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April 30, 1992

Mr. James L. Goggin
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Subject: The final Mid-term Evaluation Report

Dear Jim:

Attached are two copies of the Mid-term Evaluation for the Sri Lanka Commercial Small Farm Development Project prepared under Cooperative Agreement No. 383-0101-A-00-0062.

I want to thank you and others in USAID for the assistance given me in preparing the report. I hope you will find it useful.

Sincerely,


C. Kenneth Laurent
Agricultural Economist

cc: Robert C. Flick - ACDI/CSFD
ACDI/W ✓

**CONSULTANCY REPORT ON
MID-TERM EVALUATION FOR THE SRI LANKA
COMMERCIAL SMALL FARM DEVELOPMENT PROJECT**

COOPERATIVE AGREEMENT NO. 383-0101-A-00-0062

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Acronyms

ACDI	Agricultural Cooperative Development International
ADA	Agricultural Development Authority
AID	Agency for International Development
ANR/USAID	Agriculture and Natural Resources/USAID
ADB	Asian Development Bank
CDS	Community Development Service
CISIR	Ceylon Inst.for Scientific and Industrial Research
CPJ	Concentrated Pineapple Juice
CRI	Coconut Research Institute
CSFD	Commercial Small Farm Development
CTC	Ceylon Tobacco Company
CTC/F	CTC Foliage Ltd.
DA	Department of Agriculture
DAB	Dept. of Agriculture and Biology
DAF	Development Assistance Funds
DARP	Diversified Agricultural Research Project
DEA	Dept. of Export Agriculture
EOPS	End of Project Status
FAUP	Faculty of Agriculture, Univ. of Peradeniya
GSL	Government of Sri Lanka
HRD	Horticulture Research Div.
JO	Juice Only
NGO	Non-Governmental Organization
MADR	Ministry of Agricultural Development and Research
MED	Mahaweli Enterprise Development Project
MOU	Memorandum of Understanding
PACD	Project Activity Completion Date
PSD/USAID	Private Sector Development/USAID
PVO	Private Volunteer Organization
RBG	Royal Botanical Gardens
RCO	Regional Contracting Officer
RLA	Regional Legal Advisor
RRI	Rubber Research Inst.
SPJ	Solids Plus Juice
USAID	United States Agency for International Development
VOCA	Volunteers in Overseas Cooperative Assistance

EXECUTIVE SUMMARY

1. The Commercial Small Farm Development project has as its goal the improvement of small farmer incomes and, secondarily, to increase non-traditional agricultural exports. Its purpose is to help small farmers improve and diversify their production, for both domestic and export markets.
2. The project design calls for the establishment of two nucleus demonstration farms near concentrations of small farmers. Farmers will learn by seeing the results on the demonstration farms and "learn by doing" on small plots on the farm. Private extension agents will be employed to assist farmers by providing technical information and support.
3. Farmers will be encouraged to link up with private firms for the production and marketing of their crops. Mechanisms for helping farmers achieve equity positions in the integrated operations will be pursued.
4. Other concerns of the project will include the development of a sustainable agriculture, utilizing organic farming methods to the extent possible, incorporation of women into the project, providing international and local training, use of Volunteers in Overseas Cooperative Assistance (VOCA) to provide expertise in implementing the project, and developing a model that can be replicated in other areas of the country.
5. The expected outputs at the end of the project include: (1) two nucleus demonstration farms established and fully operating and at least 1250 farmers trained; (2) one or more nursery farms established and improved planting material distributed to farmers; (3) a survey completed of farmers in the vicinity of the nucleus farms and progressive farmers identified; (4) small farmers trained in improved techniques which have improved their incomes; and (5) six private extension agents employed and providing assistance to farmers.
6. USAID has provided a grant of US \$2,004,590 to ACDI to implement the project. The budget includes US \$582,513 for contracting with local firms to assist in the implementation. The project will run from September 24, 1990 to December 31, 1993.
7. On arrival in Sri Lanka in October, 1990, the ACDI Chief of Party found that the contracting mode envisioned in the project design presented a number of difficulties. It was decided that ACDI would develop the farms itself but this was not legally possible, and another means of implementation was taken by establishing a non-profit, limited liability company. The company, AgriDev, which took eight months to develop, came into being on December 31, 1992. Consequently, the implementation process has been delayed.
8. The project design contemplated that tissue culture methods would help overcome the rigid quarantine requirements for importing improved plant materials. However, after

considerable study and time, tissue culture was ruled out because of the sophistication and time required to produce sufficient quantities of planting materials.

9. A search began for domestic planting materials and crops that could be successfully developed on the nucleus demonstration farms. The search for investment opportunities included pineapple, cocoa, passion fruit, Gloriosa Superba, gherkins, highland vegetables, papaya, freshwater shrimp, herbs and spices to be grown organically, seed, bananas and ginger. After study, some of the crops were dropped from consideration: cocoa, Gloriosa Superba, papaya, and freshwater shrimp. Two: pineapple and gherkins, were selected for implementation. The other crops studied are still under consideration.
10. A pineapple nursery farm has been established to produce smooth Cayenne pineapple plants for local farmers and a possible large operation. A multinational company has visited the site and is considering becoming involved.
11. Agri-DEV will enter into a joint venture with Pickle Packers Ltd(PPL) to develop a nucleus demonstration farm and to assist farmers in improving the production of gherkins. Agri-DEV will also assist in organizing farmers to become directly linked to the private firm, through contracts or equity ownership, or both. It is expected that the project will begin in June, 1992.
12. The smooth Cayenne being planted on the nursery farm, is a variety called Kew locally that was "discovered" by the VOCA volunteer brought in to assist in looking at the possibilities for pineapple production and marketing. The pineapple expert feels the smooth Cayenne is superior to the local variety, Mauritius, for the export market.
13. A third initiative to be undertaken by the project is to assist the Community Development Service(CDS), a local NGO, to develop its 12 acre farm into a commercial farming operation.
14. A limited amount of training has been completed to date, mainly involving one person to study post-harvest technologies in the U.S., the training of local staff in procedures and in computers, and the participation in two seminars, one on pineapple production and marketing(led by the VOCA volunteer) and the other on post harvest handling of fruits and vegetables. Approximately 260 people attended the two seminars.
15. The project proposal anticipated that PL 480 Title II monetized funds would be available for a second phase which would involve hiring another expatriate and for expansion of project activities. However, it was learned early in the project that these funds would not be available and that the project could count only on the funds provided for in the cooperative agreement.
16. As of the end of March, 1992, 46.5 percent of the project's time had elapsed and 29.4 percent of the funds expended. The main reason for the slow disbursement of funds has been the change from the plan to contract with local firms

for implementation to that of developing an alternative strategy, the forming Agri-DEV.

17. The project has not yet established the two nucleus demonstration farms. Because of the delay in establishing these farms, no progress has been made on hiring and training private extension agents, developing technical packages for farmers, nor in surveying farmers in the areas surrounding the nucleus farms. These activities are scheduled to begin when the activities mentioned above begin.

18. Although substantial changes have taken place in the project, the project agreement has not been amended, nor has the budget been adjusted to take into account the new project focus.

19. The backstopping of the project by ACDI/W and USAID/SL appears to be satisfactory. A review of the correspondence files and FAX messages reveals an active correspondence between the CSFD project and those backstopping it.

20. Given the circumstances faced by the ACDI COP on arrival in Sri Lanka and the change in the project implementation plan, considerable progress has been made. Much time was taken up in sorting out the crops to be considered and in searching for planting material. The time has come to consolidate and concentrate CSFD's efforts and to limit its efforts at further identification of crops for investment.

21. Recommendations:

a. CSFD should focus its efforts on the three on-going activities and reduce its efforts in identifying other opportunities. One additional investment might be considered providing the development stage is short and it can be implemented quickly.

b. Contingency plans need to be developed for the pineapple nursery in the event no multinational firm commits itself by the end of December 1992 to undertake the development of the large area provided by the GSL for pineapple production.

c. ACDI should concentrate its capabilities on developing the farm organizational linkages with the private firms involved in the projects. It should actively utilize VOCA and ACDI expertise to accomplish this.

d. The cooperative agreement should be amended to reflect the change in direction of the CSFD project and the budget realigned to conform to the new direction the project is taking.

e. The lack of technical agricultural expertise should be overcome by hiring a competent Sri Lankan agronomist/agriculturalist and/or by making greater use of VOCA volunteers and other consultants.

f. ACDI should step up its training activities, especially for the new extension agents and for the farmers who will be involved in the projects to be implemented. Local

trainers, supported by short term consultants, should be utilized.

g. USAID should consider Agri-DEV as a possible vehicle for channeling funds to agro-enterprises to be assisted under the proposed Agro-Enterprises Development project.

h. USAID should consider utilizing the administrative organization, facilities and expertise of CSFD to assist and perhaps monitor NGO/PVO agriculturally-related organizations receiving assistance from USAID.

j. The contract agreement between ACDI and Agri-Dev, governing grants from ACDI, should be completed as soon as possible.

k. Depending upon the progress made during the next 12 months, consideration should be given to extending the CSFD project for up to two years beyond the current PACD and providing funds for the extension.

