

A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

DKAL944

A. REPORTING A.I.D. UNIT:

RDO/C
(Mission or AID/W Office)

(RS# 538-87-04)

B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?

yes slipped ad hoc

Eval. Plan Submission Date: FY 87 Q 4th

C. EVALUATION TIMING

Interim final ex post other

D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report)

Project #	Project/Program Title (or title & date of evaluation report)	First PROAG or equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost ('000)	Amount Obligated to Date ('000)
	Private Sector Program - Agribusiness Cluster				
538-T-007	Regional Agribusiness Development (RAD)	78	3/86	6500	6500
538-0057	Agribusiness Expansion Project (AEP)	80	6/86	6000	6000

IDENTIFICATION DATA

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

Action(s) Required

These projects were both completed and so the major benefit of this evaluation lay in the lessons which could be identified for application to the recently initiated High Impact Agricultural Marketing Project (HIAMP). There were no future actions decided on for either of the two projects but a meeting of Mission Management, Private Sector and Agriculture Office staff, the evaluators and the core contractor was held to discuss the specific recommendation made with respect to HIAMP and the implications of the evaluation findings for HIAMP implementation.

Name of officer responsible for Action

Date Action to be Completed

The meeting took place in April 1987.

BEST AVAILABLE DOCUMENT

FILE

(Attach extra sheet if necessary)

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: mo 5 day 27 yr 87

G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:

<p>Project/Program Officer</p> <p>Signature: <i>[Signature]</i></p> <p>Typed Name: Peter Medford</p> <p>Date: <u>10/11/87</u></p>	<p>Representative of Borrower/Grantee</p> <p>Signature: <i>[Signature]</i></p> <p>Darwin Clarke</p> <p>Date: _____</p>	<p>Evaluation Officer</p> <p>Signature: <i>[Signature]</i></p> <p>Darwin Clarke</p> <p>Date: _____</p>	<p>Mission or AID/W Office Director</p> <p>Signature: <i>[Signature]</i></p> <p>James S. Hottaway</p> <p>Date: <u>10/4/87</u></p>
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APPROVALS

IX

H. EVALUATION ABSTRACT (do not exceed the space provided)

The RAD and AEP Projects were both designed to promote the development and expansion of agribusiness enterprises in the OECS States. RAD was implemented by the Caribbean Development Bank (CDB) and AEP was executed by the Latin American Agribusiness Development Corporation (LAAD). The former was targetted to small farmers, and the latter, medium to large scale producers. The purpose of this evaluation was to examine the development impact and to identify lessons which could benefit future agribusiness initiatives under the High Impact Agricultural and Marketing Project (HIAMP). The evaluation was based on a review of project documentation and other project related reports, interviews of project personnel and loan recipients. The evaluators major findings, conclusions and recommendatins are:

- o Neither project had much success in finding agribusiness enterprises. This was due to an erroneous assumption that entrepreneurs would emerge if credit was provided for agribusiness.
- o There are other fundamental constraints besides credit which inhibit the development of agribusiness in the OECS.
- o If USAID is keen on producing a positive impact on the argicultural sector then it needs to loosēh institutional restrictions which reflect an aversion to risk.
- o HIAMP should be carefully monitored and regularly evaluated for performance, achievement and impact. RDO/C and project personnel should develop contingency plans for conserving the agency's investment in the project should the innovations prove less well targetted than anticipated.
- o Private sector success should be publicized giving particular emphasis to the achievements of Caribbean entrepreneurs.
- o Project Officers and loan approval committees should develop with sub-borrowers realistic performance targets.

The Evaluators Noted the Following Lessons:

- o Agribusiness sub-projects having the highest level of commercial viability provided the most sustained benefits to the national economies.
- o Privately owned argibusiness projects were more successful than government projects.
- o The most successful agribusiness projects in the Eastern Caribbean are those which export to market niches in industrialized countries.

ABSTRACT

I. EVALUATION COSTS

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
H. Lerner	LBII	538-0119-C-00-6027	366.610	Project
J. Coolidge	LBII			
G. Layne	LBII			

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2. Mission/Office Professional Staff Person-Days (estimate) 4

3. Borrower/Grantee Professional Staff Person-Days (estimate) 5

COSTS

A.I.D. EVALUATION SUMMARY PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)
Address the following items:

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: RDC/C

Date this summary prepared: 10/14/87

Title and Date of Full Evaluation Report: Evaluation of the Regional Agribusiness Development Project and the Agribusiness Expansion Project
April 87

1. Purpose of Activities Evaluated

- o RAD was focussed on the constrained markets for agricultural production and was intended to benefit small farmers and the rural poor indirectly by expanding the markets for their output. The project was expected to increase investment in agroprocessing enterprises which would purchase regularly from small farmers. The project would provide funds for loans and equity investments to such businesses. Businesses which contributed to a reduction in the cost of small farmer inputs as well as increase employment opportunities for rural workers could also receive funding through this project.
- o AEP was to initiate and expand private agribusiness investment in the Caribbean through the application of capital, management and technical expertise to identified constraints in the production, processing, distribution and marketing systems.
- o The objectives of both projects were generally similar and were consistent with the Mission strategy objectives of increasing production and employment. The primary difference was the target group. RAD targetted small farmers while AEP focussed on medium to large producers.

2. Purpose of Evaluation and Methodology

- o This ex post evaluation was undertaken as part of an evaluation of RDC/C's Private Sector Program. In addition to assessing their impact, the evaluation was expected to identify lessons which would be useful to the Mission in the implementation of the High Impact Agricultural Marketing Project (HIAMP), which includes an agribusiness component and is the Mission's major agricultural initiative.
- o The methodology involved a review of project documents and reports, a special study of loans to the private sector and an Inspector General 1985 audit report. In addition interviews were conducted with officials of National Development Finance institutions (DFCs), projects' beneficiaries and AID, CDB and LAAD personnel. The evaluators obtained information on the numbers of loans made, the size of the loans, the performance of the activities supported and the efficiency of the mechanisms used to provide resources to the beneficiaries.

3. Findings and Conclusions

o Findings

RAD: Projects financed directly by the CDB experienced serious financial problems. Loans through the National Development Finance Corporations were used for farm improvement and farm production and not agro-processing as envisaged in the project paper. Hence no lasting contribution was made to overcoming the market constraints which the project was designed to address. Restrictions imposed by CDB on the DFCs

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SUMMARY

effectively prevented the use of funds for the purposes set out in the Project Paper. The restrictions were apparently carried over from a previous USAID project.

AEP: There is a dearth of fundable agro-projects in the English speaking Eastern Caribbean. Of the projects assisted, the most successful were those involved in the export of non-traditional crops to a specialized market. Overall the evaluation report states that agribusiness in the OECS is very risky with weather, water and soil problems. Thus if institutional requirements for safety preclude commitments to hazardous ventures then its unlikely that any impact will be made on developing the agriculture sector in the sub-region.

Conclusions: The evaluators concluded that results of the two projects were disappointing. The underlying assumption of the two projects that the provision of credit for agribusiness would release a key constraint and result in a significant number of new agribusinesses proved to be unfounded. The disappointing results suggested that there are binding constraints to agribusiness in the Eastern Caribbean other than credit. A particularly serious mistake on the part of the PAD project was the assumption that the provision of agribusiness credit on slightly concessionary terms would result in sufficient numbers of applications that potential projects could be screened through a variety of provisions, conditions, and restrictions designed to ensure direct small farmer participation in agribusiness. The evaluation evidence suggests that the accumulation of burdensome restrictions as the funds passed through USAID, CDB, and the DFCs on their way to ultimate borrowers severely hampered the ability of the lending institutions (CDB and the DFCs) to disburse funds for their originally intended use, and thus was a major contributing factor to the disappointing results of the project.

Impact: The impact of the two projects was very limited due to an insufficient number of agribusiness projects worthy of support.

4. Principal Recommendations

- o RDO/C should reconcile its agribusiness financing program objectives for the Organization of Eastern Caribbean States (OECS) with its institutional attitudes towards risk.
- o The High Impact Agricultural Marketing Project (HIAMP) should be carefully monitored and regularly evaluated for project performance, achievement, and impact. RDO/C should give HIAMP full support during the critically important early stages of the project. At the same time, RDO/C and project personnel should develop contingency plans which can be used to conserve the Mission's investment in the project should the innovation in agribusiness prove less well targetted than anticipated.
- o RDO/C should publicize the private sector successes which agricultural financing has supported in the OECS states, giving particular emphasis to the achievements of Caribbean entrepreneurs.

5. Lessons Learned

- o Those agribusiness subprojects which had the highest levels of commercial viability also provide the most significant and sustained benefits to the economies of their nations. Those subprojects which were not commercially viable have provided disappointingly few benefits.
- o Project officers and loan approval committees should work closely with potential sub-borrowers to devise a realistic set of targets against which sub-project performance can be measured. While target inflation may be an inherent aspect of project and sub-project proposals, post-approval targets should be set realistically, giving due regard to typical degrees of agribusiness risk and the cost of that risk.
- o The most successful agribusiness sub-projects in the Eastern Caribbean under 007/057 have all been exporting products to market niches in industrialized countries.
- o Privately owned agribusiness projects have been distinctly more successful than government-owned projects.

SUMMARY (continued)

5X

ATTACHMENTS

- K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)
 - o Evaluation of the Regional Agribusiness Development Project and the Agribusiness Expansion Project.

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

The Mission was pleased with the evaluation report and accepted its findings and recommendations as well as statement of the setting as relevant for future project development and implementation. Of the two executing agencies, only the CDB reacted to the report and this was primarily in relation to accuracy of statements.

MISSION COMMENTS ON FULL REPORT

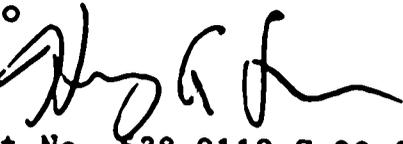
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MEMORANDUM

July 20, 1987

TO: Gerrit Argento

FROM: Harvey Lerner 

RE: USAID Contract No. 538-0118-C-00-6027, LBII Project
No. GG 268
Evaluation, Monitoring and Design of Private Sector
Program and Projects

SUBJECT: Final Report, Regional Agribusiness Development
Project
(USAID Loan No. 538-T-007 and Agribusiness Expansion
Project (USAID Project No. 538-0057))

cc: David Mutchler, Darwin Clarke, Erol Haker, Stanley
Heishman, Peter Medford

I am enclosing herewith four bound copies and one unbound
reproducible copy of the above-referenced final report.

7

Evaluation of the
REGIONAL AGRIBUSINESS DEVELOPMENT PROJECT
(USAID Loan No. 538-T-007)
Implemented by the Caribbean Development Bank
and the
AGRIBUSINESS EXPANSION PROJECT
(USAID Project No. 538-0057)
Implemented by the Latin American Agribusiness Development Co.

FINAL REPORT



Prepared for
USAID, RDO/C
By Louis Berger International, Inc.
June, 1987

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LIST OF TERMS AND ABBREVIATIONS

ABDB	Antigua and Barbuda Development Bank
AID	Agency for International Development (U.S.)
BNB	Barbados National Bank
BDB	Barbados Development Bank
CDB	Caribbean Development Bank
c.i.f.	Cost, insurance and freight (cost of imports)
DAIDB	Dominica Agricultural and Industrial Development Bank
DEVCO	Development Corporation (St. Vincent)
DFC	Development Finance Corporation: National, state-owned, development banks
ECA	Eastern Caribbean Agencies, Ltd.
EEC	European Economic Community
FAO	Food and Agricultural Organization
f.o.b.	Free on Board (price of exports)
GDB	Grenada Development Bank
GDP	Gross Domestic Product
GNP	Gross National Product
IBRD	International Bank for Reconstruction and Development
ICI	Intermediate Credit Institution: Direct recipients of donor funds for on-lending for sub-projects.
IDA	International Development Association
IMF	International Monetary Fund
IRR	Internal Rate of Return
LAAD	Latin American Agribusiness Development Corporation
LDC	Lesser Developed Countries
MSICC	Montserrat Sea Island Cotton Company, Ltd.
NPV	Net Present Value
OECS	Organization of Eastern Caribbean States
PY	Project Year
RAD	Regional Agribusiness Development Project (538-T-007)
RDO/C	Regional Development Office/Caribbean (USAID)
SLDB	Saint Lucia Development Bank
SVSI	Saint Vincent Sugar Industries, Ltd.
SVP	Saint Vincent Plastics, Ltd.
USAID	United States Agency for International Development
USIG	United States Inspector General
WIA	Windward Islands Aloe, Ltd.
WITP	Windward Islands Tropical Plants
007	USAID loan 538-T-007 to the CDB for the Regional Agribusiness Development Project
057	USAID Project 538-G057, "Agribusiness Expansion Project," executed by LAAD

Approximate Exchange Rates: BDS\$2.00 = US\$1.00
EC\$2.70 = US\$1.00

All figures in US dollars unless otherwise specified.

EXECUTIVE SUMMARY

A. BACKGROUND OF THE EVALUATIONS

In January, 1987, Louis Berger International, Inc. undertook the evaluation of two agribusiness development projects financed by USAID's Regional Development Office/Caribbean. The two projects were (1) the Regional Agribusiness Development Project (USAID Project 538-T-007) implemented by the Caribbean Development Bank (CDB) and (2) the Agribusiness Expansion Project (USAID Project No. 538-0057) carried out by the Latin American Agribusiness Development Corporation (LAAD). The CDB project is referred to as "007" and the LAAD project "057."

Exhibit I provides summary data on the utilization of 007 project funds by the CDB. A total of \$6,299,000 was disbursed, starting in December of 1979. Of this amount, \$5,605,000 was disbursed within the OECS states and Barbados, the primary geographic focus of the present evaluation. The remaining \$694,000 was disbursed to the British Virgin Islands, an area outside the primary geographic focus of the evaluation. Only one CDB subproject, Windward Island Tropical in St. Lucia (loan disbursements of \$254,000), was privately owned.

Exhibit II provides summary data on the utilization of 057 project funds by LAAD. A total of \$5,628,000 was disbursed, starting in 1980. Of this amount, \$1,038,000 was disbursed within the OECS states and Barbados to four privately owned businesses located within the primary geographic focus of the evaluation.

The CDB and LAAD projects were evaluated together because:

1. Recent guidance from USAID's Latin America and Caribbean Bureau favors clustered, program-related evaluations, where grouping is possible.

2. The evaluation status of the two projects were similar. Loan disbursements for both projects were complete. The designs of each project prescribed similar evaluation forms and methods for evaluating development impact. Both projects had run their entire course without any of the scheduled evaluations of development impact actually taking place.

