange earnings from NTAEs in 1994 were only 17% of the annual objective for NTAE exports, and earnings from aquaculture exports were only 52% of the Project objective for the same year. DIVAGRO did not monitor annual foreign exchange savings which resulted from the local sale of un-exported NTAE products. The value of the FIDEX loans disbursed under this Project amounted to 55% of the original objective.

b) While some economic benefits were derived from the Agribusiness Development Project, these benefits were not broad-based, as currently required by USAID Strategic Objective No. 2. Over the life of the Project, some thirty-six sustainable NTAE projects were developed with DIVAGRO's assistance. None of these projects was initiated directly with small farmers or cooperatives, although melon exporters and the food processing plants assisted by DIVAGRO receive considerable amounts of product from those sources. While linkage with small farmers was not an explicit requirement of the Project, this omission is inconsistent with current USAID strategic objectives.

c) DIVAGRO did not establish an on-going program for the continued development of NTAEs. The successful enterprises which resulted from the Project have a modest impact on income, employment and foreign exchange earnings but they hardly justify seven years of effort and an investment of \$33 million.

d) The DIVAGRO "model", or program for NTAE sector development which supported the private sector in all aspects of non-traditional crop production, post-harvest handling, processing and marketing was valid. However, when it realized the agribusiness environment prevailing in El Salvador at that time was not conducive to implementing its program, DIVAGRO lacked the initiative or will to adapt it to the prevailing conditions.

e) The FUSADES team responsible for the FIDEX lending mechanism was generally inexperienced in agribusiness lending. The organization's performance in financing NTAE development investments was grossly ineffective. Additionally, DIVAGRO could not or would not intervene in the interest of supporting flagging investments.

f) While the ornamental horticulture industry was well suited to FUSADES' strategy for NTAE development, its potential is limited. On the other hand, large-scale agroindustry like the Del Tropic freezing plant provided a model that combined the entrepreneurial focus of FUSADES with the land and productive capacity of the Agrarian Reform cooperatives. This option was not pursued by DIVAGRO.

g) FUSADES disagreed with two important USAID-initiated policies which constrained Project implementation, but did not vigorously attempt to change either of them. These were the restriction on non-traditional crop production for local markets, and the requirement that DIVAGRO develop an aquaculture industry based on cultivated shrimp.

h) La Colina Farm is a FUSADES-owned commercial enterprise whose principal function is to generate income to support the institution. DIVAGRO's development function has been superseded by La Colina's profit-making activity.

## B. LESSONS LEARNED

Since the Project has ended it would be superfluous to make recommendations, thus a look at lessons learned:

- a) The implementing organization should have the flexibility to modify its strategy for carrying out a project, or the project should be redesigned when unalterable obstacles make it impossible to implement it as originally designed.
- b) There is no substitute for effective USAID project monitoring. Even under the Cooperative Agreement mode of implementation, an involved project officer is a valuable input into the process.
- c) USAID and/or the implementing organization should be prepared to either terminate or make wholesale revisions to projects which cannot be implemented as designed. FUSADES' senior managers were unanimous in their observation that the NTAE program carried out was not viable under the civil war conditions and political instability of the 1980s and the early 1990s. Why, then, did the Project continue?

**TABLE 1**                      **AGRIBUSINESS DEVELOPMENT PROJECT**  
**COMPARISON OF PLANNED AND ACTUAL**  
**ACCOMPLISHMENT OF PROJECT OBJECTIVES**

ITEM	PLANNED PERFORMANCE	ACTUAL PERFORMANCE <sup>1</sup>	COMPARISON (%)
Full-time equivalent jobs created	12,600	17,696 (F) 9,650 (M)	217%
Hectares of NTAEs	23,000	29,106	126%
Annual foreign exchange earnings	\$49,000,000	\$8,300,000 (Avg. 92-94)	17%
Annual foreign exchange savings	\$12,000,000	Not Monitored	NA
Annual aquaculture exports	\$3,000,000	\$1,575,000 (in 1993/94)	53%
NTAE crops produced and exported	15	20	133%
New products and technology	30	38	127%
Foreign investment promoted by DIVAGRO	12	14	117%
No. of pest control programs established	1	1	100%
No. of market MI developed	1	1	100%
Total FIDEX loans disbursed (Project 519-0327)	\$10,000,000 (Reduced to \$5.6 million)	\$5,547,584	55%
FIDEX loans disbursed to aquaculture	\$4,000,000	\$1,812,200 (seriously in arrears)	45%
Extension to agribusinesses	40	150	375%
Extension to cooperatives	20	175	875%
Extension to farm families	11,000	9,680	88%

<sup>1</sup>The following observations were made by the USAID/El Salvador Gender Specialist on the data presented in this table: "The employment data provided by Divagro raises several questions for me. First, more than twice as many "full-time equivalent" jobs were created as were planned. It is unclear whether this difference was due to inaccurate projections or some other factor since the land dedicated to NTAE production is only 20% larger than was initially projected. If the increased labor demands are due to intensification of production, then this should be discussed in the report.