I. INTRODUCTION

A. Background

Sri Lanka is a country of approximately 17 million people living on an area about the size of West Virginia. About 75 percent of the people live in rural areas and directly or indirectly depend upon agriculture for a livelihood. Most live on small farms which average less than one acre.

A dry zone covers about 60 percent of the island, while intermediate and a wet zones about equally cover the rest. Agricultural production is generally of two types: large-scale plantings of tree crops (tea, rubber and coconut) and small-scale planting of rice. Fruits, vegetables, spices and other crops are grown throughout the island although most are grown in the intermediate and wet zones and on small farms.

The small farm size of a majority of Sri Lankan farmers has resulted in low incomes and difficult living conditions. The farmers lack access to new production technology, including improved planting materials, equipment, growing methods and technical assistance. The concentration on rice production has resulted in lower incomes than might otherwise be the case if more intense cultivation of higher value crops were undertaken.

The project being evaluated is designed to help small farmers by providing both production and organizational technologies through the use of technology packages, specialized private extension services, demonstration farms, and "hands-on" training. It also seeks to enable farmers to become equity partners in business operations related to the crops they are producing.

The Commercial Small Farm Development (CSFD) project began in October 1990 and has been operating approximately a year and a half.

B. Purpose of the Evaluation

The purpose of the evaluation is to review all aspects of the CSFD project and to provide impartial advice and counsel to Agricultural Cooperative Development International (ACDI) and to the United States Agency for International Development/Sri Lanka (USAID/SL) on the project design, structure, implementation strategies, and ACDI/SL performance and future direction. The consultant will also review and comment on ACDI headquarters support as well as that of USAID/SL.

C. Scope of Work

1. Review project background information including the original concept paper, the original proposal, the amended proposal and project files and documentation in ACDI/W prior to departure for Sri Lanka.

2. Review technical reports and background information on the Sri Lankan agricultural and agribusiness sector, meet agribusiness leaders, GSL officials, USAID/SL executives and staff, other USAID project expatriates and local staff so as to gain an appreciation of the nature of Sri Lankan agriculture, problems, opportunities, etc. from a Colombo perspective.

3. Travel in Sri Lanka through agricultural areas meeting farmers and visiting GSL officials, CSFD and other USAID supported project sites and counterparts to gain an understanding of the nature of Sri Lankan agriculture, problems, opportunities, etc. from a field perspective.

4. Review project documentation at the CSFD office, meet with CSFD staff to assess project organization, management, reporting, follow-through, etc.

5. Meet with USAID/SL staff to gain an understanding of USAID's concerns, views, issues, etc. as regards the CSFD project and ACDI's performance on the project.

6. Meet Agri-DEV members and the Board of Directors to gain an understanding of the potential and plans for this organization and assess the potential for institutional development.

7. Based on the above, prepare a comprehensive draft report prior to departure from Sri Lanka, addressing the following:

- a) The original project design and its appropriateness for addressing the constraints to small farmer commercial agricultural development.
- b) The revised project structure and implementation strategies and their appropriateness for addressing the constraints to small farmer commercial agricultural development.
- c) ACDI performance to date at implementing the CSFD activity, including an assessment of the current level of effort.
- d) Document required changes in the Cooperative Agreement and related financial plan so as to align it with the approved implementation methodology.
- e) Re-draft a more appropriate Logical Framework Matrix for the re-designed project.
- f) Review and comment on headquarters support for the CSFD activity as well as on USAID/SL involvement with and support of the project, including recommendations for improvement, if necessary.

- g) Review project activities for compliance with the AID Standard Provisions and the appropriate Optional Standard Provisions of the Cooperative Agreement.
- h) Examine the potential for Agri-DEV to evolve into an agricultural and agribusiness foundation-like local organization. Make recommendations for strengthening of Agri-DEV if appropriate.

D. Methodology

The consultant was provided documents, files and reports developed by the CSFD project. These were reviewed as well as pertinent USAID reports and those prepared by other consultants working on agricultural projects in Sri Lanka.

Field visits were made to farmers growing gherkins in the Putallam area and to the processing facility operated by Pickle Packers Ltd. Visits were made with farmers and cooperative personnel located on roads to Anuradhapura and Polonnaruwa while traveling to the Mahaweli Agricultural and Rural Development project at Aralaganwila where a CSFD pineapple nursery has been established.

A visit was made to the Bibile area where an expanded pineapple nursery will be established by CSFD and which is near the site of a proposed 5000 acre pineapple operation.

Visits were also made to the highland areas of Welimada, Bandarawela and Nuwara Eliya to observe vegetable growing in the area and for discussions with agricultural personnel in the area. Much of the area in the highlands is devoted to large-scale tea production. Most of the vegetable production is in small plots in the valleys or on hillsides. A visit was made to one of the Agricultural Production Villages (APVs).

Discussions were held with USAID officials, directors of Agri-DEV, Government of Sri Lanka (GSL) officials, private sector businessmen, and with various consultants in other USAID projects in Sri Lanka.

A plan of work was submitted soon after arrival to USAID officials and a preliminary draft report was submitted a week prior to departure. This draft was revised and presented in an in-house review after which a final report was presented prior to departure.

The consultancy covered the period April 2 to May 2, 1992 and included two days in Washington, D.C., prior to departure, to discuss the project with ACDI officials and to review documents.

II. THE ORIGINAL PROJECT

A. Project Goal and Purpose

The project goal is to improve incomes of small farmers and, secondarily, to increase Sri Lanka's non-traditional exports.

The primary purposes of the project are to assist Sri Lanka small-scale, low-resource farmers to:

1. Increase, improve and diversify their production, first for the local market and later for export.

2. Learn new production and organizational technologies leading to new farmer organizations which are private, self-sustaining and which have a business focus and/or linked with reliable private sector agribusinesses as an intermediate step.

3. Deal with major obstacles and bottlenecks to increased farm incomes, specifically: obtaining new and improved planting material, inputs, access to transportation, and handling and marketing services.

4. Learn sustainable agricultural production techniques, including organic farming, in order to conserve local soil and water quality and the environment, and to protect the health of farm families.

B. Project Design

1. Nucleus Demonstration Farms

Two regional "nucleus" demonstration farms will be established near concentrations of small farmers. These demonstration farms are to provide facilities where farmers can learn by seeing the results of demonstration plots on one half of the farm. Farmers will be provided small plots on the other half where they can "learn by doing."

2. Nursery Farms

One or more nursery farms will be established to provide the cooperating farmers with adequate quantities of improved planting materials. Because of rigid quarantine requirements, propagation by tissue culture may be required to obtain improved varieties of plants.

3. Private Extension Element and Technical Packages

To provide assistance to farmers in the project, six extension agents will be employed, three at each nucleus farm. They will be supported by a farm manager and an agronomist each of whom will do some extension work. At the end of the project, it is expected that the extension agents will be employed in the private sector, or by the farmers they are working with.

4. Farmer Organizations and Linkages to the Private Sector

It is expected that some of the farmers will link up with private firms either through contracts or through forming business enterprises. A key element in the project is ACDI's background in working with farm organizations throughout the world. Consequently, a major thrust will be to strengthen the ability of farmers to organize or to become directly linked with the private sector through equity positions.

5. Crops to be Considered

In developing the nucleus farms, the project will look at a range of crops to be considered. These fall into three categories:

a. Category One: Crops that show promise of adding value to the farming operation, which are less costly to develop, and which involve less risk to the farmer. These include cabbages, lettuce and leafy vegetables, cauliflower, broccoli, carrots, onions, garlic, peas and potatoes.

b. Category Two: These crops require a large investment, a relatively long production cycle, and are relatively easy to market. These include mangoes, avocados, grapes, ornamental plants and various spices. Highland crops would include coffee, flowers, macadamia and apples.

c. Category Three: These crops involve high risk, are perishable, but offer the possibility of large gain. For the lowlands, these would include orchids, flowering plants, and vanilla. Highlands, crops would be strawberries, raspberries, fresh herbs, miniature vegetables and asparagus. These crops are the least appropriate for the local market and will be pursued only if air transport becomes readily available.

6. Organic Agriculture

The project will consider the advantages of organic farming where appropriate and develop and demonstrate organic farming methods on the nucleus farms. Research will be undertaken on crops grown organically and which have a potential for the export market.

7. Better Environmental Management

Soil and water conservation methods will be part of the demonstrations provided farmers, as well as techniques to reduce the use of chemicals on crops.

8. Gender Considerations

Women play an important role in Sri Lankan agriculture. The project will provide training opportunities, nursery materials for home gardens, incorporate women into the "learn by doing" process, and provide training in processing methods where appropriate.

9. Project Sustainability

The CSFD project is intended to spur the private sector to replicate the nucleus farm concept when possible. The private extension agents will be expected to move into the private sector at the end of the project and, hopefully, continue to work in the mode developed by the project.