3. Each project had targeted a significant amount of financing for agribusiness enterprises in the OECS states, but neither project had much success in finding such enterprises. Combining the evaluation of the two projects permitted examination of a larger number of agribusiness establishments and

EXHIBIT I

CDB UTILIZATION OF 007 FUNDS

----- US\$ '000 -----					
Country	Project Title	Approval/ Agreement Date	Disbursements	Repayments	Outstanding
SUB-PROJECTS:					
British Vir. Isl.	Fisheries Development	5/80	694	-	694
x Grenada	Carriacou Sheep Production	5/80	107	-	107
x Montserrat	Integrated Sea Island Cotton	8/80	644	-	644
x St. Lucia	Windward Island Tropicals	00-84	254	13	241
St. Vincent	Sugar Rehabilitation	8/80	2207	241	1966
TOTAL SUB-PROJECTS			83,906	9254	83,652
DEVELOPMENT FINANCE COMPANIES:					
x Antigua	Farm Improvement	10/80	260	-	260
x Barbados	Agricultural	12/79	882	108	774
x Dominica	Integrated Grapefruit *	3/81	176	33	143
x Grenada	Agricultural/Industrial	4/81	296	-	296
x St. Lucia	Consolidated Credit	10/81	409	-	409
x St. Vincent	Integrated Sugar	10/80	370	25	345
TOTAL DFCs			82,393	8166	82,227
TOTAL 007 FUNDS ACCOUNTED FOR:			86,299		
AUTHORIZED - NOT DISBURSED:			201		
TOTAL 007 FUNDING:			86,500		

				Primary focus	
				of evaluation	

x Indicates Evaluation Team Visit

* Originally intended as project for citrus packaging with related DFC line of credit to citrus growers.

Exhibit II

LAAD UTILIZATION OF 057 FUNDS

----- US\$ '000 -----					
Country	Project Title	Approval/ Agreement Date	Disbursements	Repayments	Outstanding
SUB-PROJECTS:					
Anguilla	Corito Trading Co. Ltd.	10/84	35	2	33
• Barbados	Tillage Services Ltd	12/81	100	113	75
x Dominica	Windward Island Aloe Ltd	4/84	150	-	150
	Windward Island Aloe Ltd	10/85	65	-	65
x St. Vincent	Eastern Caribbean Agencies	80-84-86	600	237	363
• St. Vincent	St. Vincent Plastics	11/81	35	20	15
Turks	Providenciales Fisheries Ltd	6/82	120	81	39
Turks	Trade Winds Industries	10/83	210	-	210
Belize Totals			2150	100	1970
Haiti Totals			170	170	-
Dominican Republic Totals			1905	1092	13
			95,620	92,695	92,933
TOTAL 057 FUNDS ACCOUNTED FOR			95,620		
AUTHORIZED - NOT DISBURSED			372		
TOTAL 057 FUNDING			96,000		

x Indicates Evaluation Team visit

• Indicates telephone interview

Primary Focus of Evaluation

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a better basis for making judgments concerning development in the OECS states.

4. Each project had made loans to only a few agribusiness enterprises. It was anticipated that, by evaluating the two projects together, the likelihood would be increased for adducing lessons that would be applicable to the Mission's High Impact Agricultural Marketing Project (HIAMP) which was launched in mid-1986.

Barbados and the OECS states were the principal geographic focus of the evaluation because that is the Mission's primary focus as well as that of HIAMP. The evaluation team visited Antigua, Barbados, Dominica, Grenada, Montserrat, St. Lucia, and St. Vincent. The team did not visit the British Virgin Islands nor Anguilla where two 007 subprojects were located. Nor did it visit Turks, Belize, Haiti, or the Dominican Republic, where 057 subprojects were located.

The evaluations of the agribusiness projects represent two of some fourteen evaluations of projects within the ambit of RDO/C's Private Sector Program which Louis Berger International, Inc. is carrying out for USAID over a period of two years. Project evaluation results will be synthesized and incorporated into two annual program reports. A "generic scope of work" is applied for the evaluation to analyze the project designs within a standardized program framework. Use of a standardized program framework facilitates comparisons among projects and integration of the results of individual project evaluations into the program reports.

B. FINDINGS

1. Regional Agribusiness Development Project (007)

Project Design

The Regional Agribusiness Project (543-T-007) implemented by the Caribbean Development Bank was designed principally to address problems in market structure for small farmer crops. The Project Paper stated:

"The existing market structure is considered to be possibly the most significant single constraint to increasing small farmer production and incomes in the Region."

The project was expected to reduce this constraint mainly by increasing investment in agribusiness enterprises. Loans and equity investments by CDB and loans by regional and national

development finance institutions were to be made in a geographic area that was defined to include Barbados and the Lesser Developed Countries (LDC's) of Antigua/Barbuda, Belize, Dominica, Grenada, Montserrat, St. Kitts/Nevis/Anguilla, St. Lucia, and St. Vincent.

It was anticipated that food processing enterprises would account for the majority of the investments under the 007 project. However, two other types of enterprises also were eligible for financing, those which reduce the cost of small farmer inputs (e.g., fertilizer mixing, farm implement manufacturing) and those which increase employment opportunities for rural workers in labor intensive enterprises.

The Caribbean Development Bank had primary responsibility for carrying out the project. An "Agribusiness Development Fund" was established within the Bank's Special Fund operations. CDB had responsibility for promotion of an Agribusiness Development Program, identification of eligible subprojects, preinvestment studies, project appraisals, approval of loan applications, coordination of technical assistance to enterprises, and subproject follow-up. The Caribbean Investment Corporation (CIC) and the national Development Finance Corporations (DFC's) were to serve as financial intermediaries and were to make loans under US \$100,000 commensurate with their capabilities under the surveillance of the CDB.

The Agribusiness Development Fund was to be complemented by a US\$450,000 grant to be used by the CDB in commissioning adaptive research technologies appropriate to the Region's resource base and end markets.

Project Outcomes

1. RDO/C's Project Paper anticipated that at the end of the project all loan funds would have been placed in agribusiness enterprises (primarily food processing and input distribution) and in labor intensive enterprises (those which generate significant employment opportunities) and that national development financing institutions would have demonstrated capability in funding such enterprises. The 007 project has failed to achieve these results.

2. Of the \$6,299,000 in loan funds disbursed by the CDB, five subprojects accounted for \$3,906,000 in loan disbursements and appear directly pertinent to criteria established in the Project Paper. Of these five subprojects, four have had serious financial difficulties. The fifth appears somewhat out of compliance with labor intensity standards established by USAID. While a portion of the remaining funds appear to have been distributed by DFC's

to persons who represented intended beneficiaries of the project (small farmers and fishermen) engaged in what loosely could be defined as "agribusinesses," most of these loans were not directed to the kinds of enterprises and purposes identified in the Project Paper.

3. The government-owned St. Vincent Sugar Rehabilitation Project (which rehabilitated a sugar refinery and represented loan disbursements of \$2,207,000) was a clear financial failure and had to be shut down.

4. The Government-owned Carriacou sheep production project in Grenada is in serious financial trouble. The small farmer marketing component of the project has not worked, and modern methods of sheep production have not caught on with small farmers. The project itself employs no more than four people.

5. In the absence of substantial restructuring (probably including privatization), the future of another government-owned project, Montserrat Sea Island Cotton (representing loan disbursements of \$644,000) is very much in doubt. The project is in arrears and has applied for rescheduling of its loan.

6. The government-owned project concerned with fisheries development in the British Virgin Islands (representing \$394,000 in loan disbursements) was not visited by the evaluation team.

7. A privately owned business in St. Lucia which is producing ornamental plants for the U.K. market is the only CDB subproject which is doing relatively well financially. This business (which accounts for \$254,000 in loan disbursements) does not market the production of small farmers, but it does employ some 75 persons who might otherwise have been classified among the rural poor. This business appears to have a capital/labor ratio (total capital investment in US dollars divided by number of full time jobs created) in excess of a \$10,000 limit established by USAID as a measure of the required degree of labor intensity. The limitation, however, is of very doubtful wisdom.

8. The lines of credit extended to the DFCs under 007 were usually combined with other resources and incorporated into existing Farm Improvement Credit programs. Loans were used principally for farm improvement and farm production credits extended directly to farmers and fishermen. Loan purposes included purchase of fertilizer and farm implements, farm vehicles, livestock, and motors for fishing boats. Only in Dominica (grapefruit production loans), and St. Vincent (sugar production loans) were 007 funds loaned to farmers intended to relate to an agribusiness project or enterprise which would buy the farmers' outputs. Even in these countries, it is clear that

DFC loans were used for other purposes as well. There is no convincing evidence that funds disbursed by the DFC's made any lasting contribution to overcoming market structure constraints faced by small farmers in these countries. Nor did the evaluators find that any new farm input or labor intensive enterprises were started with DFC loan funds.

9. The set of conditions attached to most lines of credit extended by the CDB to the DFC's effectively prevented the use of loan funds for the purposes set forth in the project paper. Reportedly at the behest of RDO/C officials, the CDB included in its loan conditions for DFCs restrictions which were mentioned in neither the Project Paper nor the Loan Agreement, but which may have been drawn from an earlier RDO/C agricultural development project. These restrictions (including ceilings on the net worth of the borrower equivalent to US\$56,000) effectively prevented DFC's from making viable loans of the types envisioned in the Project Paper. During the project period, the DFC in St. Lucia used funds other than those available under 007 to make at least one loan under US\$100,000 for the processing of coffee, spices, cocoa, and coconut cream. DFC officials reported that net worth limitations would exclude persons owning a good house and two vehicles-- or virtually anybody who would be in a position to finance successful agribusiness. Officials of the Barbados DFC reported turning down requests for loans from dairy farmers because the value of their livestock and sheds put them above the net worth limitations contained in the arrangements between the CDB and the DFC. Utilization of the resources in the 007-financed lending programs (which also included other resources) by the DFCs in subloans has been roughly half, providing further evidence that effective demand for subloans has been limited, and that other uses had to be found for financial resources.

2. Agribusiness Expansion Project (057)

Project Design

The goal of the 057 project, implemented by LAAD since 1980, has been "to improve the standard of living of the Caribbean poor." The project's sub-goal has been "to stimulate economic and agricultural growth and create employment." The purpose has been "to initiate and expand private agribusiness investments in the Caribbean." The purpose was to be achieved by identifying deficiencies and constraints in agricultural production, processing, distribution and marketing systems and by applying capital, management and technical expertise to improve the functioning of those systems.

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In terms of impact, the project was to: 1) provide additional employment opportunities, particularly for rural small farmers and unskilled or semi-skilled rural labor in agroindustries; 2) increase incomes to members of the above target group; 3) increase production and productivity; 4) expand marketing opportunities; 5) facilitate new product development; 6) increase foreign exchange earnings.

The primary beneficiaries of the proposed project, the rural poor in the areas where LAAD operates, were expected to include both men and women and be composed of both small farmers and landless workers. Operators of mini-agribusinesses providing inputs to the LAAD-financed project could also be beneficiaries. The project was to assist agribusiness entrepreneurs establish operations which would have direct impact (through employment) and indirect impact (through linkages to production) on low income families. Sub-project activities were to encourage small farmers in the area increase or diversify production in order to supply raw materials to processing facilities or related marketing entities, such as cold storage or packaging plants. Landless workers, or farmers whose landholdings are inadequate for reasons of size, quality, or location, would find employment in production or processing operations.

At the time of the project agreement, it was estimated that about 44 sub-projects in the Caribbean basin (including 17 in the OECS and Barbados), in the areas of food production, agricultural inputs, processing, packaging, storage and transportation would be financed in the Caribbean during the four year AID loan.

In addition to the co-financing feature of the project, other major aspects included: additional staff and establishment of a new LAAD office in the Eastern Caribbean to facilitate project identification and development; an expanded role for LAAD in terms of providing more comprehensive financing packages, and extended marketing services and export related services, for example, through linkages with US or regional purchasers. Emphasis was to be placed on those sub-project which would promote trade or contribute to exports for the LDCs. Special priority was to be given to investment opportunities involving the export of non-traditional agricultural-based products to regional and international markets.

The project paper made note of the earlier 007 project, implemented through the CDB, and justified the overlap of activities as follows:

Loan 538-T-007 is fully programmed and investment proposals are in the process of being analyzed. There is likely to be some fallout among these programmed proposals and thus some

competition between LAAD & CDB, however, the competition is not expected to be severe as LAAD will serve some clients who prefer not to utilize the CDB. Also, it is expected that some competition will be healthy for CDB in that CDB may be forced to accelerate its loan approval process.

According to the 057 project paper, written in 1980, LAAD has had an established track record in agribusiness investments in Central America. As an investor or lender, LAAD has sought out agribusiness opportunities with long-term growth potential. LAAD has required any project it financed to make "a meaningful contribution to the economy of the host country." Further, as a private profit making company, LAAD insured that investments demonstrate a return or yield commensurate with the risks involved. When evaluating proposals for financing, LAAD's primary concerns were said to be the capability of the project's management, the product's market growth potential, the competitiveness of the product, its total importance to the local economy, and its impact on employment both directly and indirectly. LAAD has also provided technical and managerial services in addition to financing. The most important of these was said to be assistance in developing and financing a business venture.

The project paper noted that previous efforts to stimulate growth were primarily channeled through the public sector, such as trade incentives, research, and extension programs. "The criticism of this approach, however, has been that it has not worked." Since agriculture is largely a private sector endeavor, 057 was designed to utilize a private sector institution to provide services. This new approach was a direct response to a 1980 study (the York Mission) commissioned by President Carter, which found that donor/government programs aimed at stimulating agriculture were not very effective and in some instances were outright failures, and that new ways of utilizing the private sector more directly should be sought. As the agriculture sector is generally market oriented, highly decentralized and, for the most part, operates on a small-scale basis, the private sector was judged to have a comparative advantage over the public sector in providing necessary technical, financial, and marketing services.

Project Outcomes

1. LAAD has failed to find even half of the US\$8 million worth of investments in the English speaking Caribbean LDCs expected at the outset of the project; and over 60% of the \$3,553,000 which was invested in the English speaking Caribbean went to the single country of Belize. Compared to the 17 potential sub-projects identified in the project paper in the OECS and Barbados

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(involving project investments estimated to total \$3,895,000), LAAD ultimately placed only \$1,038,000 of AID funds in four projects. LAAD invested only \$42,000 of its own resources in RDO/C's area of interest, and placed only \$1.5 million of its own resources in the Caribbean, compared to an expected \$9.3 million.

2. Of the four 057 projects in the Barbados/OECS area, one is performing very well and meeting project objectives, one is making significant progress toward meeting financial and project objectives, one is in doubt, and one has clearly failed and is in liquidation.

3. The most successful of the four 057 projects has been Eastern Caribbean Agencies, Ltd., in St. Vincent. This project involves the purchase from small farmers in St. Vincent, St. Lucia, Jamaica, and Barbados of fresh tropical produce such as breadfruits, mangoes, yams, and okras for export to Canada, the United States, and Great Britain. ECA has collection, storage, packaging, and export distribution facilities which have encouraged small farmer production and have increased the earnings of the small farmer participants (although by somewhat less than originally anticipated). In addition, ECA has contributed significantly to St. Vincent's foreign exchange earnings and, probably, national value added as well.