From my perspective, however, an even more important issue is the amount of employment that it is estimated was generated for women, i.e., 64%. Although it is unquestionable that women predominate in post-harvest stages of NTAE including processing and packaging, and for the harvesting of select NTAE products, for many agricultural products these stages account for somewhere between a third and a quarter of the total labor input. The percentage is higher for products like coffee and ornamental plants, but considerably lower for other products like cantaloupe. Hence, unless women predominate as field laborers as well, it is highly unlikely that the cited proportion of female employment could be achieved. The report needs to provide substantiation for these claims.

My concern is that the reported amount of employment for women generated by NTAE is inaccurate and unrealistic, distorts future projections, and could not be achieved in the agricultural sector with the possible exception of projects dedicated to work with ornamentals, flowers, and plants."

TABLE 2

## AGRIBUSINESS DEVELOPMENT PROJECT

## COMPARISON OF PLANNED AND ACTUAL EXPENDITURES

(\$000)

ITEM	USAID		HOST COUNTRY		TOTAL	
	PLAN	ACTUAL (1)	PLAN	ACTUAL (2)	PLAN	ACTUAL
ASSISTANCE TO NTAE PROJECTS						
T/A and Studies	5,963	7,096	2,000	731	7,963	7,827
Training	2,337	1,058	900		3,237	1,058
Credit Line	10,000	5,600	4,500	7,866	14,500	13,466
SUBTOTAL	18,300	13,754	7,400	8,597	25,700	22,351
INSTITUTIONAL SUPPORT						
Operating Support	12,850	13,918	3,500	1,287	16,350	15,205
Buildings and Equipment	2,000	2,832	100	521	2,100	3,353
Purchase Land; Infrastructure; La Colina Initial Expenses				5,629		5,629
Evaluations and Audits	400	179			400	179
Overhead; Program Management		2,316				2,316
Contingency	850	1			850	1
SUBTOTAL	14,700	19,246	3,600	7,437	18,300	26,683
TOTAL PROJECT	33,000	33,000	11,000	16,034	44,000	49,034

(1) Amounts obligated through June 30, 1995

(2) Information reported by DIVAGRO.

Note: DIVAGRO converted local currency expenditures into U.S. \$ by using an average exchange rate U.S.\$1.00 = SC5.00