10. Project Implementation

a. Budget

The total budget is US\$2,004,591 which is to be provided as a grant by USAID.

b. Time Frame

The project began in September 24, 1990 and is currently programmed to end December 31, 1993.

c. Revised Implementation Plan

A revised implementation plan was approved by USAID in April 1991 and included the following elements:

1. Administrative
2. Foundation-Non-Profit Company
3. Target Crops Identification
4. Nucleus Farm # 1-Pineapple
5. Nucleus Farm # 2-Gloriosa Superba
6. Nucleus Farm # 3-Cocoa
7. Nucleus Farm # 4-Herbs
8. Pineapple Nursery Farm
9. Women in Development
10. Organic Sustainable Agriculture
11. VOCA
12. Training/Study Visits

The major shift in direction from the original plan involved the development of a foundation or non-profit organization for implementation. While appearing to be a minor change from the local contracting mode, it had important implications, especially for getting the nucleus farms underway quickly.

It is not clear why implementation plans included four nucleus demonstration farms since only two were programmed in the original design. Apparently, it was felt that one or more of the crops being studied at the time would not be found feasible. As it turned out, three of the crops were rejected or put on hold and another, gherkins, was accepted for implementation. An opportunity to utilize a farm owned by the Community development Services has been accepted as a third initiative.

d. PL480 Considerations

The original ACDI proposal contemplated the expansion of the CSFD project through a Title II monetization proposal. These funds were to be used beginning the second year of the

project to fund local costs, permit the project to expand its activities, and add an expatriate advisor specialized in post-harvest handling, processing and marketing.

Soon after arrival of the ACDI Chief of Party in November 1990, it was clear that no PL 480 Title II funds would be available and that the project should not depend upon the availability of these funds. The project as outlined and budgeted in the cooperative agreement was to stand on its own. However, ACDI submitted a proposal in February 1991, there has been no action on the proposal.

C. Expected Outputs/End of Project Status (EOPS)

1. Two regional "nucleus" farms to be established near concentrations of small farmers. EOPS: Farms established and operating with all necessary infrastructure. At least 1250 farmers to be trained.

2. One or more nursery farms established in the lowland and/or highland areas. EOPS: At least one nursery farm established and distributing improved planting material to 1000 farmers.

3. Survey of needs of farmers around nucleus farms and the identification of progressive small farmer trainees. EOPS: Surveys completed and progressive farmers identified.

4. Train farmers to grow more profitable crops for local market and export. EOPS: Farmers trained and production and incomes increase in the area served by the CSFD project.

5. Implementation of a new private extension system. EOPS: Six extension agents employed and successfully demonstrating new technologies.

III. ISSUES AND REVISED STRATEGY

A. Change in Strategy vis-a-vis the Proposed Contracting Mode-Background and Rationale

In the initial project proposal submitted to USAID in April 1990, ACDI and Agroskills¹, a local for-profit consulting firm, proposed to implement two nucleus farms, one or more nursery farms, and carry-out the work outlined in the proposal. It was expected that Agroskills would be contracted to help implement the proposal. During the review process, the GSL determined that Agroskills did not have any unique advantage or skills that would merit sole source procurement and recommended that ACDI tender the sub-contract. The AID regional contracting officer (RCO) asked for a modified proposal from ACDI which would make no reference to implementation with Agroskills and which would propose to tender the sub-contract. Budgets were revised to delete references to Agroskills and the original structure of the project was modified to contemplate the main local staffing contingent under ACDI.

¹Agroskills was part of the design team.

1. Agroskills vs Tendering the Subcontract

Shortly after arrival of the ACDI Chief of Party in Sri Lanka in November, 1990, ACDI was threatened with legal action by Agroskills which claimed it had an agreement with ACDI to implement the projects and that it would obtain an injunction prohibiting ACDI from implementing the project. This, together with the delay in signing the Memorandum of Understanding (MOU) between the GSL and ACDI, resulted in further delays in moving ahead with the project.

Agroskills did not pursue its threat to sue and the alternative to issuing a tender calling for proposals by interested Sri Lankan firms was explored. Visits were made to several local firms to discuss their capabilities and willingness to bid should a tender be issued. In general it was found that while these firms had much experience, none had specific capability in developing farmer organizations or farmer owned businesses, nor did they have expertise in non-traditional agricultural products.

The firms were unwilling to invest or make any direct contribution to the project other than what they were paid for. They were found to have limited in-house expertise, other than in the largest firms, and operated with small core staffs skilled at writing proposals, recruiting consultants and doing budgets. Little opportunity for institutionalization of the CSFD concept was observed and no capability to undertake similar projects on their own was found.

It should be noted, however, that the development of local consulting expertise was one of the objectives of the original concept. The failure to attempt to strengthen local firms apparently gave way to the desire to leverage the project's funds, especially when it became apparent that no PL 480 funds would be available during the relatively short time the project had to carry out its objectives. On the other hand, Agri-DEV (see below) will provide an opportunity for developing an effective project development and implementation organization. This should become one of the objectives of the project.

2. Possibility of Leveraging Project Funds

In the familiarization and orientation exercise undertaken during the first two months in country, the COP met a number of private sector firms working as exporters and/or processors and farmers with land. Most of the well known firms were visited. During these visits the various companies suggested they would be willing to invest, together with ACDI, to undertake nucleus farms with out-growers who would deliver products to the joint venture company operating the nucleus farm, and that they might be willing to match ACDI's investment.

In these discussions the concept of "divesting" ACDI's equity to the farmers growing for the joint venture company was discussed. The firms felt this approach would provide some lasting linkages between the growers and the firm. The farmers interviewed also indicated a willingness to participate in such an undertaking.

This willingness to join ACDI in developing the nucleus farms offered an opportunity to multiply the CSFD project funds. By ACDI investing with a local exporter/processor and later divesting its shares to the farmers doing the growing, the problem of lack of small farmer capital to initiate business ventures would also be overcome.

The approach was analyzed and, with concurrence from USAID, it was decided to pursue this option. This represented a major change in the implementation of the project, but would achieve its original goal and purpose.

a. ACDI as the investor

Under the proposal, ACDI would join a for-profit local agribusiness firms and create a nucleus farm or other project intervention as a joint venture company. Over time, ACDI would divest its share in the business to the farmers. No clear strategy was been developed with this scenario as how to manage the PACD with regard to any equity still not divested nor what to do with the reflows other than to continue to invest them in future projects.

This scenario was submitted to the RLA and to ACDI/W to request clarification regarding investment using DA funds. The RLA asked for clarification and approval from AID/W which gave the go ahead.

b. Need to create a local investment vehicle

As progress was made in developing the concepts for a modified CSFD activity, contacts were made with several attorneys regarding the legality of ACDI investing in for profit companies together with local agribusinesses. Interviews were also held with the Ministry of Policy Planning and Implementation, the official link with the GSL vis-a-vis the MOU.

Both the attorneys and the Ministry thought the concept was unique and innovative but were unanimous in their opinion that ACDI was not authorized to implement such a program as this activity was not spelled-out in the MOU, which gave ACDI the right to operate as a foreign non-profit NGO.

The attorneys suggested that a non-profit company, limited by guarantee in accord with the Companies Act No. 17 of 1982, be organized. They thought that because the new organization would be a non-profit company it would be eligible to receive grants from ACDI for the purpose of investing in the manner suggested. Furthermore, the company could be kept small to avoid creating a bureaucracy and, if the concept worked, it could be expanded later with additional resources.

As the company would be a local company, it could continue to operate after ACDI's project ended and could recover its equity from the farmers, which could then be used to re-invest in similar projects. If it was decided to wind-up the local company, any residual funds would have to be donated to a similar organization, returned to the donor (USAID) or turned over to the GSL.

3. Creation and Development of Agri-DEV

Beginning in the late Summer of 1991 Articles and Memorandum of Association were developed, cleared by the Registrar of Companies and by ACDI/W. Requirements were for seven incorporators. ACDI was to be one of the original incorporators, the COP, in representation of ACDI as well as a member in his own right, was also one of the original seven. ACDI then sought-out five other individuals who understood what was planned and who were willing to lend their names for the incorporation procedures (See Annex 1 for a list of the incorporators).

Agri-DEV was incorporated on December 31, 1991. It held its first board meeting on January 16, 1992 and legally began operating. Since then it has had several additional board meetings, has begun implementation of the pineapple nursery in Bibile and will sign joint venture agreements with Pickle Packers (Pvt) Ltd, probably in June, 1992. The Community Development Services agreement was signed April 27, 1992.

Do we have this?

B. Operational and Investment Considerations

1. Operational Activities

a. Management and finance

Management: ACDI has leased offices, purchased office equipment, vehicles and hired central office staff. Duty free status for importing project materials and equipment has been obtained (See Annex 2 for information on CSFD staff).

Work responsibilities within the office have been divided between the Program Director/Deputy Chief of Party, the Director of Agribusiness and the Accountant as follows:

The Deputy COP/Program Director reports to the COP. He is responsible for managing relationships with the GSL, the development of Agri-DEV (he is CEO of Agri-DEV), legal matters, leases, contracts, local staff recruitment, hiring and supervision, vehicle maintenance and operation, and acting in the name and representing ACDI when the COP is away.