4. Windward Island Aloe, begun in 1984, has provided the equivalent of about 55 full time jobs, and has introduced a new, non-traditional export crop to Dominica. Although behind schedule compared to the projections made at the time of the loan application, it appears to be a growing foreign-exchange earning venture. In addition, efforts are being made to encourage small farmer production of aloe, which can be processed and marketed through WIA.

5. St. Vincent Plastics, which received a small LAAD loan to expand production of plastic packaging material and banana protection film, is now in uncertain condition, after having suffered a fire in mid 1985. When in full operation, it provided employment to 15 - 20 people, provided products which contributed to the productivity of the banana farmers by saving them from losses of their banana crop; and provided plastic wrapping film which facilitated the marketing of local produce in local outlets. The plant opened again in spring of 1986, and currently employs seven people. There was (and may still be) intra-regional export potential.

6. The Tillage Services Company in Barbados was to provide mechanized land preparation services to small and medium-sized farmers, particularly in sugar cane. Although direct employment was not expected to be substantial, indirect part time field

employment was expected to increase significantly by bringing in acreage that would otherwise be left uncultivated. Due in part to the decline in the sugar industry in Barbados, demand for tillage services fell short of expectations, and the company is in the process of liquidation.

7. The emphasis on agroprocessing anticipated in the project paper has not been forthcoming - only one of the four projects evaluated involved processing of local produce (aloe). The two most successful projects (ECA and WIA) are both involved in export oriented, non-traditional crops involving a special market niche. The most successful project (ECA) addressed the need for collection, storage, and distribution facilities described in the project rationale.

C. CONCLUSIONS

On the basis of the evaluation evidence, it appears that the benefits of the 007 project failed to exceed its costs. Of the \$3.9 million invested in agribusiness subprojects, only one subproject, the Windward Islands Tropical Plants, Ltd (providing about 75 full time job equivalents), is currently self-sustaining. The rest have either closed down, or have been unable to cover their operating costs, and therefore have not been self-sustaining. The \$2.4 million of resources for the DFCs reprogrammed from agribusiness lending ostensibly to small farmer credit programs have not been fully utilized in those CDB-approved agricultural lending programs. Utilization of resources in the agricultural lending programs (including both 007 funds and other resources) for subloans has been only roughly half, indicating there was insufficient demand for the reprogrammed funds. Arrears on subloans in the agricultural lending programs were about 30% as of 1986. Although some of the DFC loans may have been put to good financial and economic use, there is little evidence that the DFC loans have contributed to project objectives (improving markets for small farmer production, reducing costs of small farmer inputs, or generating rural employment).

The 057 project, although establishing or expanding several agribusiness ventures in the Caribbean, found only four agribusiness projects to finance in RDO/C's area of interest, one of which has failed. It appears the LAAD succeeded in negotiating a broad list of eligible countries, including several outside RDO/C's area of interest, which took ultimately over 80% of the project funds.

It therefore appears that the underlying assumption of the two projects, that the provision of credit for agribusiness would release a key constraint and result in the establishment of

significant numbers of new agribusiness ventures (principally engaged in agroprocessing), proved to be unfounded. Although USAID provided \$12.5 million for agribusiness credit, as of 1987 there are only three new or expanded viable agribusiness enterprises in RDO/C's area of interest, each of which appear to have had the potential for successful solicitation of commercial credit. The disappointing results of the two projects suggest that there are binding constraints to agribusiness in the Eastern Caribbean other than credit which frustrated project efforts.

A particularly onerous mistake on the part of the 007 project was the assumption that the provision of agribusiness credit on (slightly) concessionary terms would result in sufficient numbers of applications that potential projects could be screened through a variety of provisions, conditions, and restrictions designed to ensure direct small farmer participation in agribusiness. The evaluation evidence suggests that the accumulation of restrictions as the funds passed through USAID, CDB, and the DFCs on their way to the ultimate borrowers severely hampered the ability of the lending institutions (CDB and the DFCs) to disburse funds for their originally intended use, and played a major role in the disappointing results of the project.

The failure to evaluate both agribusiness projects as called for in their respective loan agreements may have resulted in lost time and resources as far as the agribusiness sector was concerned. Earlier evaluation of the 007 project should have led to earlier attempts at a different approach to support agribusiness. There could have been modification of the above-mentioned restrictions on lending from 007 resources, and/or a more significant departure from traditional project design for the 057 project. Earlier, thorough evaluation of 057 might have hastened the advent of HIAMP, or led to a decision to loosen RDO/C's commitment to the agribusiness sector in the Eastern Caribbean, due to the numerous binding or inherent constraints on the sector which donor agencies are powerless to relieve.

D. RECOMMENDATIONS

1. RDO/C and CDB should reconcile their agribusiness financing program objectives for the OECS with their respective, institutional attitudes toward risk.

Financing agribusiness in the OECS states is not a field for the fearful. Agribusiness is risky business, particularly on small islands with weather, water and soil problems. Careful and judicious policies have an important place in the field of

development finance, but they are not really congruent with achieving bold objectives in the face of previously intransigent constraints. Where collaborative undertakings between two cautious institutions are involved, protective devices affecting subprojects easily can proliferate in response to real or fancied dangers. Under such circumstances, each institution needs to be realistic about how much safety it really requires. If institutional requirements for safety basically preclude commitments to hazardous ventures, and the achievement of program objectives require commitment to such ventures, then either the safety requirements or the program objectives must be changed.

The designers of the 007 project recognized the difficulties of creating financially self-sustaining nontraditional agribusinesses in the OECS states. However, the project design did not squarely face the problem of risk. The project did indeed permit the CDB to devote up to \$1.3 million of the AID loan to equity financing, which was to be used to sweeten marginal situations and accomplish a certain amount of social engineering. However, USAID's financial position was protected by its status as a creditor. In effect, RDO/C was saying to a regional development banking institution with a history of solid but largely traditional achievement: "Let's you take an equity risk on the chanciest aspects of agribusiness in the OECS states," a type of activity that was both perilous and new to CDB. In retrospect, it does not seem surprising that CDB made no equity investment of any kind. Nor is it surprising that CDB did not greatly increase its exposure profile in making a few direct subloans to relatively large agribusiness enterprises. The limited number of credits which it did extend to agribusinesses were to three parastatal enterprises backed by governments (which in turn have traditionally been sustained by donors) and to one enterprise owned and managed by very well-connected and substantial private interests. Subsequent events demonstrated that, in giving the bulk of its enterprise loans to parastatals, the CDB in fact chose its own financial security (government guarantees) over efficiency in the marketplace.

When CDB had difficulty finding a sufficient number of acceptable agribusiness projects of any kind, 007 funds were dedicated to institutionally "safe" DFC small farmer lending programs-- an area in which problems in loan selection and administration would be subject to much less potential criticism than in lending to enterprises. The intention of the 007 project design to develop the capacity of DFCs to finance agribusiness enterprises was defeated before the activity got underway. The cumulative effects of USAID and CDB restrictions and covenants made achievement of this project objective impossible.

in extending the US\$ loan to LAAD. USAID hoped that substantial resources would be put into the OECS states, but the loan terms were structured in such a way that LAAD could invest most of resources in countries with fewer fundamental limitations to agribusiness than those present in the OECS states-- and indeed it did. The performance of the enterprises which LAAD financed in the OECS was better than that of CDB. But LAAD's program in the OECS was basically a failure for lack of sufficient volume, and LAAD closed its regional office. Once again, RDO/C's project design basically said, "Let's you take a risk on agribusiness in the OECS." LAAD chose to take most of its risk elsewhere.

It has been argued by some observers that the lesson of the LAAD project is that there does not exist in the OECS states a sufficient coterie of entrepreneurs who are willing and able to make agribusiness investments; that the problem lies as much in the area of human resources as in the physical characteristics of the region. It was not so much that LAAD was unwilling to undertake risks in the OECS-- so the argument goes-- it was rather that there were not many local businessmen who wished to take the plunge -- and that those few venturers who did have the needed combination of resources and enterprise were not willing to share ownership with outside investors. RDO/C's High Impact Agricultural Marketing and Production Project (HIAMP), currently in its start-up phase, will put such contentions much more rigorously to the test than did LAAD.

2. The High Impact Agricultural Marketing and Production Project (HIAMP) should be carefully monitored and regularly evaluated for project performance, achievement, and impact. RDO/C should give HIAMP full support during the critically important early stages of the project.

HIAMP was in its early stages of implementation at the time the LBII evaluation team examined the agribusiness projects undertaken by CDB and by LAAD. Neither assessment of HIAMP's project design, nor its early progress was within the Scope of Work of the LBII evaluation team. RDO/C did ask, however, that the team identify portents in the histories of the CDB and LAAD projects that could have particular application to the future of HIAMP.

The records of the preceding agribusiness projects clearly indicate that HIAMP project evaluations should not be deferred as they were in the case of CDB and LAAD. Three key questions

should regularly be addressed in the course of quarterly project reviews as well as in evaluations:

a. Is RDO/C giving project management the support it needs, particularly during the critical early stages of the activity?

The history of the 007 project suggests that the responsible parties, RDO/C and CDB, shied away from the riskier and more innovative aspects of the project (including equity investments and direct loans to privately owned enterprises which could, theoretically, declare bankruptcy) from the outset. Is RDO/C's sense of commitment to HIAMP strong enough and its tolerance of risk high enough so that RDO/C will be able to provide needed support to the project when and if the going gets really tough?

b. Will enough investors come forward to invest in new or expanded agribusiness activity to justify the magnitude of the resources programmed for the project?

The experience of 007 and 057 suggests that the scope for agribusiness investment in the Eastern Caribbean may be quite limited. Although HIAMP may be better designed and staffed to make optimal use of those opportunities which do exist, its potentials may be of a much lower order of magnitude than anticipated in the project design.

c. Will HIAMP hold to an approach in which private investors control subprojects and bear the larger share of equity risks?

If it is true that local OECS agribusiness investors are few in number and unwilling to share control with outsiders (one interpretation of the LAAD's results in the area), pressures to show project accomplishment and to move RDO/C funds could result in the "parastatalization" of HIAMP in a number of subtle and not-so-subtle ways. An analogous "reversion to type" took place in the 007 project as pressures to move money produced a throw-back to the earlier 006 small farmer loan project financed through CDB by RDO/C. A basic premise of USAID's support for the private sector is that when ventures are controlled by businessmen and the largest share of risks are borne by them, the likelihood of successful outcomes is greater than when control and risk lies with governmental instrumentalities. It will be advisable for project reviews to

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analyze arrangements made by HIAMP with a keen eye as to how subproject control and risk in actuality is distributed between the private and public sectors.

3. The Montserrat Sea Island Cotton Project should be restructured for privatization or closed down.

According to the current company manager, the prospects for the Montserrat Sea Island Cotton Company to achieve financial viability in hand weaving of Sea Island cotton are negligible. The concept of an "integrated industry" with Sea Island cotton and local hand weaving should be abandoned. Hand weaving of cotton products can proceed with other strains of cotton, purchased locally or imported, depending on which offers the lowest price. Sea Island Cotton should be sold for the highest possible price on any market. A Sea Island Cotton Industry might be feasibly built up on a step-by-step basis, with the initiation of each new step contingent upon commercial viability.

4. The Carriacou Sheep Project should be restructured or closed down.

As currently designed and staffed, the Carriacou sheep project is generating very little income and yielding almost no benefits. The project manager and the local Agricultural Officer have both petitioned the Ministry of Agriculture in Grenada to either take steps to improve the project (which would require fresh funds) or terminate the project. Although the official decision of the Government of Grenada was to continue with the project, no action has yet been taken to improve the project. Project performance has lagged very far behind projections, and- even with the sale of assets--the project has continued to show a substantial negative cash flow.

5. RDO/C and/or other institutions should publicize the private sector successes which CDB and LAAD financing have supported in the OECS states, giving particular emphasis to the achievements of Caribbean entrepreneurs.

Recognition of entrepreneurial success in the agribusiness area can have the effect of encouraging other local businessmen to start new agribusiness ventures. RDO/C, LAAD, CDB, and perhaps' local business associations should collaborate on appropriate publicity and/or awards. While the importance of development financing should be recognized in such publicity, the focus of such publicity should be on the success of the owners and managers of the assisted enterprises. Eastern Caribbean

Agencies, Ltd. is particularly deserving of recognition on the basis of its performance to date. Windward Island Tropical Plants and Windward Islands Aloe may be candidates for such recognition in the near future if their performance continues to improve.

6. Project officers and loan approval committees should work closely with potential sub-borrowers to devise a realistic set of targets against which sub-project performance can be measured. While target inflation may be an inherent aspect of project and sub-project proposals, post-approval targets should be set realistically, giving due regard to typical degrees of agribusiness risk and the cost of that risk.

All the sub-projects evaluated had difficulty meeting the targets set for them at the time of the pre-funding analysis. In most cases, the shortfall had less to do with the capabilities of the implementors, and much more to do with inflated forecasts (see Appendix B). The problem of inflated forecasts has plagued many RDO/C private sector projects, and is clearly related to the "selling job" required for donor funding. A retrospective assessment indicates that "sensitivity analyses" of anticipated subproject rates of return usually failed to encompass the range of fluctuation in prices and outputs that are characteristic of agribusiness. Embedded in the sophisticated veneer of subproject appraisals have been some credulous assumptions concerning the predictability of prices and costs, and concerning the magnitudes of the risks associated with agribusiness projects. The appraisals lack a fundamental sense of reality, and an understanding of the dangers and opportunities for investors--and for every institution associated with the agribusiness financing process.

E. USAID PROGRAM LESSONS LEARNED

1. Those agribusiness subprojects which had the highest levels of commercial viability also provided the most significant and sustained benefits to the economies of their nations. Those subprojects which were not commercially viable have provided disappointingly few economic benefits.

On the basis of the evaluation evidence, it is clear that those agribusiness ventures financed by 007/057 which have been commercially viable are also those which have provided the sought for economic benefits in the form of employment, exports, and increasing the standards of living of the poor. Those agribusinesses which have not been commercially viable have not been able to deliver significant benefits to the target group (Refer to Exhibit VI.1, below). The most commercially successful

project has been the largest purchaser from small farmers. The creators of the largest amounts of employment are the three most commercially successful projects. The commercially successful subprojects have provided the highest levels of quantifiable benefits to intended project beneficiaries.

2. Privately owned agribusiness projects have been distinctly more successful than government-owned projects, but some of the private projects reviewed in this evaluation have experienced financial difficulties.