**TABLE 3 AGRIBUSINESS DEVELOPMENT PROJECT****LIST OF AGRIBUSINESS PROJECTS SUPPORTED BY DIVAGRO**

NAME OF PROJECT	LOCATION	PRODUCT OR INDUSTRY	TYPE OF ASSISTANCE	PRESENT STATUS
Cerro de Flores	Ataco, Ahachapan	Ornamental plants	FIDEX	Expanding
Exotica Farms	Atecozol, Sonsonate	Ornamental plants	FIDEX	Functioning
Analex	Corral Blanco, Zapotitan, La Libertad	Ornamental plants	FIDEX	Expanding
Riveras Tropicales	Fca. El Canelo, Los Naranjos, Sonsonate	Ornamental plants	FIDEX	Expanding
El Salvador Protea Farms	Volcan San Salvador, San Salvador	Ornamental plants	TA	Functioning
CAPOSA	Sonsonate	Ornamental plants	TA	Expanding
Vivero Xochicali	Zapotitan	Ornamental plants	TA	Expanding
Ornamentals de El Salvador	Carretera a Frontera de Guatemala, Ahuachapan	Ornamental plants	FIDEX	Reduced Prod.
CAFECOYO	Ateos, La Libertad	Ornamental plants	TA	Expanding
Granja Solis	Carretera a Acajutla, Sonsonate	Ornamental plants	TA	Functioning
EXPORTAGRO	Santa Ana	Ornamental plants	TA	Not operat
Vivero Sta. Ma.	Caluco	Ornamental plants	TA	Functioning
Canizales	Los Naranjos	Ornamental plants	TA	Functioning
Follajes el Sauce	Metapan	Ornamental plants	TA	Expanding
Finca el Jordan	Coatepeque, Santa Ana	Ornamental plants	TA	Expanding
COEX	Hda. coyuta, Candelaria la Frontera	Ornamental plants	TA	Expanding
Cristiani Burkard	Fca. el Carmen, San Vicente	Ornamental plants	TA	Expanding
La Colina	San Juan Chiquito, Santa Ana	Ornamental plants	TA	Expanding
Baldochi-Duenas	Valle de Ormoa, Chalchuapa, Santa Ana	Ornamental plants	TA	Expanding
Vivero el 98	N/A	Ornamental plants	TA	Functioning
Enzo Giammtei	San Julian, Sonsonate	Ornamental plants	TA	Functioning
La Selva Tropical	Camino a Chalchuapa, Santa Ana	Ornamental plants	TA	Functioning
Vivero los Ejidos	Entre Ataco y Apaneca	Ornamental plants	TA	Functioning
Flores y Follajes	San Miguel	Ornamental plants	TA	Functioning
El Salvador Fresh	Cara Sucia, Ahuachapan	Melons	TA	Decreasing
Agroproductores	Rosario del la Paz, la Paz	Watermelon	TA	Expanding
El Rico Melones	Hda. Los Tihuilotes, Usulután	Melon	TA	Closed
Casvel	San Luis Talpa, La Paz	Melon	TA	Closed
Frutas S.A.	Cara Sucia, Ahuachapan	Melon	TA	Closed
La Cosecha	Coop. Sta. Rita, Comalapa, La Paz	Melon	TA	Closed
Mauricio Castillo	N/A	Malanga	TA	Closed
FRUVEX	Cara Sucia, Ahuachapan	Melon	FIDEX	Functioning
MELOPAC	Cara Sucia, Ahuachapan	Melon	FIDEX	Closed
CAPECA	Hda. Nancuchiname, Usulután	Melon	FIDEX	Closed
ENSALVA	Comalapa, La Paz	Melon	FIDEX	Closed

NAME OF PROJECT	LOCATION	PRODUCT OR INDUSTRY	TYPE OF ASSISTANCE	PRESENT STATUS
MACONDO	Comalapa, La Paz	Melon	FIDEX	Closed
Agricola Samayoa	Sonsonate	Processing Marigold	FIDEX	Functioning
AGROTEC	La Libertad, La Paz	Loofa	FIDEX	Functioning
Quality Foods	Zapotitan, La Libertad	Frozen Foods	FIDEX	Closed
Del Tropic Foods	Ateos, La Libertad	Frozen Foods	FIDEX	Expanding
Bon Appetite	Ateos, La Libertad	Processed Foods	FIDEX	Expanding
Agroconsa	Zapotitan, La Libertad	Sesame	TA	Functioning
La Portada	Metepan, Santa Ana	Broom Sorg.	TA	Functioning
ALDEMASA FOODS	Santa Ana	Processed Foods	TA	Functioning
Las Delicias	Ahuachapan	Shrimp	FIDEX	Closed
Oceanica	N/D	Shrimp	FIDEX	Funct.
PESCANOVA	Libertad	Shrimp	FIDEX	Funct.
Diadema	Santa Ana	Processed Foods	TA	Functioning
Banana Tropic	N/D	Bananas	FIDEX	Functioning
INGAPO	N/D	Plantains	FIDEX	Functioning