The Director of Agribusiness reports to the COP. He is responsible for activities relating to investments, crop selection, feasibility studies, business plans, identifying potential investors, and approval of the investment/project.

The Accountant reports to the Deputy Chief of Party and through him to the COP. He is responsible for procurement, accounting and financial management, banking, etc. for both ACDI and Agri-DEV.

A personnel review/performance appraisal system has been introduced and all employees have been evaluated at least once.

Short-term consultants have been engaged to carry-out specific assignments (See Annex 3). For those assignments involving expatriate consultants and/or international travel,

the scopes of work, CV's, budgets, and proposed itinerary are submitted to USAID for review and approval.

A sub-contract was signed with VOCA and to date two volunteers have been assigned. Requests for gherkin and passion fruit volunteers are pending.

Quarterly technical reports have been submitted on schedule.

Finance: A simple financial reporting system has been developed in Lotus 1-2-3 contemplating disbursement and receipt memos to document expenditures or receipts of funds, monthly bank reconciliations and coding of the various expenditures (or receipts) in accord with the ACDI/W supplied list of project accounts. A master financial report summarizing the expenditures with running balances in dollars and local currency is prepared and submitted to ACDI/W monthly.

Two bank accounts have been opened. One is an off-shore non-interest bearing dollar account into which ACDI/W wires funds as requested by the CSFD office. The other is a local non-interest bearing checking account.

b. Agri-DEV (a non-profit agribusiness and agricultural development company)

As described in Section III.A. above it was found necessary to create a local non-profit company in order to channel ACDI investments to the joint ventures and other projects to be undertaken. This company called Agri-DEV, was formally incorporated on December 31, 1991 after completing all the previous legal steps and receiving approval from ACDI/W.

Agri-DEV is currently undertaking three distinct types of "projects." Some projects may be undertaken directly, such as the Bibile pineapple nursery. Other projects will be joint ventures between Agri-DEV and interested agribusiness companies and/or farmers (for example, the gherkin project), Agri-DEV will also make grants and profit-sharing agreements with local NGO's to assist them undertake agricultural projects (example: CDS profit sharing agreement) that have replicability potential or that serve to strengthen local NGO's working in agricultural development.

The Articles and Memorandum of Association (equivalent to Articles of Incorporation and By-Laws in the U.S.) drafted in Sri Lanka and reviewed and approved by ACDI/W legal counsel, contemplate a number of activities, including making investments, donations, undertaking training, seeking additional donor support, etc.

ACDI is preparing a grant agreement with Agri-DEV which will govern the relationship between ACDI and Agri-DEV and the donation and use of USAID-derived funds. This grant document had not been completed as of the date of the evaluation. Subsequent to this agreement, Agri-DEV will sign individual joint venture agreements with local agribusinesses,

farmers, NGO's and other organizations and/or individuals it chooses to work with.

To date two employees have been hired by Agri-DEV for the Bibile nursery farm.

To finance the anticipated expenses of Agri-DEV, an overhead rate of 0.75% will be charged on the total amount of each grant or project undertaken by Agri-DEV. This rate was determined based on an estimated yearly budget for Agri-DEV. The overhead rate should be reviewed annually to determine if it is sufficient to cover Agri-Dev's normal operating expenses so as to sustain the organization.

2. Investment Scenario

The CSFD project proposal and cooperative agreement suggests that project activities concentrate on three categories of crops as discussed in section II.F above. But in beginning it soon became apparent that several constraints were limiting factors in determining which crops to work with.

a. Constraints to crop selection and improvement

i. Quarantine restrictions

GSL quarantine restrictions were found to make it difficult to import some new planting materials in sufficient quantities to generate commercial stocks for planting on a nucleus farm and providing it to out growers. By following the rules for introduction of new planting material, the time required to legally introduce it, pass through quarantine requirements, grow it to test yields, adapt it to local conditions and to be satisfied that the material was ready for dissemination to the farmers, was a long-term development effort better suited to other projects (DARP, MARD, for example) and the Department of Agriculture.

The project design, while recognizing the problem, did not sufficiently take this constraint into consideration or, if it did, depended too much on the use of tissue culture to overcome it (see below).

ii. Tissue culture¹ limitations

Another alternative discussed in the project proposal and in the CA was to use tissue culture to produce commercial quantities of planting material. By bringing-in "ex-plant" material in sterile containers, plants could be multiplied in a commercial laboratory and provided to farmers.

To obtain up-to-date information on tissue culture facilities available in Sri Lanka, CSFD contracted for a

¹Evaluator's note: The original proposal dwelt at length on the need for tissue culture to solve the problem of improved plant materials. Although it is not spelled out as an EOPS, the time expended by the project on this issue should be considered one of the "lessons learned" on the project. Hence, the rather long section on tissue culture.

tissue culture study. The report found that the only laboratory with commercial potential was operated by the Ceylon Tobacco Company (CTC). Other facilities, although excellent in some cases, were either dedicated to produce foliage plants or to in-house work for one or more specialized institutes (the Rubber Research Institute, for example) and were unavailable for commercial work.

Several meetings were held with CTC and visits were made to their installations close to Colombo and to their potato seed multiplication project near to Nuwara Eliya. It was found that they were in the very early stages of work on pineapple but that at least two years of additional work would be required before they would be willing and able to produce sufficient quantities of proven and tested planting material. Furthermore, they were working on Mauritius, a variety identified by the ACDI pineapple consultant as less than promising for the world market and with limited potential for expansion in the local market. CTC also reported some success with potato production from material produced through tissue culture experiments, although they estimated it would be another year, at least, before they would be ready to give out small quantities to several out growers for multiplication into certified seed for local production.

Contacts were established with a tissue culture expert at the University of Hawaii, and with ECHO, a U.S. PVO based in Florida, to enquire about the possibility of obtaining ex-plant from smooth Cayenne to be multiplied here. Both sources reported that there was no known "protocol" for tissue culturing pineapple but were willing to undertake the work if financial assistance were available..

In analyzing the tissue culture activities in Sri Lanka, it was determined that, other than for research purposes and advanced plant genetic work, little applicability in commercial agriculture existed. Basically, tissue culture work in Sri Lanka is an aberration caused by difficult quarantine restrictions. Late in 1991, it was learned that the GSL would review and likely modify its plant protection and quarantine rules and regulations to make the system more responsive to industry needs.

In the end, it was decided that the project needed to identify specific crops first with good market potential and a profitability and production profile that would be feasible for farmers to grow and offer the potential for value added processing. As such, tissue culture, as a commercially viable methodology to produce planting material for small farmers, was considered impractical, too costly and too time consuming. The project then began to search for promising local plant materials for use in its proposed nucleus farms.

iii. Markets

Since the project would be dealing mainly with small farmers, most of whom cannot take production or market risks, the possibility for marketing the products, either locally or in the export market, was a prime consideration. Shipping problems, both by sea and air, precluded the emphasis on some fresh products for export. Consequently, the CSFD project

focused on products with a marketing potential in the local market and on those which offer some processing potential to overcome shipping constraints and quality control problems.

b. Investments considered and accepted

i. Pineapple

Initial investigations revealed that several exporters were sending limited quantities of Mauritius pineapples to the Gulf and Maldiv Islands by air and sea. The processors, namely Lanka Canneries (a GSL owned company up for privatization), Pure Beverages and Kelania Valley Canneries, reported they could not obtain sufficient quantities at a reasonable price to satisfy their demand. The ACDI consultant said that the Mauritius variety, a low acid dry fruit, was not well suited for the international market, nor for processing because of its shape, and was difficult to intensively cultivate because of its sharp spines and was too expensive to effectively compete with the smooth Cayenne.

On consulting GSL officials it was learned that it was prohibited to import pineapple planting material! At least one study reported that after a month long survey throughout the island, researchers were unable to find any smooth Cayenne growing in Sri Lanka.

To help the project sort through the issues and determine if there was any potential for commercial pineapple production in Sri Lanka, ACDI obtained the services of a VOCA volunteer, Dr. J. B. Smith, a well known pineapple specialist with more than 30 years international experience.

As a result of Dr. Smith's visits it was learned that a local variety known as Kew was actually a smooth Cayenne and in order to promote this variety it would be necessary to obtain mother stock and initiate a multiplication program. With USAID concurrence, an agreement was reached between ACDI/CSFD and the Mahaweli Authority of Sri Lanka/MARD project to undertake the multiplication of Kew material collected by ACDI at the processing facilities near Colombo. In this manner 100,000 pieces of treated material were sent to the Aralaganwila nursery site in System B of the Mahaweli from June-September, 1991. A joint venture agreement was signed with the MASL which contains a commitment to purchase 2,000,000 pieces of planting material at Rs. 1.15 (US\$0.027).

Dr. Smith was later retained to prepare feasibility studies for a commercial pineapple project. The studies, completed in January 1992, were highly positive and were used to attract a multinational company to investigate the possibilities of undertaking an investment in a nucleus farm and processing plant. No decision has been made yet.