The three most successful projects examined during the evaluation were all privately owned. None of the public sector agribusiness subprojects could be described as successful. LAAD was more private-sector oriented than CDB, which may help to account for their relatively higher success rate in agribusiness, although they, too found it difficult to find viable projects in the Eastern Caribbean. It appears that CDB was hampered in part by its public sector outlook, which, in combination with the onerous USAID loan conditions, led CDB's loan officers to avoid the private sector almost completely.

3. Loans to parastatal enterprises covered by Government guarantees cannot be assumed to be ultimately "safe" loans.

The CDB placed \$3.0 million in three parastatal agribusiness subprojects, none of which demonstrated self-sufficiency. The responsible governments are repaying their loans to CDB, and CDB is repaying its loan to USAID. However, the productive resources in which the loans have been invested have been underemployed or dissipated. One failed and was closed, and the other two would require major restructuring and new resources in order to achieve viability. In the end, the loans must be repaid. Wasted resources must be paid for by the economies of the nations whose governments guaranteed the loans and/or by those donors (including USAID) who continue to provide assistance to the economies of these countries.

4. The most successful agribusiness sub-projects in the Eastern Caribbean under 007/057 have all been exporting products to market niches in industrialized countries.

The successful projects among the two portfolios were all oriented toward an export market niche. A "niche" requires only a modest scale of inputs: Windward Island Aloe produces on about 70 acres, Windward Island Tropical Plants produces on 30 acres, and Eastern Caribbean Agencies collects production from roughly

1000 - 2000 acres of mostly small plots (averaging about two acres each) scattered through St. Vincent, St. Lucia, Barbados, and Jamaica. The export markets of North America and Europe provide a scope which is larger by many orders of magnitude than the markets of the Eastern Caribbean. The potential promise of the Montserrat Sea Island Cotton Company, too, lies in just such a niche in the export market.

I. INTRODUCTION

In January, 1987, Louis Berger International, Inc. undertook the evaluation of two agribusiness development projects financed by USAID's Regional Development Office/Caribbean (RDO/C). The two projects were: (1) the Regional Agribusiness Development Project (USAID Project 538-T-007) implemented by the Caribbean Development Bank (CDB) and (2) the Agribusiness Expansion Project (USAID Project No. 538-0057) carried out the Latin American Agribusiness Development Corporation (LAAD). The CDB project is referred to as "007" and the LAAD project as "057."

This evaluation report is composed of six sections. This introduction, Chapter I, describes the methodology of the evaluation, outlines the geographic and temporal scope of the evaluation, describes the contextual setting in which the projects were initiated, provides an overview of loan purposes and utilization, and summarizes the findings of previous evaluations.

Chapter II, "Constraints on Agribusiness Development," provides a general overview of economic circumstances in the Caribbean, highlighting the major constraints to agricultural and agribusiness development.

Chapter III, "Sub-project Agribusiness Financing by CDB and LAAD" analyzes of each of the sub-projects examined by the evaluation team in terms of sub-project achievements, difficulties experienced and an overall assessment of performance.

Chapter IV, "Lines of Credit to Development Finance Corporations under 007," analyzes each of the lines of credit extended to various Development Finance Corporations (DFCs) via the CDB under 007. Purposes and performance of the subloans made by the DFCs are highlighted.

Chapter V, "Project Impacts and Application of Generic Scope of Work," summarizes the impact of the projects on the basis of their goals, purposes and other identifiable objectives within the framework of RDO/C's private sector program.

Chapter VI, "Conclusions, Recommendations, and Lessons Learned," discusses major findings of the evaluation, makes recommendations with regard to the two agribusiness projects under review as well as considerations applicable to the recently initiated High Impact Agricultural Marketing and Production Project (HIAMP), and discusses lessons learned for RDO/C's private sector program.

Appendix A contains the scope of work for the evaluation. Appendices B and C provide greater detail on each of the individual sub-projects and DFC lines of credit, respectively. Appendix D lists research studies conducted in conjunction with the 007 project. Appendix E describes the evaluation team assignments and qualifications.

The evaluations of the CDB and LAAD agribusiness projects represent two of some fourteen evaluations of projects within the ambit of RDO/C's Private Sector Program which Louis Berger International, Inc. is carrying out for USAID over a period of two years. Project evaluation results will be synthesized and incorporated into two annual program reports. A "generic scope of work" is applied in each evaluation to analyze the project design within a standardized program framework. Use of a standardized program framework facilitates comparisons among projects and integration of the results of individual project evaluations into the program reports. The Generic Scope of Work is reproduced in Appendix A.

A. EVALUATION METHODOLOGY

The evaluation team began with a review of relevant project documents: the respective project papers and loan agreements, recent LAAD quarterly reports to USAID, the Inspectors General's 1985 audit of selected agricultural projects (which included some subprojects under the 007 project) and a study of private sector lending by Arthur D. Little, Inc. (which included some of the 007 loans to Development Finance Corporations). The evaluation team then conducted interviews with RDO/C and CDB personnel involved in the project (including the RDO/C Agricultural and Rural Development Officer, who was involved in the design and implementation of the 007 project, and the Senior Manager for Agriculture and Industry at CDB). The team then visited the President of LAAD in Miami, sub-projects and Development Finance Corporations (DFCs) in Antigua, Barbados, Dominica, Grenada, Montserrat, St. Lucia, and St. Vincent. Sub-project prefunding analyses, received by the evaluation team after most of the visits had been conducted, provided background information.

The evaluations were conducted on two levels: Each of the two parent projects, 007 and 057 (as well as each of the sub-projects), were evaluated in terms of their own internal targets and objectives and by means of the "Generic Scope of Work" for the RDO/C Private Sector Program.

The CDB and LAAD projects were evaluated together because:

1. Recent guidance from USAID's Latin America and Caribbean Bureau favors clustered, program-related evaluations, where grouping is possible.

2. Each project had targeted a significant amount of financing for agribusiness enterprises in the OECS states, but neither project had much success in finding such enterprises. Combining the evaluation of the two projects permitted examination of a larger number of agribusiness establishments and a better basis for making judgments concerning development in the OECS states.

3. The evaluation status of the two projects were similar. Loan disbursements for both projects had been completed. The designs of each project prescribed similar evaluation forms and methods for evaluating development impact. Both projects had run their entire course without any of the scheduled evaluations of development impact actually taking place.

4. Each project had made sub-loans to only a few agribusiness enterprises. It was anticipated that, by evaluating the two projects together, the likelihood would be increased for adducing lessons that would be applicable to the Mission's High Impact Agricultural Marketing Project (HIAMP) which was launched in mid-1986.

B. GEOGRAPHIC SCOPE OF EVALUATION

Exhibit I.1 presents the geographical breakdown of eligible territories provided for in the loan agreements covering 007 and 057. The CDB loan and grant agreements were amended in June, 1980 to include the British Virgin Islands, the Cayman Islands, and the Turks and Caicos Islands as eligible territories. The groupings are presented for ease of reference in this report and the countries were not grouped as such in the Project Papers. Group A represents the primary interest area of RDC/C.

Exhibits I.2 and I.3 show the individual sub-project investments made by both CDB and LAAD from 007 and 057 funds in their respective eligible countries. Those marked with an "X" represent those sub-projects and DFCs which were visited by the Evaluation Team during the period February 13th - 21st. Those marked with a "*" were interviewed by telephone only. The following comments on each ICI listing are appropriate to an understanding of the Evaluation Team coverage (from a geographical standpoint) of utilization of USAID funds by each project.

Exhibit I.1

Geographic Scope

Eligible Countries marked X (1) -----	CDB ---	LAAD ----
Group A (Primary Interest Area of RDO/C: ----- OECS plus Barbados)		
Anguilla	X	
Antigua-Barbuda (4)	X	X
Barbados (2) (4)	X	X
Dominica (4)	X	X
Grenada	X	
Montserrat (4)	X	X
St. Kitt-Nevis (4)	X	X
St. Lucia (4)	X	X
St. Vincent (4)	X	X
Group B (Other English speaking LDCs) -----		
Belize (4)	X	X
British Virgin Islands (4)		X
Cayman Islands (4)		X
Turks and Caicos (4)		X
Group C (Other Caribbean nations) -----		
Dominica Republic		X
Guyana		X
Haiti		X
Jamaica		X
Trinidad/Tobago (3)(4)		X
Other AID Approved (4) -----		X

- (1) As specified in the Project Papers 1977 and 1980
- (2) CDB was limited to \$1 million out of the \$6.5 million for Barbados unless Aid agrees otherwise.
- (3) "Under special circumstances". Irrelevant since as of its 1985 Annual Report LAAD had no investments from whatever source in Trinidad/Tobago.
- (4) The LAAD Project Authorization dated 8/29/80 contained a covenant that no less than \$4 million of the loan would be utilized in these countries. Additionally, the \$4 million could geographically be invested "for projects impacting on such countries."

Exhibit i.2

CDB UTILIZATION OF 007 FUNDS

		----- US\$000 -----					
		----- USAID -----					
Country	Project Activity	Approval/ Agreement Date	Total Investment	Appro- vals	Disburse- ments	Status as of 31/12/86 Repayments	Balance
-----	-----	-----	-----	-----	-----	-----	-----
SUB-PROJECTS:							

British Vir. Isl.	Fisheries Development	5/80	793	705	694	17	677
x Grenada	Sheep Production, Carriacou	5/80	322	107	107	2	105
x Montserrat	Integrated Sea Island Cotton	8/80	858	644	644	-	644
x St. Lucia	Windward Island Tropicals	80-84(1)	936	254	254	26	228
St. Vincent	Sugar Rehabilitation	8/80	7680	2237	2207	276	1931
	TOTAL SUB-PROJECTS		110,589	83,947	83,906	8321	83,585
DEVELOPMENT FINANCE COMPANIES:							

x Antigua	Farm Improvement	10/80		260	260	-	260
x Barbados	Agricultural	12/79		924	882	108	774
o Dominica	Integrated Citrus Development	3/81		176	176	33	143
x Grenada	Agricultural/Industrial	4/81		296	296	-	296
x St. Lucia	Consolidated Credit	10/81		500	409	-	409
x St. Vincent	Integrated Sugar	10/80		370	370	25	345
	TOTAL DFCs			82,526	82,393	8166	82,227
	TOTAL 007 FUNDS ACCOUNTED FOR:				86,299		
	AUTHORIZED - NOT DISBURSED:				201		
	TOTAL 007 FUNDING:				86,500		

x INDICATES EVALUATION TEAM SITE VISIT
o INDICATES TELEPHONE INTERVIEW ONLY

(1) Two loans of \$184,000 and \$70,000

Source: CDB Financial Files, Feb. 28, 1987

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1. CDB Projects Visited by the Evaluation Team

CDB made loans to five subprojects and six Development Finance Corporations (DFCs). The evaluation team visited subprojects in Grenada, Montserrat, and St. Lucia; and DFCs in Antigua, Barbados, Dominica, Grenada, St. Lucia, and St. Vincent.

The British Virgin Islands fisheries development project was excluded from the site visit schedule due to its relatively remote location, because it was outside RDO/C's primary area of interest and because of time constraints. The St. Vincent sugar rehabilitation project has been closed down for several years (see Chapter III of this report) and there were neither personnel nor facilities to be visited. The Evaluation Team, therefore, visited nine out of a possible eleven CDB sub-projects and DFCs financed by 007 funds.

2. LAAD Projects Visited by the Evaluation Team

LAAD financed twenty projects in eight countries, but only five of these projects were in the Eastern Caribbean. The evaluation team visited projects in Dominica and St. Vincent, and interviewed two more project principals by telephone in Barbados and St. Vincent. One of the five Eastern Caribbean projects was in Anguilla, which is now a British Colony and technically not an OECS state. Of the 15 remaining non-OECS projects, seven were in Belize, five were in the Dominican Republic, one was in Haiti, and two were in the Turks and Caicos.

Two-thirds of the 057 AID funds, i.e. \$4 million of the total \$6 million, were to be used in the English speaking LDCs (which included Belize). The Evaluation Team eliminated Belize from its survey for several reasons: the economy, land area, business climate, and other related factors are quite different from the Island States; Belize activities are under scrutiny from AID/W, which is the stated reporting and evaluation center under previous loans and under 057; and the travel time required to review five projects there would have been excessive. The Dominican Republic and Haiti were eliminated for essentially the same reasons. The above three countries are not of prime interest to RDO/C. Relative to specific Island States' projects under 057, the following comments are pertinent:

- 1) The Anguilla Trading Company loan of \$35,000 was eliminated because it is currently outside RDO/C's area of primary interest (OECS states), and because of the small amount of funds involved.

- 2) The two Turks and Caicos investments were eliminated due to distance and lack of prime RDO/C interest.
- 3) The Barbados Tillage Services Company equity/loan investment is in foreclosure (see Chapter IV) and the Evaluation Team could only speak to the local principal by telephone.
- 4) The St. Vincent Plastics Company could not be contacted at the time of the field survey, so interviews were conducted by telephone. (See Chapter IV)

The Evaluation Team therefore conducted site visits at two sub-projects: Windward Islands Aloe, Ltd. (Dominica), and Eastern Caribbean Agencies, Ltd. (St. Vincent); and telephone interviews with two more: Tillage Services, Ltd. (Barbados) and St. Vincent Plastics, Ltd.

C. TIME FRAME OF EVALUATION

The CDB 007 Project Agreement was signed in March, 1978, and loan activity began in 1979. The current evaluation thus covers a span of nearly nine years of activity. All sub-project loans were approved by CDB in 1980 and 1981, except for a second loan in 1984 to the one private sector activity in the CDB portfolio. All DFC lines of credit were approved between 1979 and 1981.

The LAAD 057 Project Agreement was signed in September, 1980, and project activity began a little later in 1980. The current evaluation thus covers a span of six years of activity.

D. PROJECT DESIGNS IN CONTEXT

The project designs for both 007 and 057 need to be understood in the context of the development milieu of both USAID and the Caribbean at the time the projects were being developed. In 1977, when the 007 project paper was written, the USAID mission in Barbados was engaged in no direct, bilateral activities; most USAID assistance was channeled through regional institutions, the most important of which was the Caribbean Development Bank. The small USAID staff in Barbados worked closely with the CDB and other regional agencies, and implemented no projects directly from the mission.

Throughout the Caribbean, there was a strong effort towards regional self sufficiency and import substitution, particularly in food. Caricom had recently published a Food/Nutrition strategy document which advocated greater self-sufficiency in food

production as a goal for the region. However, much of the supporting research, documentation, information, and guidelines, (where not related to the traditional export crops of the region - sugar, bananas, coconut, etc.) were academically oriented and not well suited to the clientele of existing and potential food producers in the region: primarily small farmers.