Source: DIVAGRO

**TABLE 4**

**AGRIBUSINESS DEVELOPMENT PROJECT  
DIVAGRO/FIDEX (519-0327) LOAN PORTFOLIO**

**(\$000)**

CLIENT	PRODUCT	NO. OF LOANS	AMOUNT APPROVED	AMOUNT DISBURSED	STATUS
Las Delicias	Shrimp	4	845.6	281.3	Canceled
Riviera Trop.	Ornamentals	1	35.2	35.2	Paid
Soc. Agr. Samayoa	Processed Marigold	14	811.8	811.8	Current
Oceanica	Shrimp	6	730.9	730.9	Arrears
INGAPO	Plantain	2	88.5	88.5	Paid
CASVEL	Melons	1	6.7	6.7	Paid
Agroexport ANALEX	Ornamentals	2	197.5	197.5	Refinanced Current
CIMMARON	Ornamentals	1	175.0	175.0	Paid
MACONDO	Melons	1	119.5	119.5	Paid
Topsy	Ice Cream	2	1,300.0	1,300.0	Arrears
PESCANOVA	Shrimp	3	800.0	800.0	Current
Pacif. Exp.	Melons	1	50.0	50.0	Arrears
Banana Tropic	Bananas	1	798.3	798.3	Refinanced Current
Ornamentals	Ornamental plants	2	199.0	199.0	Refinanced Arrears
Salv. Fresh	Melons	1	50.0	50.0	Current
Nelly Avilez	Ornamentals	1	80.0	80.0	Current
<b>TOTALS</b>		<b>43</b>	<b>6,288.00</b>	<b>5,723.70</b>	

Note: Total disbursements include refinancing

## APPENDIX

### RESPONSE TO THE MID-TERM EVALUATION RECOMMENDATIONS

In 1994 FUSADES instituted a dramatic change in its strategy and structure of DIVAGRO. The central focus of the new strategy was a consolidation of activities into its commercial/demonstration farm, *La Colina*. In the face of the termination of the USAID project that had funded 80% of its operations over the previous four years, the principal rationale behind this retrenching was to achieve self-sufficiency for DIVAGRO and generate surplus income to support unprofitable activities of FUSADES. Toward that end DIVAGRO has,

1. eliminated its four experimental farms and associated costs operations;
2. reduced staff and personnel expenses; and,
3. dedicated the vast majority of its resources to productive, income-generating activities.

FUSADES and DIVAGRO officials maintain that *La Colina*, as a commercially viable agribusiness, doubles as a demonstration unit of production, processing and marketing technology for the crops grown on the farm (presently including pineapple, tomatoes, cucumbers, sweet corn and ornamentals). Yet, as a result of DIVAGRO adopting this strategy for its own long-run survival and institutional sustainability, it has reduced its capacity to provide services to present and potential clients. Basically all resources are dedicated to the commercial operation of *La Colina*, relegating promotion and support of NTAEs to a part-time concern of two extension agronomists.

This abrupt and far-reaching change in strategy places the recommendations of the mid-term evaluation in an entirely different light. In large part, many of the major findings and recommendation are now either inappropriate or irrelevant. The following review of those recommendations indicates their current status:

#### A. Organizational Issues

A.1.1. Recommendation: DIVAGRO adopt a matrix organization design, built around the market-driven model recommended by the evaluation team, in which technical assistance provides the needed link between the research and marketing.

A.1.2. Current Situation: The DIVAGRO diversified research activity on experimental farms has been abandoned, and all "research" is directed at those crops which *La Colina* hopes to produce commercially, either for the export and/or the local market. For those crops there is little initiative to disseminate technology to perspective producers and/or investors.

**A.2.1. Recommendation:** QAP needs a business plan which targets identified markets.

**A.2.2. Current Situation:** QAP is very concerned about finding a self-financing strategy. It has developed a business plan, but its major problem is a lack of demand for the services which supposedly would have been the basis for generating the laboratory's income. In 1994 it was projected that the laboratory would earn 3.2 million colones from chemical and biological analyses (2.9 million) and technical assistance and training (0.3 million); actual income generated from those sources totaled about 1.0 million colones. It has been projected that the QAP will be 50% self-sufficient in 1996 and 100% in 1997. There is little reason to believe that these goals will be reached, given the slow development of demand in the agricultural and agribusiness sectors, and the lack of legal requirements for quality control inspections and testing for export products.

In order to be able to reach the level of income projected from quality control inspections of exports laws or decrees must be formulated and instituted. The real questions that must be asked are:

1. Is an outside organization more appropriate for quality control than the industry itself (eg. producers and exporters)?
2. If so, is a bureaucracy like DIVAGRO the appropriate institution? The presence of the laboratory has little to do with visual pre-export inspection.
3. Is an inspection function of DIVAGRO proposed because of need on the part of the NTAE sector, or need to cover the laboratory's costs?

A promising area for future income generation is the tissue culture section of the laboratory in the production of cloned planting material. However, commercial success will be subject to identifying and promoting appropriate crops and selling first the idea of using cloned material, and then the product, to an as yet non-existent population of growers.

**A.3.1. Recommendation:** A DIVAGRO manager should spend 25% of his time in tracking results attributable to its activities.