To provide added incentives to attract commercial investors, a 300 acre pineapple nursery farm has been approved, pending environmental clearance. The plants presently in the MARD nursery in System B will be transferred to Bibile as soon as possible for continued multiplication. It is the project's intention to continue on this tract at least until the end of December, 1992. If by then an investor has

not been found, alternate arrangements will be made to either convert the nursery farm into a pineapple production unit, sell the existing planting material to Mahaweli farmers and others in the Western Province, or convert it into a general nursery.

ii. Gherkins

Sri Lanka has become one of the leading brined and/or pickled gherkin exporters in Asia. The market is strong and several companies have long-standing agreements to supply product to the export markets. It is a processed product grown by thousands of small farmers throughout the country and it is an ideal crop for the kind of effort ACDI, through Agri-DEV, was willing to undertake.

ACDI was approached by Pickle Packers (Pvt) Ltd, a local company having about 25% of the export gherkin market, with a proposal to form a joint venture company to produce and market gherkins. A feasibility study and business plan have been prepared and a request to form the joint venture company approved by USAID. The investment will contemplate selling or divesting equity to farmers delivering gherkins to the company, the creation of a producers association, farmer training, etc. Activities are expected to begin in June, 1992. ACDI has committed Rs. 6.0 million (US\$140,000 ±) to the project.

iii. Community Development Services (CDS)

Community Development Services (CDS) is a NGO that requested assistance from ACDI to help make its 12 acre farm near Anuradhapura a viable commercial operation. One of the aims of the CSFD project is to develop linkages with other NGOs working on agricultural projects, especially those striving to become more business-oriented. ACDI accepted the proposal which was later approved by USAID.

Farm and business plans were drawn up by a Dutch volunteer working with CDS. The project commits ACDI to invest Rs. 650,000 (US\$15,100 ±). A professional manager will be hired and the farm plan implemented to put the operation on a self-sustainable basis. A variety of crops will be grown for the local market. ACDI's "investment" is through Agri-DEV and in the form of a profit sharing arrangement, in which the initial investment is expected to be recovered from profits.

This project could be developed into a nucleus farm along the lines of the project design. More funds might have to be added to provide for the extension and marketing components.

c. Investments considered and still under consideration

i. Organic herbs & spices

Initial investigations seemed to indicate a potential for producing organic herbs and spices for export. Uva highlands, the upper reaches of Uva Province around Bandarawela, were found to be well suited for producing particularly aromatic herbs and a local non-profit company was

found in Bandarawela which was already purchasing herbs and spices, grinding and blending these and exporting small quantities primarily to Europe.

Further investigations revealed that the lack of a certifying agency in Sri Lanka for organically grown herbs and spices precluded these crops from obtaining the high prices that exist for organically-grown herbs and spices in the export market. However, it seemed possible that, even without certification, a reasonable market existed.

Discussions were held with Uva Spice, a company already in the business and with Ceylon Botanicals. Because of internal problems within the companies, and the unwillingness of the companies to invest capital in any projects, no agreement was reached although Ceylon Botanicals continues to express an interest.

Another contact was made with Chemical Agencies (Pvt) Ltd, a company having contacts with Celestial Seasonings in Colorado. An offer was made by ACDI to partially finance an agronomist to undertake trials (part was to be financed by Celestial Seasonings) of hibiscus for Celestial's herbal teas. It was agreed that Chemical Agencies would send a brief proposal to Agri-DEV providing some background information, work they have done to date, a brief plan of what is to be accomplished and a simple budget. So far nothing has been forthcoming from Chemical Agencies (Pvt) Ltd.

The possibility of undertaking a project involving organic herbs and spices still exists if a suitable partner can be found.

ii. Passion fruit

Passion fruit has a strong local market and production is insufficient to meet local demand. An export market exists for full strength and frozen juice concentrate. It is only attractive for processing, which eliminates any problems with perishability.

Earlier, farmers had been persuaded to plant the fruit but the market collapsed and many farmers were left with substantial losses. Initial investigations and some interviews found farmers willing to grow passion fruit if a market could be guaranteed. But these same investigations have revealed that several serious virus diseases exist in Sri Lanka. The Taiwanese have partially overcome these problems and a report on their production methods has been obtained.

While no investor has been identified, land has been found in the Kurunegala District on which to establish a nucleus passion fruit farm and the owner is apparently willing to join the project.

A survey of passion fruit, contracted by ACDI, has been undertaken and some basic information has been obtained. This information will be sent to VOCA to pass-on to their volunteer experts for review. Depending on this review, a VOCA volunteer may be assigned to help organize a nucleus farm commercial plantation and put together a feasibility study for

such a project. A commercial partner will have to be identified before such an investment will be made.

iii. Highland vegetables

The Nuwara Eliya and surrounding districts are famous for highland vegetable production. Initial enquiries revealed substantial losses due to poor cultivation practices, bad harvesting techniques, and inadequate post harvest handling and storage. It appeared that opportunities existed for organizing a vegetable auction system, similar to the Dutch vegetable auctions, to facilitate marketing and post harvest handling.

Before embarking on an effort to organize a farmer-owned auction system, it was felt a marketing study was needed to document marketing channels and assessing whether or not a potential existed for such an intervention. ACDI contracted a marketing study and the final report should be ready by early May.

iv. Milk

The GSL is set to privatize its government-owned plant MILCO, and apparently wishes to divest all or part of it to farmers. ACDI/CSFD was asked by the chairman of MILCO to inquire if a large U.S. dairy cooperatives might be interested in the operation. ACDI has developed a concept which involves privatizing MILCO through Agri-DEV and gradually divesting shares to dairy farmers. A management contract with a leading milk products company and/or cooperative committed to developing the local sector would ensure professional management of the business and provide training opportunities.

Preliminary information has been gathered and several meetings held with the Chairman of MILCO and an Asian Development Bank (ADB) consultant. Information has been sent to a leading U.S. dairy cooperative which has expressed interest in visiting Sri Lanka and investigating the possibility of becoming involved.

CSFD's involvement with the dairy sector will depend on resource availability and recommendations by the cooperative as to whether or not an investment is feasible and on what conditions.

v. Seeds

ACDI was approached by the managing director of Viswakula Sons (Kandy) Ltd., the local distributor of Peto Seeds with an expression of interest in undertaking a joint venture to produce bean and hot pepper seeds for the local market. This offered excellent potential for out growers as most of the seeds would eventually be produced on farms isolated from one another and from the main nucleus farm. Furthermore, the GSL is keen on privatizing the seed industry and this seemed to offer excellent possibilities.

After a preliminary meeting, a letter was sent to Viswakula Sons expressing Agri-DEV's interest in joining them

in an investment and outlining the basic parameters of their involvement. No reply has been received.

vi. Bananas

ACDI was approached by Aitken Spence with an inquiry regarding ACDI's interest in joining them on a specialty banana production and export project. A quick review of the literature revealed that a market existed for this product in the U.K. Site visits were undertaken to areas near Puttalam in the North and Embilipitiya in the South. Discussions were held with senior executives of Aitken Spence and ACDI expressed its willingness to invest with them in the venture. A preliminary reply was received which put the project "on hold," pending improvement in Aitken Spence's existing operation.

vii. Ginger

A request was received from EXPOLANKA to study the possibility of undertaking a joint venture nucleus farm and processing company to produce and export Chinese Ginger. As this request was only recently received there has been no time to follow-up. An initial meeting is set for late April with EXPOLANKA. A tentative request has been made to ACDI/W to locate a ginger specialist as few people in Sri Lanka know much about this product, other than it was widely grown several years ago but production ceased because of marketing difficulties.

d. Investments considered and rejected

i. Cocoa

Cocoa was one of the first crops to be examined in some depth. A VOCA consultant made a pre-feasibility study of the industry and recommended that cocoa not be pursued. The reasons were (1) it took too long to grow, (2) little money could be made in the growing of cocoa and thus it would not benefit small farmers, (3) it would involve chocolate manufacture in a vertically integrated operation, and (4) the companies contacted, Upali and Ceylon Chocolates, were unwilling to present serious proposals. Consequently, cocoa is not currently being considered as a crop for a nucleus farm.

ii. Gloriosa Superba

Gloriosa Superba seed are processed to extract an alkaloid (colchicine) used in bio-technology and cancer research. Colchicine is a powerful mutating agent, has a good market in the scientific community and limited competition from other developing countries. India produces limited quantities.

This product seemed to fit the pattern of a crop ideally suited to small farmers: value added processing, non-perishability and a guaranteed market.

ACDI was contacted by Ceylinco Agroproducts, the only company in Sri Lanka commercially producing and exporting Gloriosa Superba seed. ACDI investigated the possibility of developing a project as a joint venture. However, due to

Ceylinco's unwillingness to pay prices that would be satisfactory to the nucleus farming company and out-growers, no agreement was worked out. Multiple feasibility scenarios and sensitivity tests were tried in an effort to find a way to make money for the nucleus farm and growers. No solution satisfactory to ACDI and Ceylinco was found and the project was dropped.

iii. Papaya

Papaya was considered as a potential fresh fruit for shipment to the Gulf and/or to Singapore. Seed were imported from Hawaii (Hawaii Solo) and trials undertaken at the MARD nursery farm. Results were poor since most plants were infected with viruses. Local researchers also gave negative recommendations due to disease problems. Because of these difficulties it was decided not to go ahead with papaya.

iv. Fresh water shrimp

ACDI was contacted by an entrepreneur wishing to undertake fresh water prawn production in rain-fed tanks in the dry zone. Preliminary investigations looked promising. However, it was soon discovered that the GSL had abandoned prawn (and fresh water fish) cultivation because of religious sensitivities of the Buddhist clergy and all their facilities are to be offered for sale through a tender process.