In USAID, there had begun a trend away from investment in large scale enterprises such as agribusiness. Policy at USAID placed greater emphasis on basic rural and agricultural development, with a focus on the "poorest of the poor" as the primary target group for USAID activity. Anything which appeared to work on the principle of "trickle down" was eschewed in favor of a more direct approach to the intended beneficiaries. The "Green Revolution," although a technical success, was being criticized by many people as benefitting large, wealthy farmers and agribusiness at the expense of small farmers. In the donor agencies as well as the academic communities, the philosophy of "Small is Beautiful," making use of appropriate technology, had considerable influence, although many development professionals understood that a purely "bubble up" strategy would be difficult to implement effectively.

1977 saw the initiation of the Integrated Agriculture Development Project ("006"), which was to increase the income of small farmers and to diversify the production base in the Caribbean from the traditional crops. The 006 loan was designed explicitly to lend agricultural production credits to small farmers, via the CDB and its affiliated DFCs, and contained numerous restrictions on loan uses. The 006 project paper makes reference to the then-proposed 007 project, which it says "would directly complement this [006] project by helping to ensure larger and more stable markets for small farmer crops. It represents a logical follow-on to this [006] project."

1. Project Design of 007

While the 006 project focussed on agricultural production, and was intended to reach small farmers directly, the 007 project (and the 057 project after it), was focussed on the constrained markets for agricultural production, and was intended to benefit small farmers and the rural poor indirectly, primarily by expanding the markets for their output.

The 007 Project Paper stated:

The existing market structure is considered to be possibly the most significant single constraint to increasing small farmer production and incomes in the Region.

The project was expected to reduce this constraint mainly by increasing investment in agroprocessing enterprises which would purchase regularly from small farmers, specifically defined in the loan agreement as "those whose agricultural exploitations are under twenty-five acres in size." Loans and equity investments in agribusiness by CDB and loans to agribusiness by regional and national DFCs were to be made in a geographic area that was defined to include Barbados and the Lesser Developed Countries (LDC's) of Antigua/Barbuda, Belize, Dominica, Grenada, Montserrat, St. Kitts/Nevis/Anguilla, St. Lucia, and St. Vincent.

The financial plan of the Project Paper specified that the \$8.5 million project loan to CDB could be utilized in two ways: \$5.2 million was to be used for loan financing of agribusiness enterprises and up to \$1.3 million could be used for equity financing of agribusiness (which if unutilized could be used for loan financing). Under the Logical Framework, two of the verifiable indicators of project output were 52 subloans totalling \$5.2 million and 28 equity investments totalling \$1.3 million.

The Caribbean Development Bank had primary responsibility for carrying out the project. An "Agribusiness Development Fund" was established within the Bank's Special Fund operations. CDB had responsibility for promotion of an Agribusiness Development Program, identification of eligible subprojects, preinvestment studies, project appraisals, approval of loan applications, coordination of technical assistance to enterprises, and subproject follow-up. The Caribbean Investment Corporation (CIC) and the national Development Financing Corporations (DFC's) were to serve as financial intermediaries and were to make loans under \$100,000 commensurate with their capabilities under the surveillance of the CDB.

The Agribusiness Development Fund was to be complemented by a \$450,000 grant to be used by the CDB in commissioning adaptive research technologies appropriate to the Region's resource base and end markets. Selection of the research projects was to be based on the following criteria:

- (a) the technologies to be developed should have direct utility in the agribusiness development program
- (b) the technology to be developed would be of utility to more than a single facility
- (c) all basic research was to have been completed, therefore, effective application to the Region would require only adaptive research.

It was anticipated that agroprocessing enterprises (or agricultural storage and distribution enterprises) which could expand or stabilize the market for small farmer production would account for the majority of the investments under the 007 project. However, two other types of enterprises also were eligible for financing, those which manufacture or distribute agricultural inputs to small farms, and therefore reduce the cost of small farmer inputs (e.g., fertilizer mixing, farm implement manufacturing) and those which increase employment opportunities for rural workers in labor intensive enterprises.

Specific criteria, as established in an Annex to the project paper, were listed as follows:

CRITERION A: The proposed Project will Expand/Stabilize the Market Opportunities for Small Farmer Production [Mostly agroprocessing, storage and distribution enterprises].

Evidence should be presented that the proposed project will benefit the target group through one or more of the following:

1. Decreased range of short or long term price fluctuations of a commodity produced by small farmers.
2. Increased total annual quantities demanded of a commodity produced by small farmers.
3. Reduced proportion of physical product losses sustained by small farmer commodity between harvest and consumption.
4. Reduced cost of accomplishing transport, handling, exchange, and other functions incident to marketing of commodity produced by small farmers.

CRITERION B: The Proposed Project will Reduce Small Farmer Cost of Production [mostly manufacture or distribution of agricultural inputs]

Evidence should be presented that the proposed project will benefit small farmers in one or more of the following:

1. Introduction of new, more appropriate, or less costly small farm implements that increase labor or land productivity.

2. Increased convenience, availability, or timeliness of supply of recommended technical production inputs to small farmers.
3. Reduction in the purchase price or distribution cost of recommended production inputs or services.

CRITERION C: The Proposed Project Creates a Substantial Amount of Direct Employment in Rural Areas [labor intensive employment generation]

Evidence should be presented that the proposed project investment will demonstrate a capital employment ratio no greater than \$7500.

The USAID agricultural development officers had correctly identified some key constraints facing small farmers (i.e., poor markets for their outputs and high costs for their inputs) and tried to design a project to relieve those constraints. However, the lack of scale economies which create the farmers' constraints would likewise plague 007's agribusinesses; and it appears that the project design was not sufficient to overcome the evident scale constraints facing it. This judgement is not simply a matter of hindsight - the 007 project paper, written in 1977, lists essentially the same obstacles to agribusiness expansion that are cited in Chapter II of this report:

... the seven LDC's have small populations which severely limit the size of domestic markets, labor supply and economic advantages of scale in production, administration, and distribution... The relatively high cost per capita of the public sector will continue to burden these economies...

... agricultural conditions in the Eastern Caribbean Islands are not very favorable. However, the potential for agriculture in the area, no matter how modest, is not being realized and the inhibiting constraints are more complex than just poor natural endowments...

...The market organization for root crops, fruits, vegetables and livestock is poor and leaves the farmer faced with high risk and uncertainty, high transport and exchange cost, and substantial physical product losses. The opportunities for the small farmers to sell non-export crops is limited to the fresh market since food processing industries in the LDCs are insignificant or non-existent. Thin domestic markets on each island, characterized by scarcity and glut, allow for little more than home garden

scale production. Exports within the Region of fresh food crops suffer from insufficient market information flows and unreliable transportation facilities. It is speculated that locally grown fresh food crops, while having only slight price advantages over imported produce, lack consistent quality and quantity required by the tourist industry.

... The combination of low yield and high production cost probably place the Caribbean LDCs in the position of having few, if any, agricultural commodities in which the area has a comparative advantage vis-a-vis world markets. Moreover, these islands of the ECCM may lack comparative advantages in the production of staple foods for domestic consumption... [due to] antiquated tenure systems that leave the small farmers insecure and unwilling to make long term capital investments... [the fact that] access to unused land held by large estates is limited for small farmers, reportedly due to a preference of estate owners to forego rents rather than give small farmers any claim on the land...

Raw Material Supplies: Inadequate supply of crops suitable for processing is generally judged to be a formidable obstacle to establishing food processing in the Eastern Caribbean. The limited area planted to food crops and relatively low yields in the region have already been discussed, as has the difficult and thin market situation usually confronting the small farmer. It appears to be a "Chicken and Egg" situation where an increased demand would be matched by supply and vice versa. In any case, current supply quantities of almost all domestic food crops are low in the LDCs and effectively inhibit agribusiness investment.

Technology: Inappropriate scale of industrial equipment available for many food processing and agricultural input manufacturing activities frequently precludes agribusiness investment in the Eastern Caribbean... **Lack of Agribusiness Precedents...** ancillary services including credit, transport, marketing and distribution, equipment maintenance, and public sector services often lack experience or familiarity with the needs of agriculturally related industry... **Lack of Credit Availabilities...** The commercial banking sector... has not responded to the credit needs of agribusiness or labor intensive small enterprises... **Lack of Promotion...** [there are] inadequate institutional mechanisms and funding sources within the Region capable of systematically identifying and developing potentially viable agribusiness projects....

The section of the 007 project paper on "Background" (five pages) is cast in pessimistic terms, and the section on "Constraints" itself runs for over five pages. It seems that the personnel involved in the project at the Barbados mission were well aware of the severity of those constraints. The 007 project was to provide credit to the agribusiness industry, which was in turn supposed to relieve the market constraint for the agricultural production sector (for which 006 was intended to relieve a credit constraint), and the two projects together were supposed to solve the "Chicken and Egg" market/input problem of agriculture and agribusiness in the Eastern Caribbean, although the only constraint addressed to any significant degree was credit availability.

As if the constraints themselves weren't sufficiently daunting, the project designers added their own obstacles to a successful outcome. Although the premise of the project required that the target group remain indirect beneficiaries, it appears that the project designers wished to avoid the accusation of "trickle down" at all costs. The overriding concern for reaching the target beneficiaries (small farmers and the rural poor) was reflected in guidelines presumably deriving from USAID Washington, and was a major feature of the 006 project; but the concern was strong enough that it got incorporated into the 007 Project Paper as well, in "Other Sub-project Considerations":

In developing projects which contribute to the above objectives, the CDB will seek to incorporate, to the extent possible and where appropriate, the following elements which tend to strengthen the forward and backward linkages of the enterprise to the target group: Where such elements are considered essential to ensuring the desired target group benefits, the CDB and DFCs shall require subborrowers, under the terms of the subloan agreement, to implement these elements of the project.

- 1) contract buying
- 2) Employee profit sharing
- 3) Cooperative ownership
- 4) Small farmer equity participation
- 5) Enterprise services to small farmer suppliers, e.g. credit, credit-in-kind, technical assistance, etc.

Such arrangements might have been expected to deter most potential investors in agribusiness, especially in a part of the world where such arrangements (particularly the second, third and fourth of the list above) run counter to normal entrepreneurial practices. Recognizing this difficulty, the project paper explicitly eschews any special effort to "maximize private sector involvement in the agribusiness program," at least initially.

The use of equity financing, as described in Annex I to the 007 loan agreement was further restricted in that it was:

conditioned upon a determination that either:

(1) Equity financing is necessary to ensure the financial viability of an otherwise viable, eligible enterprise -- that is, where an entrepreneur wishes to establish or expand a potentially viable enterprise but is unable to meet current CDB lending criteria, i.e., (a) borrower contribution of at least 40 percent and (b) adequate security coverage of CDB loans;

(2) Equity participation is to be held by the Bank, with the objective of subsequently transferring such equity to small farmer raw material suppliers of the enterprise or cooperatives or other organizations consisting of such farmers... Where this is not possible the Bank shall seek to transfer such equity to other nationals of borrowing member countries of the Bank.

Until December, 1979, there were no disbursements from 007, and the only activities appeared to be the "adaptive research" under the \$450,000 grant. Presumably, CDB was having difficulty finding viable agribusiness sub-projects. The very first disbursement from 007 funds was a loan to the Barbados National Bank, which was to function as a DFC and provide loans under 007 of up to US\$100,000. The loan agreement between CDB and BNB contained explicit restrictions (as mentioned in the 007 loan agreement) against making a subloan for:

- (a) the purchase of land and/or existing buildings;
- (b) providing working capital (except where required for start-up operations);
- (c) refinancing;
- (d) equity investments; or
- (e) any other purpose which is excluded from financing by the Bank.

and restrictions (which are not found in the 007 Loan Agreement) against making a subloan to:

- (a) any person whose net worth (including the net worth of such person's spouse) exceeds one hundred and fifty thousand Barbados dollars (Bds\$150,000);

- (b) any company which has among its members any body (other than the Bank) or person whose net worth (including the net worth of the person's spouse) exceed one hundred and fifty thousand Barbados dollars (Bds\$150,000)...1

According to a USAID agricultural officer who participated in the negotiations with the CDB (both over the 007 loan agreement and over later implementation decisions, including the terms of the loan to the BNB), the officials of the CDB pointed out that such restrictions attached to the loan would make disbursement difficult and could perhaps defeat its ostensible purpose. Nonetheless, USAID insisted on those terms and conditions, (including, verbally, the "net worth" criteria) apparently to ensure that funds reached the intended beneficiaries, even if such restrictions precluded the success of the project.

2. Project Design of 057

At the same time that the CDB finally began to lend its 007 funds, the 057 project was being created, and the absence of the types of restrictions discussed above probably accounts for the (marginally) better performance of that project.

The goal of the 057 project, implemented by the Latin American Agribusiness Development Company (LAAD) since 1980, has been "to improve the standard of living of the Caribbean poor." The project's sub-goal has been "to stimulate economic and agricultural growth and create employment." The purpose has been "to initiate and expand private agribusiness investments in the Caribbean." The purpose was to be achieved by identifying deficiencies and constraints in agricultural production, processing, distribution and marketing systems and by applying capital, management and technical expertise to improve the functioning of those systems. The project rationale stated the following:

Far more than in other areas of the world, the Caribbean, with its small territories in relative isolation, faces a situation in which specific agribusiness projects are a necessary condition for specific agricultural developments. In the eastern islands in particular, the availability of warehousing, transportation and marketing services will determine the viability of export, and even domestically oriented agricultural development. Similarly, the develop-

1. Provisions applicable to CDB loan 6/SFR-BDS to the Barbados National Bank; Article X, Section 10.01, (S)(1)(a).

ment of processing industries, which either reduce the bulk of agricultural shipment or transform perishable products into a more easily transportable form, will often make the difference between a feasible line of agricultural development and one which is not economically viable. In short, agribusiness is both an important sector in its own right, and an important determinant of the development of the agricultural sector itself.

As was the case with 007, the 057 project would supply credit to agribusiness and the benefits would follow.

In terms of impact, the project was to: 1) provide additional employment opportunities, particularly for rural small farmers and unskilled or semi-skilled rural labor in agroindustries; 2) increase incomes to members of the above target group; 3) increase production and productivity; 4) expand marketing opportunities; 5) facilitate new product development; 6) increase foreign exchange earnings.

The primary beneficiaries of the proposed project, the rural poor in the areas where LAAD operates, were expected to include both men and women and be composed of both small farmers and landless workers. Operators of mini-agribusinesses providing inputs to the LAAD-financed project could also be beneficiaries. The project was to assist agribusiness entrepreneurs establish operations which would have direct impact (through employment) and indirect impact (through linkages to production) on low income families. Sub-project activities were to encourage small farmers in the area increase or diversify production in order to supply raw materials to processing facilities or related marketing entities, such as cold storage or packaging plants. Landless workers, or farmers whose landholdings are inadequate for reasons of size, quality, or location, would find employment in production or processing operations. The 057 Project Paper establishes selection criteria as follows:

"... all LAAD sub-projects must be related to agribusiness and will be required to meet the following criteria:

- The subproject must contribute to the welfare of small farmers and/or landless laborers:

The degree to which this criteria (sic) is met will be measured in terms of increased employment generated, increased income generated, increased production and/or productivity, induced changes from lower to higher value crops or better land utilization, and general rural development effect which the activity is projected to produce at maturity.