**A.3.2. Current Situation:** A moot question given the concentration on *La Colina* activities, with little concern about outreach and off-farm impact.

**A.4.1. Recommendation:** DIVAGRO needs a sustainability plan.

**A.4.2. Current Situation:** FUSADES contracted a consulting firm from Miami to produce a sustainability plan. It is that plan which advocates the strategy of "polos de desarrollo", eg. La Colina, and three other primary areas of focus:

- agroindustry promotion and development
- training and technical assistance
- identification of alternative sources and mechanisms for financing sector development.

**A.5.1. Recommendation:** Committees should be set up to support primary and secondary priority activities and on an individual project basis.

**A.5.2. Current Situation:** Again, the primary, secondary and tertiary activities are all *La Colina*.

**A.6.1. Recommendation:** Eliminate data bases which have no relation to log frame objectives.

**A.6.2. Current Situation:** DIVAGRO has continued to improve its data base system, especially in the sense of consolidating its information program in PRIMEX, where shared personnel, equipment and software provide services to FUSADES' agricultural and industrial sector clients. Also, in light of the end of the USAID project, the requirements of the log frame are of little consequence. The data bases installed and maintained should respond to the needs of current and potential users.

## **B. Technology Generation and Transfer Issues**

**B.1.1. Recommendation:** Establish crop-specific teams for technology generation and transfer, with an on-farm focus, complemented by a committee composed of agribusiness, farmers and DIVAGRO personnel.

**B.1.2. Current Situation:** The technology generation function as envisioned no longer exists. The overriding criteria are to add to *La Colina*'s productive base if necessary.

**B.2.1. Recommendation:** Institute farm-base research methodology, with participation of producers and/or agribusiness to share costs and reduce time for converting research results into client recommendations.

**B.2.2. Current Situation:** A strategy for farm-based research is inappropriate for the *La Colina* model. It is held by DIVAGRO that the activities on the farm are indeed demonstrations of commercial agriculture that can be adopted by interested farmers.

**B.3.1. Recommendation:** Increase cooperatives in client base to achieve a greater multiplier effect.

**B.3.2. Current Situation:** *La Colina* does not have a client base.

**B.4.1. Recommendation:** Calculate economic justification of plant propagation activities.

**B.4.2. Current Situation:** Plant propagation is one of the most promising activities for future income generation and specialty crop production. However, sufficient demand does not exist at present to achieve economies of scale and determine commercial pricing. In addition, the principal client of the laboratory's production is *La Colina*, which does not always pay as a commercial client would.

### **C. Marketing Issues**

**C.1.1. Recommendation:** Limit DIVAGRO activities to priority crops identified.

**C.1.2. Current Situation:** This recommendation was overtaken by events once the *La Colina* model was adopted.

**C.2.1. Recommendation:** Establish limit to free T.A. and graduation to paid services.

**C.2.2. Current Situation:** The few clients who continue to use DIVAGRO technical assistance are charged for the services. But, technical assistance is not a full-time activity for DIVAGRO technicians and there is in reality little demand for it. The successful enterprises which were previously assisted by DIVAGRO have outgrown its technicians, and are much more capable in their narrow specialties than DIVAGRO. Among these ex-clients there is no incentive to pay for the level of services that DIVAGRO could offer.

**C.3.1. Recommendation:** That DIVAGRO take equity position in projects it identifies and implements.

**C.3.2. Current Situation:** DIVAGRO is no longer identifying and implementing projects.

**C.4.1. Recommendation:** Quality control services should be provided for all priority products as needed, on a cost recoverable basis.

**C.4.2. Current Situation:** There is little demand and less legal obligation for quality control of fresh and frozen agricultural exports. The canning plants are clients of the QAP and provide it with a large portion of the samples sent for analysis. The crops produced in Salvador are less demanding than those of the Guatemalan Highlands, and in-field controls practiced in the use of chemicals all but eliminated the need for frequent testing. In addition, clients in importing countries prefer that testing be done in that country. Unless the QAP can gain an international reputation for quality it is unlikely that it will be able to compete in importing countries.

**C.5.1. Recommendation:** Combine various data bases and information services, and improve the distribution in major market countries of crop-availability reports for Salvadoran products.

**C.5.2. Current Situation:** DIVAGRO has unified its information services in PRIDEX and is negotiating with various sources to improve the quality and applicability of its information service, including a more complete data base for agriculture.