The concept of producing fresh water prawns in rain-fed tanks was somewhat controversial as the water in these tanks might be contaminated with chemical run-off and other pollutants lethal to prawns. To undertake commercial fresh water prawn production in larger, year round tanks would involve complicated organizational techniques, as many villagers surrounding the tank also use it for fishing, and poaching would be a problem.

ACDI/CSFD decided that the only practical way to commercially produce fresh water prawns would be in the installations of the Fisheries Corporation being offered for sale, but this offered little opportunity for "out growers" and consideration was withdrawn.

3. Other Project Concerns

a. Women in development

The project has not reached the point where women have become involved. Once the nucleus farms are activated, women should become an integral part of the operation. The pineapple nursery operation may also offer an opportunity for women, but this will depend upon the extent to which the nursery operation develops.

b. Organic sustainable agriculture

The concept of sustainable agriculture is a basic part of the project. Organic farming may ultimately play a role, but to date there has been no effort to develop because a suitable partner has not been found and because there is no registered certifying agency for organically grown crops. This

is especially important for penetrating the high quality export market. However, CSFD will continue to search ways to utilize organic farming methods in its programs.

c. Environmental concerns

The proposed pineapple nursery farm will occupy 300 acres in the vicinity of the Senanayake National Park. The USAID environmental officer suggested that an environmental assessment be made of the proposed pineapple nursery farm. This was carried out in April of this year by James Tolisano (see Bibliography) who recommended that the site be approved providing some mitigating measures are attended to before clearing land and during the operation of the nursery. These requirements do not seem beyond the ability of the project to manage.

A model "scoping session" was held on the proposed pineapple nursery farm, during which the environmental issues involved were discussed. The session was video taped and the tape given to the appropriate GSL environmental officials for use in preparing their personnel for environmental issues facing the country.

d. VOCA

VOCA has played a limited role thus far. Of the nine VOCA visits planned, only two have taken place- a pineapple consultant and a cocoa consultant. However, in both cases, they made positive contributions. The pineapple consultant, a world-wide expert in large-scale pineapple production and marketing (and other crops), has begun a chain of events that may result in a very large pineapple operation being established in Sri Lanka. The VOCA cocoa consultant recommended that the CSFD project not consider cocoa at this time due to the poor returns growers would likely get. As a result, cocoa has been dropped from the list of crops that are likely to be included at this time.

Two other consultants from VOCA will be brought in soon, one to study the gherkin operation and prepare technical packages, and the other to study the possibilities for passion fruit.

e. Training/study visits

i. International

Specialized training in post-harvest technology was undertaken by Dr. Shanthi Wilson of CISIR who visited post harvest training centers in both the U.S. mainland and Hawaii. During the latter visit, she was accompanied by Dr. J.B. Smith who is thoroughly familiar with fruit production in Hawaii, and who is advising on the CSFD pineapple operation.

ii. Local training

The CSFD staff has been trained in organizational management and in computers. The latter training was provided by a local computer specialist and by in-house trainers. A seminar attended by about 150 persons was held in April 1991

at which Dr.J.B. Smith presented information on pineapple production and marketing. The seminar was co-sponsored by ACDI and the Export Development Board. Another seminar was held in December 1991 at which Dr.Smith, Dr. Shanthi Wilson, of CISIR, and Bob Flick gave papers relating to post-harvest handling of fruits and vegetables and wax coatings. (The paper and slides presented by Bob flick were furnished by FMC Corporation). The seminar, co-sponsored by ACDI and CISIR, was attended by about 110 persons.

iii. Practical experiments

No practical experiments have been carried out at the farm level. These will begin once the nucleus farms are established and operating.

A proposal has been put forward by CISIR for simulation studies on controlled atmospheric storage of foliage plants. This has not been approved by the CSFD project.

f. Sustainability and replicability

The project has not been operational to the extent that the premise on which it was undertaken can be said to be sustainable and replicable. Normally, several cycles of operations and a number of years are required before a determination of this type can be made. This would take the project well-beyond the current PACD.

4. Expenditures of Funds to Date

The total budget for the CSFD project is US\$2,004,591 to cover the period September 24, 1990 to December 31,1993. Although it has not been possible to precisely compare the original budget line items with the current ACDI budget printouts, a close approximation can be made. The latest financial report received from ACDI/W was for the period ending February 1991. The local ACDI office has provided information to bring the data through March 31, 1992. This information is shown in Table 1.

As of March 31, 1992, 46.5 percent of the time of the project had been completed (79 weeks of a total of 170). However, only 29.4 percent of the project budget had been utilized. The major reason has been that the funds for local contracts have not yet been utilized to support CSFD's development of nucleus farms.

Table 1. CSFD Financial Report as of March 31, 1992¹

Budget Category	Project Budget	Spent to date	Unliq. Bal.	% Budget spent
US Dollars				
Tech. asst./superv.	478,442	214,298	264,144	44.8
Other TA-consultants	52,427	29,274	23,158	55.8
Training/courses	68,094	14,146	53,948	20.8
Equip/vehicles	86,000	67,560	18,440	78.6
Local personnel	247,985	75,601	172,384	30.5
ACDI OH	363,849	155,519	309,330	42.5
VOCA sub-contract	125,281	12,548	112,733	10.0
Local contracts(1)	582,513	22,048	560,465	3.8
Total	2,004,591	589,994	1,414,597	29.4

(1) Originally programmed as follows:

	Field Person.	Capital/ operating Rupees	Total
Nursery farm	2,052,528	4,174,715	6,227,243
Lowland nucl.farm	2,802,511	2,425,681	5,228,192
Highland nucl.fm.	2,319,074	2,351,885	4,670,959
Subcontract OH	7,174,113	0	7,174,113
Total rupees	14,348,226	8,952,281	23,300,507
In US dollars	358,703	223,807	582,513

¹Data for March, 1992 was provided by the CSFD office in Sri Lanka. Therefore, the data may be modified when the ACIDI/W data for March is received.

5. Project Support

a. ACDI/Washington

A review of the CSFD letter and FAX files indicates that there has been an active correspondence between the CSFD project and ACDI/W. Numerous requests have been made by CSFD for ACDI/W assistance in providing information, locating consultants, and reviewing documents. These requests seem to have been handled promptly.

Supervisory visits were made May 20-31, 1991 and February 1-9, 1992. Supervisory visits involved a general review of project activities and discussions of problems and plans with CSFD and USAID. During the May 1991 visit, the supervisor met with the USAID regional contracts officer and discussed the need to amend the cooperative agreement to reflect changes that had taken place in the project focus and the need to incorporate provisions for the investment activity of CSFD. However, this has not been done and the issue was not mentioned in the supervisor's February 1992 trip report.

In view of the problems encountered with the project start-up, it would seem that a supervisory visit earlier than May, 1991 would have been appropriate.

b. USAID/SL

A review of the CSFD files reveals that USAID has been kept well informed of the project's activities and has generally responded quickly for requests for approvals of CSFD activities. The Mission approved changes in the implementation plan described in III.A, and the regional legal advisor and regional contracting officer were helpful in the development of Agri-Dev as a legal entity that meets AID's requirements.

There has been a problem in procurement of certain items that require AID waivers, a problem common to all projects that import vehicles, equipment, etc. This has proved time consuming, both to the project and to USAID.

Once implementation of projects begins, fairly frequent on-site reviews of project implementation should be undertaken by ANR.

IV. SUMMARY AND CONCLUSIONS

1. The CSFD project has not yet established the two nucleus demonstration farms foreseen in the implementation plan. The major reason is the change in direction from the mode originally planned in which a Sri Lankan firm would be contracted to implement the farms to one where a new investment vehicle was formed.

2. The investment vehicle developed to undertake the implementation of CSFD's projects is a non-profit, limited liability company, known as Agri-DEV. It was incorporated on December 31, 1991.

3. Three potential projects have emerged for Agri-DEV: (a) a joint venture with Pickle Packers Ltd.(PPL) which could develop a nucleus demonstration farm along the lines of the original proposal; (b) the development of a pineapple nursery farm to provide smooth Cayenne plant material to farmers and to potential investors; and (c) the development of a farm owned by the Community Development Service into a commercially viable demonstration farm.

4. The CSFD project has spent considerable time researching crops for inclusion in its proposed nucleus demonstration farms. Pineapples and gherkins have been selected for development. Several, cocoa, Gloriosa Superba, papaya and freshwater shr'amp, have been rejected. Others, including passion fruit, milk, seeds, bananas, highland vegetables, and organically grown herbs and spices, are under consideration.