- The subproject must contribute to the development or improvement of an agribusiness system:

To satisfy the thrust of this criterion, the proposed project must demonstrate that it eliminates a system bottleneck (that is, adds a critical component in the production-transformation-processing-distribution-marketing-retailing steps which characterize the agribusiness process); introduces a new non-traditional product into this process, establishes new market penetration; assists LAAD in better performing this systems development role; or produces systems efficiencies. The degree to which the project contributes to this objective will be measured in terms of increased production, commodity price stability, or value added.

- An additional criteria (sic) will be the sub-project's ability to contribute to the overall economic improvement of the country or region. To measure a project's projected achievement of this objective, LAAD will analyze a) its balance of payments effect...; b) the value which the project will add to raw or semi-processed commodities; c) the increased employment and consequent income added to the economy; and/or d) the increased production (whether from new or present agricultural commodities) and the implication for future medium to longer term growth...
- Lastly, AID and other donors have argued for the importance of regional development through trade and cooperation. It is expected that sub-projects such as cold storage facilities or transport systems could measurably increase inter-island trade at the same time increasing export earnings.

Subprojects intended to benefit the target group primarily through direct employment were expected to have a capital/employment ratio of \$8,000; but projects that benefited the target group indirectly, through linkages, were more broadly defined. Instead of insisting on the inclusion of one of five types of linkages to beneficiaries, the Project Paper states:

the Project Committee recommends that a LAAD selected subproject satisfy the following criteria: 1) the development, processing, or handling of typical small farmer crops; 2) location of the plant in an area where substantial poor are located; and 3) demonstration of involvement of members of the target group in the subproject's economic activities through linkages described below.

The project paper goes on to list eleven types of linkages, including all five listed above for 007, plus such items as "setting up of equipment pools... provision of farm management services, provision of storage and transportation... [and] bulk purchasing of small farmer inputs."

At the time of the project agreement, it was estimated that about 44 sub-projects (including 17 in the OECS and Barbados), in the areas of food production, agricultural inputs, processing, packaging, storage and transportation would be financed in the Caribbean during the four year AID loan.

The project paper made note of the earlier 007 project implemented through the CDB, and justified the overlap of activities as follows:

Loan 538-T-007 is fully programmed and investment proposals are in the process of being analyzed. There is likely to be some fallout among these programmed proposals and thus some competition between LAAD & CDB, however, the competition is not expected to be severe as LAAD will serve some clients who prefer not to utilize the CDB. Also, it is expected that some competition will be healthy for CDB in that CDB may be forced to accelerate its loan approval process.

In the "Project Rationale" section of the 057 project paper, unemployment was noted as a severe and increasing problem in the Caribbean. The agricultural sector had traditionally employed a large percentage of the labor force, but it had stagnated in many countries. Previous efforts to stimulate growth were primarily channeled through the public sector, such as trade incentives, research, and extension programs. "The criticism of this approach, however, has been that it has not worked." Since agriculture is largely a private sector endeavor, 057 was designed to utilize a private sector institution, LAAD, to provide services. This new approach was a direct response to a 1980 study (the York Mission) commissioned by President Carter, which found that donor/government programs aimed at stimulating agriculture were not very effective and in some instances were outright failures, and that new ways of utilizing the private sector more directly should be sought.

As the agriculture sector is generally market oriented, highly decentralized and, for the most part, operates on a small-scale basis, the private sector was judged to have a comparative advantage over the public sector in providing necessary technical, financial, and marketing services.

According to the 057 project paper, written in 1980, LAAD had an established track record in agribusiness investments in Central

America. As an investor or lender, LAAD sought out agribusiness opportunities with long-term growth potential. LAAD required any project it financed to make "a meaningful contribution to the economy of the host country." Further, as a private profit making company, LAAD insured that investments demonstrate a return or yield commensurate with the risks involved. When evaluating proposals for financing, LAAD's primary concerns were said to be the capability of the project's management, the product's market growth potential, the competitiveness of the product, its total importance to the local economy, and its impact on employment both directly and indirectly. LAAD also provided technical and managerial services in addition to financing. The most important of these was said to be assistance in developing and financing a business venture.

In addition to the co-financing feature of the project, other major aspects included: additional staff and establishment of a new LAAD office in the Eastern Caribbean to facilitate project identification and development; an expanded role for LAAD in terms of providing more comprehensive financing packages, and extended marketing services and export related services, for example, through linkages with US or regional purchasers.

Prior loans to LAAD were geographically oriented primarily towards Central and South America. In the 057 Project Paper it was clearly the intent of USAID in 1980 that the bulk of the 057 funds were to be used in the English-speaking LDC countries of the Caribbean, i.e. the Island States and Belize. In fact, that became a pre-condition of granting this fourth loan, and resulted in LAAD making its first real attempt to survey the potential scope in the Eastern Caribbean for agribusiness ventures. That survey of sub-project demand became a part of the Project Paper and the basis for much of the proposed project loan activity under 057. Of the total \$6 million of 057 funding, \$4 million was explicitly reserved for use in the following territories: the OECS states, Barbados, Trinidad & Tobago, Belize, the British Virgin Islands, the Caymans and Turks & Caicos Islands. It seems clearly to have been the intent of the project designers to provide a major thrust to agribusiness development in the Eastern Caribbean LDCs, however much the language of the provision mitigated that thrust by designating a broader eligible country list.

E. FINDINGS OF PREVIOUS EVALUATIONS

Neither 007 nor 057 were periodically evaluated for project impact as intended in the Project Papers. There is no evidence of such evaluations in the RDO/C files, and in conversations with the heads of both ICIs it was verified that such evaluations never took place.

A search of the RDO/C files in Barbados and discussions with CDB officials indicate that no previous evaluations were ever made of the 007 loan as provided for in the Project Paper. Project impacts on the target group were to have been jointly evaluated by AID and CDB on an annual basis and were to have been compared with the Impact Analyses contained in the original CDB prefunding appraisals of sub-project loans. Since CDB never had more than six sub-projects in operation (involving a total of \$4.082 million of AID funds) the evaluation/monitoring task was hardly a burdensome one. The fact that no annual evaluation was performed during the life of the project suggests that neither organization considered this mandated activity to be very important.

In 1980, the 007 project was audited, but at that point CDB activity was so recent that it is doubtful the audit would have revealed much of significance. (The Evaluation Team was unable to obtain a copy of the 1980 Audit from RDO/C). The 1985 Inspector General's Audit covered four of the nine RDO/C agricultural projects, of which 007 was one. The audit looked at six of the eleven CDB sub-loans (Windward Islands Tropical Plants, St. Vincent Sugar Industries, Dominica citrus production credits, and the DFCs in Antigua, St. Lucia, and St. Vincent) and found that two were not meeting their objectives - the St. Vincent sugar Industry sub-loan and the Dominica Citrus Production credit. The audit's Recommendation Number One was that unused resources be reprogrammed and that required project evaluations should be performed. Specific comments from the Inspector General's Report on individual sub-loans are contained in Appendices B and C.

The Inspector General's Audit took a detailed look at three of the six DFC sub-loans, which were lending primarily for agriculture instead of agribusiness, and it might have been anticipated that an Audit would have noted the departure from major project purposes. In January 1985, Arthur D. Little, Inc. made an evaluation of the CDB/AID Private Sector On Lending Programs under contract with the CDB. Chapter III of their report, which deals with agriculture and agribusiness development (006 and 007) cites at the beginning of their evaluation the Logframe "verifiable indicators" of 78 agribusiness subloans and equity investments to be made by CDB and the DFCs, and then devotes the balance of their report to a detailed analysis of the administration of farm improvement credits and small farmer agricultural credits. The evaluation overlooks the key question of funds diversion from the original project purposes. Little information is available on economic impact of the target group.

The 057 Project Paper called for "Two Million Dollar Reviews," to be conducted jointly by AID and LAAD, of loan and project

activities after each \$2 million of USAID funds have been committed. It appears, both from the Project Paper and discussions with LAAD officials, that the primary reporting and evaluation center for 057 was AID/W (LAC/DR) and not RDO/C, since all LAAD's previous activities were in Central and South America. The RDO/C files contain quarterly sub-loan Status Reports which were submitted to USAID/Washington and copied to RDO/C. These reports show loan approvals, disbursements, and current balance outstanding for each sub-loan. There was a meeting between LAAD and RDO/C in Barbados in January 1982, which was in effect a verbal Status Report on project activities. Also, in September, 1983 two textual reports (a Project Assessment Update submitted by LAAD and a Portfolio Review Memorandum prepared by LAC/DR) were filed in AID/W and distributed to RDO/C.

The Portfolio Review Memorandum reports on a "subject review" meeting which took place between officials of LAAD, LAC/DR and RDO/C, and notes in the first paragraph that:

The loan agreement calls for such joint AID/LAAD progress reviews after each \$2.0 million of loan funds has been committed. The first \$2.0 million review was held in November 1981. While LAAD has not yet reached the \$4.0 million commitment level of loan funds, AID requested that the subject portfolio review be held now in order to evaluate the causes for delays in project implementation, especially in the Eastern Caribbean.

The subject review was concerned primarily with the slow disbursement of funds in the Eastern Caribbean. The Memorandum concluded by noting that "LAAD also agreed to provide LAC/DR with... updated Project Assessment Forms from ongoing projects in order to measure the impact on benefits." If these forms have been updated, RDO/C has no record of it in project files.

II. CONSTRAINTS ON AGRIBUSINESS DEVELOPMENT

This chapter outlines the major constraints facing agricultural and agribusiness development in the Eastern Caribbean. The circumstances affecting agribusiness in the Eastern Caribbean include those of the agricultural sector in general and those relating particularly to agribusiness. Many of the constraints affecting agriculture (such as the small scale of resources) are inherent in the geography, topography, climate, and geology of the region, and cannot be relieved by donor funds, technical assistance, or institutional development. Others (such as credit availability) can sometimes be addressed; but the potential for project success will still be limited by those constraints which cannot be removed.

The basic constraints on the development of agriculture and agribusiness in the Eastern Caribbean may be divided into two broad, (and overlapping) categories: scale-related constraints largely inherent to the region, and institutional constraints which currently exist within the region, each broken down as follows.

- A) Inability to achieve economies of scale
 - 1. Availability and cost of land
 - 2. Availability and cost of labor
 - 3. Markets for agricultural products
 - 4. Soil and climate characteristics

- B) Institutional behavior
 - 1. Availability of entrepreneurs
 - 2. Prevalent business and commercial practices
 - 3. Availability and cost of capital, and practices of commercial lending institutions
 - 4. Covenants and conditions imposed on use of donor funds

Each of these constraints are discussed in turn in subsections below.

A. INABILITY TO ACHIEVE ECONOMIES OF SCALE

Exhibit II.1 presents selected data on the agricultural sector of each of the countries in the RDO/C target area. This exhibit illustrates the limited size of the domestic markets, the relative importance of agriculture in the economy, the percentage of the labor force in agriculture, and the amount of land available for agriculture. The small size of the island states in the Eastern Caribbean, geographically and demographically, represents probably the most serious constraint to the development of agriculture and agribusiness, and scale is the major factor in most of the other constraints faced as well (e.g., land, labor, markets). There is a relatively narrow resource base on each of the countries, and, as noted by the FAO in a 1986 conference, "undifferentiated climatic conditions and soil resources offer medium to poor prospects for agricultural development." 2

The availability of land, an essential input, is limited absolutely. The target group for both projects - small farmers and the rural poor - by definition are limited to small plots of land which they either own or rent. Typical "small farms" in the Caribbean are about five acres in size. Such plots are generally too small for the utilization of labor-saving farm machinery. Tractor services must be hired at relatively high unit cost (if small farmers avail themselves of such services at all), as small farms do not warrant investment in such expensive equipment. The same holds true for most mechanized farm equipment. Small farms are thus relatively labor intensive, so that output per worker (if not per acre) tends to be low.

The size of the domestic market for farm produce is similarly limited. This affects most particularly products which are not destined for export: most vegetable production, ground provisions (e.g., potatoes and yams), livestock and some fruits. The small size of the market and the seasonal and weather-related characteristics of farm products renders the small farmer particularly vulnerable to market instability: when one farmer markets a good harvest, it is likely that many of the others are doing so as well. The market is easily glutted and prices plummet. When the market is in short supply, it is likely that small farmers have suffered the most serious shortfall in production, as they usually have the fewest resources to protect their crops or livestock from drought, disease, pests, or storms.

2/ "Nineteenth FAO Regional conference for Latin America and the Caribbean," Barbados, August 1986.

Exhibit II.1

SELECTED CHARACTERISTICS OF THE EASTERN CARIBBEAN LBCs AND BARBADOS

COUNTRY	POPULATION	GDP (US\$mil)	AGRIC AS % OF GDP	TOTAL WORK FORCE	% WORK-FORCE IN AGRIC	NATIONAL UNEMPLOYMENT RATE	year	AGRIC. LAND AREA (000 ha)	
Antigua and Barbuda	80,300	180.2	6.5%	30,400 '83	9.0%	20.0%	'82	11	
Barbados	252,700	1,236.8	7.1%	112,200 '85	7.7%	13.7%	'82	37	
Dominica	77,900	88.2	29.6%	25,500 '81	30.6%	18.6%	'81	19	
Grenada	100,300	96.4	16.3%	27,000 '81	28.8%	23.0%	'84	16	
Montserrat	11,900	37.1	4.9%	5,300 '85	9.9%	7.0%	'83	n.a.	
St. Kitts and Nevis	45,800	67.3	11.1%	n.a.	4,000	2/	20.0%	'81	15
St. Lucia	136,800	170.3	15.0%	43,800 '83	43.6%	1/	23.0%	'83 4/	20
St. Vincent and the Grenadines	109,300	102.0	19.3%	n.a.	8,000	3/	25.0%	'81 3/	19

Sources:

Population, GDP: 1985 CDB estimate, CDB 1986 Annual Report
 Agric as % of GDP, Workforce: 1985 CDB estimate, CDB 1986 Annual Report
 % of workforce in agric: World Bank Economic Memoranda, 1981 - 1984
 Unemployment Rates: World Bank Economic Memoranda, 1981 - 1984
 Agricultural land area (Arable land and Permanent Meadows and Pastures): FAO 19th Regional Conference for Latin America and the Caribbean, 1986

Notes:

- 1/ includes agriculture and mining
- 2/ No. people, sugar only
- 3/ No. people, LAAD estimate, 1981
- 4/ CDB estimate

n.a. - data not available

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The small scale also tends to limit investment in infrastructure such as transport and storage facilities. The evaluation team was frequently offered descriptions of a "chicken and egg" problem: small farmers do not produce large quantities of, say, vegetables, because they are perishable and the immediate market for them is limited. If cold storage and transport facilities were available to, in effect, extend the market, then small farmers would produce more for that market. On the other hand, no one is willing to invest in storage or transport facilities unless there seems to be regular and assured surplus produce to store or transport. Similar problems affect investment in agro-processing.