5. Because of the delay in establishing nucleus demonstration farms, no progress has been made on hiring and training private extension agents, developing technical packages for farmers, surveying of farmers in the areas surrounding the nucleus farms, or in working with farmers to develop linkages with private sector firms. These are important elements of the project design and should be developed once the three activities cited in 3 above are begun.

6. The COP has expressed concern over the lack in CSFD of a person technically qualified to assist in the agronomic aspects of the projects that have been considered and those that will be implemented. At least four ads have been placed in local newspapers but these failed to up turn a person qualified to fill the gap.

7. A proposal for a joint venture between Agri-DEV and PPL has been drafted by PPL and modified by Agri-DEV and an agreement has been reached. The document was approved by both parties in early April and implementation of the joint venture, Pickle Cultivators (Pvt) Ltd., is expected to begin in May, 1991.

8. ACDI has not fully utilized its capability to work with and develop farm organizations. Part of the failure to do so is the delay in implementing the nucleus demonstration farms. Working with farm organizations is an important aspect of ACDI's mandate and it should initiate this part of the project early in the program to develop the nucleus farms.

9. ACDI is assisting Community Development Services(CDS), a local NGO, to develop a 12 acre farm into a commercial enterprise. This follows ACDI's goal of creating linkages with local agricultural development projects, especially those involving NGOs.

10. The CSFD project has been underway since September 24, 1990 and is programmed to run until December 31, 1993. As of March 31, 1992, 46.5 percent of the project's time had been used. During the same period, 29.4 percent of the project's budgeted funds had been used. The major shortfall in the use of funds is due to the change from contracting with

Sri Lankan firms for implementation to development of Agri-DEV as the vehicle for implementation. This has required a considerable amount of time on the part of CSFD staff and has delayed the implementation process. However, it could prove to be a good investment in the long term.

11. Agri-DEV's current funding depends upon CSFD and earnings from investments. Given the short time period remaining to the CSFD project, Agri-DEV is unlikely to survive much beyond the life of the CSFD project unless some mechanism is found to channel funds into it for several years to come. The expected income from its investments is not likely to occur before CSFD's PACD, nor will its potential earnings be great enough for several years beyond the PACD to keep it afloat. Without proper support and financing, it cannot continue to operate. However, Agri-DEV could prove to be a workable vehicle which might be incorporated into the proposed Agro-Enterprises project.

12. The activity underway to develop a pineapple nursery to attract a potential large investor carries a high degree of risk. Although one large multinational firm has visited Sri Lanka and viewed the site, and appears genuinely interested, no commitment has been made. In the meantime, the process of multiplying the pineapple nursery stock continues. Contingency plans need to be developed for actions to be taken if no decision is taken by the firm by the end of December, 1992.

Dr. Smith will visit CSFD in May and he should be queried as his evaluation of the possibility that the farm will be developed by a large firm. Even if a commitment is obtained, delays in getting the project underway may make it necessary to move the plants to a commercial operation before the large farm can be brought under cultivation. These are concerns that should be discussed with Dr. Smith.

13. Although substantial changes have taken place in the direction the project will take, and recommendations made for the cooperative agreement to be amended, no amendment has been made nor has the budget been adjusted to take into account the new focus.

14. The backstopping of the CSFD project by USAID/SL and ACDI/W appears to be satisfactory. From USAID's point of view, the project has probably required a support effort out of proportion to its funding level. However, the project's potential for assisting in the development of farm organizations with ties to the private sector is in line with AID policy and USAID has supported ACDI's efforts.

15. The original proposal contemplated that PL480 Title II monetized funds would be available to the project. The funds would be used to expand CSFD's activities and permit the hiring of another expatriate to assist in the expanded project. This was not part of the cooperative agreement and USAID made it clear from the beginning of the project that no additional funds would be available from PL480 title II and that the project had to operate within the budget provided in the cooperative agreement.

16. There have been limited training activities to date. One person from CISIR was sent to the U.S. mainland and Hawaii to study post-harvest handling for fruits and vegetables. CSFD employees have received training in use of computers, both from in-house trainers and from a professional trainer. Because of the delay in implementation, no training has begun at the farm level. Two well-attended seminars have been held on pineapple production and marketing.

17. The short time between now and the end of the project (20 months) means that CSFD will have time for only one or two production cycles, providing farming activities begin within the next few months. This is short time to train extension agents and farmers and to demonstrate that the model will work. Also, this may be too short a period to develop a relationship between farmers and the private firms aligned with the project. Depending upon the progress made during the next 12 months, consideration should be given to extending the project up to two years beyond the current PACD and providing funds for the extension.

18. Given the circumstances faced by the ACDI COP on his arrival in Sri Lanka (a possible law suit by Agroskills, the need to set up an office, hire personnel, obtain equipment and vehicles, and to get a program going), considerable progress has been made. The process of selecting or rejecting crops, the establishment of Agri-DEV, developing a joint venture agreement with PPL, locating plant material and starting a pineapple nursery, etc., has taken considerable effort and time. The three activities that are to be implemented are at the stage where their implementation can move ahead rapidly, providing the project's full resources are put behind the effort.

19. In view of a lack of clear direction as to where the project's nucleus farms were to be located, and a more specific identification of crops to be included, the projects developed by ACDI/CSFD, although delayed in implementation, are fairly well-aligned with the original project concept. The development of Agri-DEV has been an innovative addition to the project design.

20. Future options for the project include further refining and expanding the nucleus demonstration farm concept, developing Agri-DEV into an efficient, fully functional development organization, and providing assistance to local agriculturally-oriented NGOs.

V. RECOMMENDATIONS

1. CSFD should focus its efforts on the three on-going activities and reduce its efforts in identifying other opportunities. An additional investment should be considered only after the three approved projects are activated and well underway and providing the development stage of the additional project is short and it can be implemented quickly.

2. CSFD should develop contingency plans for the pineapple nursery if no multinational firm commits itself by the end of December, 1992 to undertake the development of the 5000 acres provided by the GSL for pineapple production.

3. ACDI/CSFD should concentrate its proven capabilities on developing the farm organizational linkages with the private firms involved in the projects. It should actively utilize VOCA and ACDI assistance to do this.

4. ACDI and USAID need to amend the cooperative agreement to reflect the change in direction of the CSFD project, realign the budget, and prepare new EOPS. The revised budget should present a realistic projection of the way the remaining funds will be spent during the balance of the project.

5. The lack of technical agricultural production expertise in CSFD should be overcome by hiring a competent Sri Lankan agronomist/agriculturalist and/or through greater use of VOCA volunteers and other consultants.

6. ACDI should initiate further training activities, especially for the new extension agents that will be employed and for the farmers who will be involved in the projects to be implemented. Local trainers, supported by short term consultants, should be utilized.

7. USAID should consider Agri-DEV as a possible vehicle for channeling funds to agro-enterprises to be assisted under the proposed agro-enterprises development project.

8. USAID should consider utilizing the administrative organization, facilities and expertise of CSFD to assist and perhaps monitor NGO/PVO agriculturally-related organizations receiving assistance from USAID.

9. The contract agreement between ACDI and Agri-Dev, governing grants from ACDI, should be completed before additional funds are provided by ACDI to Agri-Dev.

10. Depending upon the progress made in the next 12 months, consideration should be given to extending the project for up to two years beyond the PACD and providing funds for the extension.

VI. LESSONS LEARNED

1. If a project is found to be confronted with serious unanticipated design problems, a new design effort should be undertaken immediately, with the full assistance of the backstopping agency.

2. All implications involved in contracting or procurement should be clearly outlined before the project is approved.

3. In dealing with local firms, one should be careful not to take expressions of interest too seriously until the implications of what will be done are understood by all.

4. When a project has money to be invested, it is easy to attract interested businessmen but difficult to sort out those who are serious and reliable from those who are only looking at the money. This "sorting out" usually requires considerable time and skill.

5. When projects are designed, there is a tendency to "load" the projects with too many things in order to satisfy all who might have an interest in the project. This loading-up often diverts attention away from the main objectives of the project and uses up scarce resources.

Bibliography

- ACDI/CSFD. A Joint Venture Investment Proposal to Assist Community Development Services (CDS) Restructure its Medagama Farm as a Commercial Nucleus Farm. Colombo, Sri Lanka. January 24, 1992
- Evnin, Michael E. Cocoa Projects for Sri Lanka. Prepared for VOCA/ACDI. Washington, D.C. April 1991.
- Export Development Board. EDB and its Activities. Colombo, Sri Lanka.
- Flick, Robert C. Per Unit Add-Ons: A Capital Accumulation Tool in Farmer-Owned Businesses. ACDI/CSFD. Colombo, Sri Lanka. April 1991.
- Hettig, S.T and S.M.P Senanyake. Highland Vegetable Production and Marketing Systems. Prep. for ACDI/CSFD project. Colombo, Sri Lanka. Feb. 15, 1992. Draft.
- ISTI. Med/EIED Annual Report 1991. Pre. for the Mahaweli Authority of Sri Lanka. Colombo.
- Pach, Wolfgang. Report on the Gherkin Project. Prep. by Int.Sci. and Tech. Inst. for the Mahaweli Authority of Sri Lanka, Colombo. June 1991.
- _____ Evaluation of Gherkin Growing, Mahaweli Area "C". Prep. by Int. Sci. and Tech. Inst. for USAID/Colombo. Dec. 1991.
- John, Reginald. Plant Tissue Culture in Sri Lanka: A Report on the Industry. Prep. for ACDI/CSFD Proj. Colombo. February 24, 1991.
- Mandawela, C. Steps to be Taken in the Export of Semi-Processed Fruits and Vegetables and Root Crops. Presented at a Seminar on exporting fruits and vegetables held in Colombo, March 20, 1992. (Mr. Mandawela is plantation manager for Aitken Spence Agr. Dev. Ltd. His paper was on harvesting and processing of gherkins.)
- Smith, J.S. A Feasibility Study of Pineapple Production in Sri Lanka for Processed Export, Part I: Cost of Fruit Production. Prep. by AGPRO Associates for ACDI/CSFD, Colombo. December 1991.
- _____ Part II: Marketing, Processing and Financial Returns. Prepared by AGPRO Assoc. for ACDI/CSFD, Colombo, Sri Lanka. January 1992.
- Tolisano, James. An Environmental Assessment of the Proposed ACDI Pineapple Nursery Activity. Prep. for ACDI/Sri Lanka by Watershed Ecosystems, Santa Fe, New Mexico. April 1992. Draft.
- USAID. Strategic Framework, FY 1992-1996. Colombo, Sri Lanka. April 1991.
- Wijeratnam, A R.S. Wilson. Proposal for Simulated and Controlled Atmospheric for the Refrigerated Transportation of

Foliage Plants by Sea. Presented to ACDI/CSFD.Colombo, Sri Lanka. n.d.

Wijerserera,H.T. Rohana. Passion Fruit Industry in Sri Lanka: A Report on Past and Current Status. Prep. for ACDI/CSFD project. Colombo. April 1, 1992. Draft.

World Bank. Sri Lanka: Strengthened Adjustment for Growth and Poverty Reduction. Report No. 10079-CE. Washington, D.C. Jan. 8, 1992.

List of Persons Met

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Tolisano, James
Director, Watershed Ecosystems
Santa Fe, New Mexico

West, Martin
Agronomist
Mahaweli Agriculture and Rural Development Project

Zyhyle, S.A.C.M.
Program Director
ACDI/Commercial Small Farm Development Project

Annex 1

List of Incorporators of Agri-DEV

**Agricultural Cooperative Development International (ACDI)
Washington, D.C., U.S.A.**

**Alexander Jude Wilhelm Balthazaar
Company Director
Colombo, Sri Lanka**

**Rajit Michael Samuel Fernando
Bank Executive
Colombo, Sri Lanka**

**Robert C. Flick
ACDI/COP
Colombo, Sri Lanka**

**Harris Brian Anthony Forbes
Banking Consultant
Colombo, Sri Lanka**

**Soundaranayagam Rabindranath
Company Director
Colombo Sri Lanka**

**Philip Shathikumar Jayawardena
Mercantil Executive
Colombo, Sri Lanka**

ANNEX 2

CSFD STAFF

Name of Employee	Designation	Date Hired	Qualifications
S.A.C.M Zuhyle	Prog.Dir.& Dpty.COP	1/1/91	BA,MBA,Postgrad Dipl. in Int. Affairs. Mbr.Chartered Inst. of Mktg. UK
J.M. Gunasekera	Dir.Agribus.	4/15/91	BSc (Agr), MBA
Patsy Silva	Secretary	4/10/91	GCE(O/L) Dipl. in Confidential Secry's course & Dipl.in Pers. & Indus. Law
P.K. Marimuttu	Messenger	2/1/91	Grade 7
K.Gunatilleke	Driver	3/31/91	GCE(O/L)
S. Nagarajah	Secry.	2/10/92	GCE(O/L) Dipl in Confidential Secrys. Course (Pitman's)
M.N.M Jazree	Adm.& Fin. Officer	2/24/92	GCE(A/L) & CIMA Pat I & II
W.P.Chandrsiri*	Nursery Mgr	1/1/92	BS (Agr)
W. Peris*	Nursery Sup.	3/16/92	GCE(A/L) Dipl.in Agr.

*Employed by Agri-DEV

Information as of April 20, 1992

ANNEX 3

SHORT-TERM CONSULTANTS ENGAGED BY CSFD

Consultant	Date of assign.	Work assign.	Report
Dr.R.S.John	Jan.1991	Tissue cult.	Plant Tissue Cult. in Sri Lanka
Dr.R.S.John	Apr.1991	Pineapple cultivation	Agrotech. Aspects of Pineapple Cult.
Dr.J.B.Smith	Sept.1991	Train.assist. to Dr.Wilson	Pineapple cultiv.
Dr.J.B.Smith	Sept/Oct 1991	Pineapple feasibility study	Final report Parts I & II
M.T. Moorthy	June 1991	Install new programs in computer	Staff training
S. Perera	July 1991	Articles for Agri-DEV	Articles & Memoranda for Agri-DEV
R.G.L.deSilva	Aug.1991	Taxation	Opinion on company taxation
S. Perera	Oct.1991	Registration of Agri-Dev	***
Dr. S.Hettig	Nov. 1991	Highland Veg.Mktg. study	Veg.Mktg.Systems in the Highlands
J.Tolisano	Mar.1992	Environmental Issues of pineapple nursery farm	Environmental Assessment of proposed ACIDI pineapple nursery
S.T.R.Wijesekera	Mar.1992	Passion fruit study	Passion Fruit Industry in Sri Lanka

*** No report required.

Annex 4

List of ACDI Company Contacts

1. Aitken and Spence, Colombo. Possible banana operation.
2. Ceylinco Agroproducts. Colombo. Gloriosa Superba seed.
3. Ceylon Botanicals. Colombo. Herbs and spices. (CB is a joint venture between Dr. Rajayah from the Renuka Co. and Nihal Silva from Environmental Laboratories. Organic products in general; rice, pepper, etc.
4. Expolanka, Colombo. Ginger, root crops, pineapples (Rafik Kassim, Zahedi Alif and others).
5. MILCO. Colombo. Dairy products. This is a government-owned operation that is being divested (Faiz Mohideen).
6. UVA Spice, Wye Estate, Bandarawela, Harry Haas. Interested in condiments, herbal teas, spices.
7. Viskwakula Sons (Kandy) LTD. Local seed distributor for Peto Seeds of California. Mr. Nimal Viskwakula. Interested in seed multiplication project.
8. Mr. David Joseph - Swiss Cheese (Pvt) Ltd, Bogahawatte, Patana. Has good business, needs expansion and outgrower program to improve milk supply.
9. Mr. S. Muthusamy, Director, Chemical Agencies (Pvt) Ltd, 414/3 Bloemendhal Road, Colombo 13. Has contacts with Celestial Seasonings in Colorado. Hibiscus tea.
10. Forbes Agricultural Services (Pvt) Ltd., Colombo. Mr. S. Rabindranath. Pineapples, gherkins and other agricultural products.
11. Upali Agroproducts Ltd., Upali Nurseries, Ceylon Chocolates, Colombo. Dr. Sivali Ratwatte, Mr. Leslie Dharmaratne, Mr. Shalitha Wijesundera. Cocoa and other agricultural products.
12. Needwood Estate, Haldummulla (Hapitule). E. P. Denzil Soza, owner. Organic tea estate.
13. Consolidated Business Systems, Nugegoda, Mr. Shanthi Wijesinghe. Pineapples, fruits and general, interested in Papaya.
14. Crossworld Trading, Colombo. General upcountry vegetables not really interested in investment.

15. Pure Beverages, Colombo (Coco-Cola bottler).
Pineapple.
16. Ceylon Tobacco Co., Colombo. Potato seed production,
pineapples, foliage plants.
17. Maharaja Group, Colombo (Agritech Systems (Pvt) Ltd),
anything that can make money!
18. Lakmal Sala, Colombo, Orchids, Anthuriums, Mr. L.S.
Wanigatunga, President.
19. Nidro Supply, Colombo, Mrs. Dawn Austin. Pineapples,
fruits and vegetables in general.
20. Delmege Forsyth & Co. Ltd, Colombo. Farming in
general but with no specific or concrete interest.
21. United Picklers Ltd., Dehiwela, Mr. Nigel Billimoria.
Gherkins and other pickled/brined products.
22. John Keels & Co., Colombo. Gherkins, meat products.
23. MICO Food Products (Pvt) Ltd, Homagama. Pineapples
and miscellaneous fruits and vegetables. Has several
food factories.
24. Pickle Packers (Pvt) Ltd, Dehiwela. Mr. Wilhelm
Balthazaar. Gherkins, coir dust and other fresh and
pickled products.
25. Delhena Estates, Colombo. Mr. Nawaz Saleem. Has 1,500
acres in tea, rubber and coconut and looking for
diversification.
26. Cargills, Colombo. Mr. Ranjit Page. Interested in
general farming to supply their Food City
supermarkets.