Since any given island economy is too small to support much manufacturing activity, farm inputs, including fertilizers, other chemicals, implements, machinery, and fuel, must be imported. The high freight/interest/inventory costs associated with importing relatively small quantities into an isolated microeconomy and stocking them, leads to high per-unit overheads which push up the price of inputs to the farmers and further raise their cost of production.

Donor assistance can do little to alleviate the fundamental lack of scale in Caribbean countries, although assistance in development of "appropriate technology" can mitigate aspects of the problem. The 007 project was accompanied by a \$450,000 grant for adaptive research to address this situation.

1. Availability and Cost of Land

In addition to the absolute limits on the amount of land available in the Caribbean island states, the competition from the tourism sector often competes with agriculture and tends to drive up land prices. This is particularly the case in Antigua, Montserrat, and Barbados. The sunny skies and coral beaches in Antigua have been a natural asset to the tourist industry there, and hotels, resorts, and condominiums ring the island, confining agriculture to the interior and putting upward pressure on land prices in general. In Montserrat, an eighteen hole golf-course occupies one of the most fertile valleys on the island. The resulting high land prices raise the fixed costs of agricultural production and squeeze margins for farmers. Agro-processing ventures are affected to the extent that they require agricultural produce as an input.

Land ownership patterns vary widely throughout the Caribbean. In Antigua, the government owns 60% of all property on the island. The Agricultural Loans Officer of the Antigua and Barbuda

Development Bank reports that 90% of all farmers in the country rent land from the government, and most of the remainder rent from landlords in the private sector. Farmers who must rent land, (or share crop), generally find it difficult to obtain credit for farm improvements, as they lack collateral and security of tenure. Farmers with small land holdings are, for the same reasons, often limited in the amounts they can borrow.

The FAO reports "highly skewed land distribution patterns, in which a small minority of investors ... owned the major share of, and in general, the most fertile and accessible land. At the other end of the scale, large numbers of landowners have to make do with small and very small holdings." 3 The proportion of small landholdings (those under two hectares) in the total number of holdings, ranges from a low of 74% in Dominica to a high of 98% in Barbados (including landless). In no country was the proportion of large holdings (those over 10 hectares) in the total number of holdings greater than 3%. 4

In Grenada, estates nationalized in the early 1980s by the administration of then Prime Minister Maurice Bishop for state farms are now being subdivided and sold in five to ten acre plots by the current administration. The plots are sold by lease-purchase, with zero down payment and a long payback period. In addition, the government will guarantee development loans and farm improvement credits for the lease-purchase lands.

The government of St. Vincent has begun a similar land distribution program by buying former sugar estates and selling them in small plots (mostly about five acres) for family farms, also on a long-term basis.

There is little that donors can do to alleviate the land constraint, other than to assist in the development of crops that yield a high value per acre.

2. Availability and Cost of Labor

Another constraint in agricultural development is the availability of labor. As in the case of land, discussed above, the agricultural sector often finds itself in competition with tourism for this factor of production. Many crops, including cotton and sugar cane, must be harvested between February and

3/ Nineteenth FAO Regional Conference for Latin America and the Caribbean; Barbados, August 1986

4/ Ibid., Appendix A-5.

April, which corresponds with the peak of the tourist season in the Caribbean. The relatively high wages available in the tourist sector often cannot be matched by the agricultural sector.

In addition, agricultural labor suffers from the stigma of slavery and post-slavery indentured labor. Sugar and cotton in particular are affected by negative attitudes, although laborers tend to avoid agricultural field work in general. Thus, although unemployment rates in the Eastern Caribbean are high (over 15% in all the countries except Montserrat), farmers and other professionals involved in agriculture in the area speak of a "labor shortage" affecting that sector. Farm production in the region is therefore increasingly reliant on family labor, especially on small scale farms. Those who must employ outside labor find their wage bills significantly higher than those of competitors outside the Eastern Caribbean (e.g., from the Dominican Republic, or Central America).

Mechanization can overcome labor shortages, but generally requires large tracts of land in order to be cost-effective. Agro-processing, which can offer full time employment, has somewhat less difficulty attracting labor than agricultural field work. There is little that donors can do to alleviate the labor constraint in the Caribbean, other than to assist in the development of crops which require labor at times other than the tourist season.

3. Markets for Agricultural Products

Domestic markets for agricultural produce, as discussed earlier in this section A, are highly unstable. International markets for the region's export crops can also involve high risks. Several of the region's sugar producers, for instance, will face a 40% reduction in their sugar quota in the United States this season, and depressed world prices in other markets.

The region's highly acclaimed Sea Island Cotton attracted the attention of the Japanese textile industry in the early 1980s. A delegation visited Barbados and reportedly offered to buy as much sea island cotton as Barbados and its neighbors could produce, for a substantial premium over the current world price. In 1985/86, Barbados grew 650 acres of cotton, and St. Kitts planted as well; for the 1986/87 season, Barbados grew 1500 acres. For the following season, they had planned to grow 4000 acres. However, in the middle of 1986, the buyers came back to Barbados and said they would take only the Barbados crop this season for the premium price, would take only 100,000 lbs (the product of 200 acres in a good year) in 1987/88 at the premium price, and

might take an additional 200,000 pounds at less than half the price they had originally offered.

In the early 1980s, Dominica's grapefruit coop, which marketed most of its crop in the United Kingdom priced in Pounds Sterling, was pinched by the fall in the value of the pound. The Eastern Caribbean dollar is tied to the U.S. dollar; and most of the citrus growers' inputs were priced in U.S. dollars, so growers were unable to cover all their costs, and many ceased harvesting grapefruit for export.

The regional agricultural producers find the markets in the developed countries of North America and Europe generally difficult to penetrate, due to a variety of restrictions. Sugar is protected in both the US and the EEC. The health standards imposed by the US on fresh produce is particularly restrictive. For exports, Caribbean producers of fresh produce must therefore rely primarily on Canada and the EEC, which also have their own restrictions. The grapefruit coop in Dominica must export the bulk of its crop to UK during a tight, six week window, before production from competitors in Israel and Cuba enter that market. Imports of living plants into the US are only allowed if roots are bald (i.e., without soil), a practice which endangers the plant. Only one of the ventures examined during this evaluation was exporting fresh produce to the United States, and that in limited quantities to the "ethnic market" in New York City; one other was exporting concentrated aloe gel to the United States.

Failing a lifting of import restrictions in the markets of the developed world, donors must take into account current and anticipated market limitations in assessing the feasibility of agribusiness projects.

4. Natural Constraints - Soil and Climate Characteristics

The FAO describes three basic categories of islands in the Eastern Caribbean:

Low island territories, composed mainly of coral reef rocks, include Barbuda, parts of Barbados, Antigua, and St. Vincent and the Grenadines. Conditions on these islands are suitable for sugarcane, cotton, and root crops, as well as vegetables if irrigation is available. It notes that large estates are found in these islands, and "small holdings cannot be successful unless devoted to vegetables, ornamentals, or to small animals."

High islands of volcanic origin include Dominica, Grenada, St. Lucia, St. Vincent, St. Kitts and Nevis, and part of Antigua. The volcanic soils are highly fertile, and are suitable for most tropical crops such as banana, cocoa, coffee, root crops, fruits,

vegetables, and spices. It notes that small farming can be profitable on these islands.

High islands created mainly by tectonic uplift include part of Barbados and part of other smaller islands. In the plains and plateaus, the land is suitable for sugarcane and swamp rice. Production on steeper slopes includes maize, sorghum, yams, cassava, and sweet potato (mostly grown by small farmers), along with some banana or coffee. Other crops include beans, pigeon peas, vegetables, mango, citrus, and other fruit crops.

Precipitation can range from under 1000 mm/year (as happens frequently in Antigua) to over 2500 mm/year (Dominica). In fact, Dominica regularly exports tankers of fresh water from its 365 rivers to parched Antigua, to supplement the latter's desalinated sea water and meager rainfall and groundwater. Farmers in many of the islands are vulnerable to drought, some crops being more seriously effected than others. Cotton, for instance, which can easily yield 500 pounds of ginned cotton lint per acre with adequate water, will drop its bolls early in a drought, yielding only about 150 pounds per acre. The opposite danger, of flooding and other damage from hurricanes, is frequently encountered in the Eastern Caribbean. Hurricanes can destroy substantial proportions of an entire industry for several years: St. Lucia lost 80% of its coconut and 75% of its banana output due to a hurricane in 1980; in 1979 and 1980, hurricanes hitting Dominica slashed that nation's banana exports by 80% and destroyed between one quarter and one third of its grapefruit trees.⁵

These characteristics become scale related in that none of the Caribbean islands has enough diversity in soil or climate to absorb natural disasters: hurricanes and droughts are likely to affect the entire nation at once; homogeneous soil characteristics encourage monocrop cultures which render the economy vulnerable to local and international market fluctuations. Donors can do little to alleviate these constraints other than to assist in the development of agricultural diversity.

B. INSTITUTIONAL BEHAVIOR

Institutional constraints which currently exist within the region may be contributing to the difficulties faced in the attempt to diversify agriculture and develop agribusiness. Most existing institutional constraints cannot be changed quickly or easily, but may have some scope for long-run amelioration. These conditions are discussed below.

5. Ibid., pg. 4

1. Availability of Entrepreneurs

Although the investigations of the evaluation team did not include a rigorous search for entrepreneurs in the region, the team regularly asked the opinion of agricultural professionals in the region, both in the public sector DFCs and projects and the private sector projects, about the availability of agribusiness entrepreneurs in each country.

The officials of LAAD cited the lack as one of the key constraints in finding suitable projects in the Eastern Caribbean and disbursing the funds available.

Few interviewees could list more than a handful of existing or potential agribusiness entrepreneurs in their country, most of whom were already well entrenched in fields other than agribusiness. The agricultural loan officer at the Antigua and Barbuda Development Bank reported that no one had ever approached the bank for an agribusiness loan. The manager of the Montserrat Sea Island Cotton Company reported that, although the Montserrat government would be interested, in theory, in privatizing the company, he could think of no one on the island who had both the resources and the interest to take it over.

There are many examples of strong entrepreneurial talent arising in the Eastern Caribbean. However, little of this talent seems to reach the agricultural sector. Many Caribbean entrepreneurs invest instead in commerce or tourism; many others emigrate from the region to the United Kingdom, Canada, and the United States. The owners/managers of the Windward Island Tropical Plants Company and the Eastern Caribbean Agencies, two of the most successful of the projects evaluated, appear to be exceptional. The latter's primary constraint to expansion, as reported by the manager, is a lack of responsiveness, consistency, and commitment (i.e., entrepreneurial skills) on the part of the local air freight agencies.

2. Availability and Cost of Capital

A common complaint among farmers and agricultural professionals was what they described as the risk-averse orientation of commercial banks in the region, making it difficult for the agricultural sector to obtain the credit needed to expand and, more importantly, to diversify. While commercial banks tend to prefer short term credits (one year or less), with ample collateral and low risk, farmers and agribusiness concerns in the region often require medium to long term loans, have little or no collateral (if they aren't renting the land, they may have a

mortgage on it), and face substantial risks. This problem could arguably be described as a scale-related factor as well, because a larger and more diverse clientele tends to pool risks and may allow for lower interest rates and more liberal lending policies.

Commercial banks throughout the region reportedly lend little to the agricultural sector, with the exception of mortgages on property (where the property is held as security and preferably where the farmer has another source of income). Farmers are therefore heavily reliant on the national development banks (all public sector institutions and usually the recipients of soft loans from international donor institutions), for finance.

Commercial banks in the region generally follow the British system of banking, which avoids "term loans," but extends overdraft facilities at negotiated ceilings and interest rates. Agribusiness in the region, and larger agricultural concerns, will often have access to such overdraft facilities at commercial banks. Interest rates on such loans are typically over 12%. These overdrafts can roll over indefinitely, allowing them to be used, in effect, as term loans. These loans, however, do not have a fixed payment period and the interest rate will, in effect, float; although it is not thought of in those terms.

Most of the commercial banks in the region continue to work with fixed rate loans for credit other than overdrafts, and this is the system to which businesspeople in the Caribbean are accustomed. LAAD therefore faced the following difficulty: LAAD does most of its own borrowing in North America at floating interest rates. During the early 1980s, these rates fluctuated widely, but were generally climbing. LAAD would have preferred to lend at floating rates in the Eastern Caribbean (as it could with little difficulty in Central and South America), but found stiff resistance to the notion among the Caribbean businesspeople. As a result, LAAD had to negotiate fixed rate loans at a rate high enough to cover their own interest rate risk.

Capital, in the form of loan funds and equity investment, is the primary input of both the 007 and 057 projects, and addresses the capital constraint more directly than any other identified constraint to agribusiness. CDB and LAAD both lend directly for agribusiness. \$2.4 million of 007 funds, ostensibly for agribusiness subloans, have also been made available to six Development Finance Corporations in the Eastern Caribbean through the CDB. The six DFCs are located in Antigua, Barbados, Dominica, Grenada, St. Lucia, and St. Vincent. These loans are discussed in greater detail in Chapter IV, below. The rates of interest charged on subloans from those funds have ranged from 8% to as high as 20%.

3. Covenants and Conditions Imposed on Use of Funds

A final set of limitations on the agribusiness sector in the Eastern Caribbean are a variety of provisions, covenants, conditions precedent, regulations and restrictions applying to the use of donor funds. When each institution applies its own conditions to the funds that it provides or controls, and when funds must pass through several institutions before being received by the end-user, (e.g., from USAID to CDB to a DFC to the potential borrowers) the cumulative set of limitations may begin seriously to hinder the ability to find projects, uses, and beneficiaries which are both eligible for the funds and capable of putting them to some viable use. Accumulated covenants and restrictions can sound the death knell for a donor project almost as soon as the signatures are dry on the enabling project documents. The assumptions, practices and policies reflected in these restrictions thus can become constraints as debilitating as any of those which apply to private sector financing of agribusiness in the region (see above).

The evaluation team recognizes that some of the constraints are prudent and perhaps desirable; some are imposed globally on the lending institutions (including USAID, CDB, and the DFCs) or are included in their by-laws and can not be altered or circumvented. The evaluation team does not presume to recommend that all the restrictive provisions be abandoned, but rather, that opportunities for greater flexibility be explored and, where greater flexibility is not possible, that donors, project designers and administrators take into account the inhibiting effect of the constraints when projecting loan disbursements and, more importantly, project benefits.

The following are brief descriptions of the constraints cited by subproject managers (direct borrowers from CDB or LAAD) and the loan officers at the DFCs administering loan funds extended under the 007 project.

- A requirement that equipment and inputs purchased under the loans must be a product of the region, or the United States, or a member of the CDB: This provision restricts borrowers from purchasing the best equipment at the best price. Such restrictions may significantly raise the borrower's production costs, decrease product quality and/or reduce productivity.
- Prohibitions against the use of funds for the purchase of property: USAID regularly imposed this condition in the 1970s, and the CDB reportedly considers such a transaction a non-productive transfer of an asset. To the individual

borrower, however, it is likely to be viewed as a crucial factor of production, and one which may involve lower long run costs if owned than if leased. Ownership of land also provides collateral which may assist in obtaining additional finance.

- Prohibitions against the use of funds for the re-financing of a project if that project had any arrears on any previous loan (irrespective of the source): Loan officers at the Barbados National Bank pointed out that this restriction on their 007 funds prevents them from helping to salvage or turn around a potentially viable project which had gone sour, for any reason, in the past.
- Phased disbursements of loans: One project manager complained that his company was unable to take full advantage of certain business opportunities because the 057 loan, although approved in full, was disbursed in two tranches separated by a lag of several months.
- Restrictions disallowing loans to borrowers with a net worth of over a particular ceiling: Loan officers at more than one of the DFCs pointed out that a farmer or businessperson with a good house and two vehicles would have a net worth above the imposed ceiling. Anyone with a net worth which is much lower than that may be unable to afford a loan large enough to start an agribusiness or any business venture large enough to achieve the 007 project purposes.
- Restrictions on additional sources of financing which the borrower may wish to use: The manager of one private sector project said that he had to obtain permission from CDB each time he wanted to temporarily increase the company's line of credit at its bank. The company has a seasonal selling cycle, and needs to use overdraft facilities more extensively during the trough of the cycle. Instead of approving a higher overdraft ceiling, which the company would reach regularly but only temporarily, the company must request a special approval from CDB each year, which is slow and time consuming, worsens their vulnerability to cash flow difficulties, and hinders their ability to make needed purchases in a timely fashion.
- General inflexibility: The terms of CDB's loans can be very detailed and restrictive. Although provisions and conditions can be relaxed or waived, a request to change a provision can take six months to process, since a series of committee decisions at CDB are often required. The slow response may hinder a borrower from taking timely action on market opportunities. According to an agricultural officer

in Grenada, land was cleared for sheep grazing for an 007 project, but before the land could be put to active use, another approval was required from CDB. During the time which elapsed before the approval was granted, the grazing land was overgrown again and needed a second clearing.

Restrictions on loan funds should be carefully scrutinized and weighed against their ultimate (often intangible) costs. Although donor institutions often do not have the latitude to waive such requirements, an assessment of the costs of the restrictions should be incorporated into projections of project benefits.

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III. SUB-PROJECT AGRIBUSINESS FINANCING BY CDB AND LAAD

A. INTRODUCTION

This chapter contains analyses of each of the individual sub-projects in RDO/C's area of interest financed under 007 or 057. The evaluation team visited three sub-projects financed through the CDB (007 funds), and studied a fourth, which failed in 1984. The team visited two sub-projects financed through LAAD (057 funds), and conducted telephone interviews for two more. The projects concerned were as follows (listed in the order visited or addressed by the evaluation team):

1. Montserrat Sea Island Cotton Company (CDB)
2. Windward Islands Aloe Company (LAAD)
3. Eastern Caribbean Agencies, LTD (LAAD)
4. St. Vincent Plastics, LTD (LAAD)
5. St. Vincent Sugar Industry (CDB)
6. Windward Island Tropical Plants (CDB)
7. Carriacou Sheep Project (CDB)
8. Barbados Tillage (LAAD)

A general description of the activities and status of each of the projects, and the assessment of the evaluation team are presented below in Section B. More detailed descriptions of each of the projects are contained in Appendix B of this report.

B. SUB-PROJECT ANALYSES

1. CDB - Integrated Sea-Island Cotton Project - Montserrat

The Montserrat Sea Island Cotton Project was designed to convert an existing ginnery, pilot spinning plant, and handicraft-type weaving studio into a fully integrated commercial operation for the production of high quality sea island cotton articles, involving the growing, harvesting, ginning, carding, spinning, dyeing, weaving and finishing of sea island cotton products. The borrower is, officially, the Government of Montserrat, which owns

the Montserrat Sea Island Cotton Company (MSICC). The loan from CDB under 007 was approved in August 1980 for US\$644,000, which contributed to a total investment of US\$858,000. The loan supported investment in most of the equipment, factory renovations, and initial working capital for the newly integrated cotton industry.

Project Achievements include, first and foremost, the establishment of a new industry in Montserrat. Sea Island Cotton is among the highest quality strains of cotton grown, and Montserrat's Sea Island Cotton is acclaimed as one of the finest of that variety. The project holds promise for future development, given proper market orientation and management.

Revenues in 1985/86 totalled about US\$103,000. The Company currently employs 17 weavers, 12 spinners, 2 sewers, and 8 other workers, providing about \$91,000 in income for these people. The company also bought a total of \$4,400 of raw cotton from 30 local farmers in 1985/86. As a parastatal agency, the MSIC is required to purchase all cotton produced by local farmers.

MSIC has been able to make some interest payments on the loan, but currently has arrears on both principal and interest. The Montserrat government applied to CDB for a rescheduling almost a year ago, but no decision has been reached yet. The project has suffered from a number of difficulties; employment and production dipped in 1984/85 from 59 persons down to 30, while the company concentrated on selling off its large accumulation of inventories (estimated value of \$222,000). The Project Manager plans to increase production again in 1987.

Major difficulties faced by MSIC include the following:

1. **Inappropriate project design and use of resources:** The project originally began as a source of employment for local hand weavers who used imported cotton yarn. A decision was made early in the project to exploit Montserrat's ability to grow a fine strain of Sea Island Cotton, and create a vertically integrated industry. However, the current project manager points out that the unique attributes of Sea Island Cotton - the long staple fibre, its strength, flexibility and luster, are used most optimally in finely spun threads machine woven or knit into "superfine" fabrics for top-of-the-line ladies blouses and dresses and men's shirts. The Montserrat Sea Island Cotton Company lacks the equipment required for this type of production. The project manager explained that the valuable attributes of Sea Island cotton are utterly wasted in hand weaving, which requires a medium to heavy yarn. The costs of production of the integrated MSIC over the past several years have priced its

finished products (which, although well crafted, do not appear superior to hand woven products utilizing medium quality cotton yarn) nearly out of the market. Much of the inventory accumulated over the past few years had to be sold at a loss.

2. **Inappropriate and sub-standard equipment:** The current Project Manager reports that the bulk of the equipment obtained in 1980/81 was already old and obsolete. MSIC's one hundred hand looms lack shuttle propulsion, which keeps productivity very low, and the looms are capable of only the simplest designs. The carding machine has not been ground since it was purchased, because no one was ever trained in the procedure. The spinning machinery (obtained used) is very old and does not work well.
3. **Lack of irrigation in the cotton field:** The MSIC has fifty acres of land for growing cotton. According to the project manager, under adequate growing conditions, they should be able to produce 500 lbs of ginned lint per acre. Cotton, however, is vulnerable to drought, and production can quickly drop to 150 lbs/acre without adequate water. The MSIC currently has no irrigation facilities.

The project has arrears on its 007 loan (as of 2/28/87) as follows: Principal - \$201,250.00; Interest - \$20,118.39; Interest on overdue amounts - \$6,285.20.

The current Project Manager, hired in spring of 1986, is devoting his attention to moving the project in a new direction. He envisions, in the short term, two separate profit centers: one exporting Montserrat Sea Island cotton to exclusive producers for use in designer fashions (which may have to be sold as ginned lint until the company can afford to invest in the equipment needed to card, comb, and spin super-fine thread); the other in hand woven products - the latter getting Montserrat sea island cotton only if it can pay the best price; otherwise, he feels they should import less expensive, lower quality yarns. In the long run, he hopes that the growing of high quality Sea Island Cotton will form the basis of an expanded and vertically integrated East Caribbean Sea Island Cotton industry large enough to justify investment in equipment for the production of superfine products. The ultimate market, according to the project manager, should be the "top two percent" of the garment industry: top line designer fashions in North America, Western Europe, and Japan. A prefeasibility study for the latter scheme was commissioned by the OECS secretariat and was judged positive. No further steps have yet been taken.

In the meantime, the project manager is arranging finance from the British Development Division for about EC\$350,000 worth of irrigation facilities to ensure adequate local production of cotton. In addition, he is arranging for the upgrading of the company's existing hand looms to utilize mechanical shuttle propulsion (which he says should increase productivity by three-four fold); and to add more heels to the looms to increase the capability for production of intricate designs. He also wants a combing plant, and technical assistance for his personnel in grinding their carding machinery.

The project manager reports that the government of Montserrat would be willing to privatize the project, but is anxious to recoup past losses. The government wants the project turned around, so that the company can be sold for a reasonable price.

Evaluation Team Assessment: The conclusions reached by the new project manager are that the project should split its hand weaving activities from the production of high quality Sea Island Cotton (and only sell Sea Island Cotton to the weaving branch if it can match the market price and profitably make use of that valuable resource). This appears to be a sound strategy.

The attempt to integrate the valuable Sea Island Cotton with hand weaving at the outset of the project, and the purchase of inferior equipment, caused the company to sustain serious losses. Although the project was able to generate employment for up to 60 workers in 1983, production costs were too high for the finished products to compete in the market, and so production and employment could not be sustained. Although the MSIC was pledged to purchase all cotton grown by local farmers (and did so), it appears that the price they could afford to pay proved insufficient incentive to encourage local farmers to expand production.

Prospects for growth may be reasonably good if a market orientation for the project is upheld. Montserrat's Sea Island Cotton can fetch a significant premium over general world cotton prices, and the company could build up a clientele, particularly if it can consistently produce commercial quantities. However, the market has exhibited substantial instability: The terms offered by one group of Japanese textile producers for East Caribbean Sea Island Cotton, initially set at \$4.50/lb (ginned lint) for "as much as could be produced", dropped suddenly to \$2.20/lb for a very limited quantity. Thus the market risks should be carefully assessed.

The evaluation team concludes that the successful build up of the Sea Island Cotton industry, especially if it is aiming for the "top two percent" (in quality and price) of the world garment industry, will require a hard-nosed, commercial, profit-motivated

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orientation. For MSIC to achieve this goal, it must consistently produce commercial quantities of top two percent quality products at each step of the process. This requires market sensitivity, flexibility, adaptability, responsiveness and quickness. Public sector projects that can achieve such goals are very rare creatures, and we have seen no evidence that the MSIC, as a public sector enterprise, will prove to be an exception. Therefore, every effort should be made to assist the project to prepare for privatization.

The current management has been able to obtain the assistance of a number of agencies in a variety of ways to make improvements and provide cash inputs. Some are as follows:

- (a) British Development Division - provision of \$185,000 for direct deficit funding (working capital), machinery improvements, marketing budget, and other miscellaneous expenses.
- (b) OECS/European Development Fund - provision of \$37,000 from the Common Services/Pool of Experts Fund for required technical assistance.
- (c) USAID/SEA - \$6,500 for expenses of a textile engineer to train personnel in equipment maintenance.
- (d) CIDA (Canadian) provision of \$37,000 for modification of hand looms.
- (e) CDB - provision of a \$40,000 marketing grant for advertising and promotion in the United States. Current management, recognizing that their current product line had little appeal in the U.S. market, has not spent that amount but is devoting \$3,700 to a preliminary U.S. market trip geared toward product development.

These activities demonstrate some aggressiveness on behalf of the current management, and other steps are being taken to correct past deficiencies. For example, agreement has apparently been reached with the British Development Division, to provide \$130,000 over two years to install irrigation facilities and other equipment to properly farm 50 acres of cotton land leased from the Government of Montserrat and to provide some of the required inputs. With funding, the company could provide an extension service to small local farmers for increased inputs.

The assets and liabilities of the company can be restructured in many ways but some specific options, contingent on evidence of the financial viability of a re-oriented MSIC, are suggested to the Government of Montserrat (GOM) and CDB:

1. The GOM currently holds 580,001 shares at EC\$1.00 (US\$0.37) per share representing previous cash investment. Additional GOM financial involvement is represented by:

- (a) An \$263,000 interest free loan
- (b) An \$50,000 liability relative to their support through the cotton Development Fund
- (c) Rental (lease) arrears to the GOM of \$84,000

Assets reportedly include equipment valued after depreciation of about \$600,000 and current assets (cash, accounts receivable, and inventory) of about \$500,000.

Restructuring could involve conversion of the above debt position into equity. The GOM could further improve the asset position, and appeal to outside private investors by contributing the 50 acres of growing land to the company. The above are just examples of possible restructuring steps but would indicate to private investors that the company could be strengthened with solid GOM and CDB support.

2. CDB could, with the agreement of the Montserrat government, convert its \$644,000 loan to the project (and perhaps the overdue interest of about \$30,000) into an equity position in the project. This would effectively remove what the Montserrat government faces as a project liability, and may facilitate the privatization process.
3. LAAD could, with the agreement of the Montserrat government, take an equity position in MSIC either by itself or with other private investors, inject new capital into the venture, and assist in its market reorientation. It could also buy out the government's position in the company.
4. The project manager, with the approval of the Montserrat government, could make an active search for private investors in the company, to buy out the government's position and/or inject new capital into the venture.
5. HIAMP could, with the agreement of the Montserrat government and assuming the MSIC had or would become (either from a previous transaction along the lines listed in points 3 or 4 above or as part of a joint agreement with HIAMP), at least 51% privately owned, take an equity position in the project and inject new capital into the venture.

2. LAAD - Windward Islands Aloe, Ltd. - Dominica

The LAAD loan to Windward Islands Aloe was made to initiate a new venture to grow aloe plants and process concentrated aloe gel for export. A first loan was approved in April of 1984 for \$150,000 to purchase young aloe plants and to purchase farm equipment and aloe processing equipment. The total investment was \$380,000. Another loan of \$65,000 was approved in October, 1985, as part of a \$150,000 investment. The terms of the loan call for a two month grace period and five year repayment period, with seven semi-annual installments, at an interest rate of 11%. There have been no principle repayments so far.

There are several investors in the company from North and Central America, four of whom are active in the project. The local managers of the company have the largest share.

Project Achievements: The WIA company has planted about 250,000 aloe plants on 70 acres of property on a 330 acre estate that was purchased and cleared prior to the application for a LAAD loan. The project manager reports that the company currently produces about 4,000 lbs of raw gel per day, eight to nine months per year. It appears that gross annual sales are up to about US\$400,000 per year. WIA exports all its product to the US for use in lotions, cosmetics, soaps, and drinks. The market for aloe appears to be still growing in Europe and Japan as well as North America. The project manager reports that WIA can sell all it produces. Other sources in RDO/C report that the company must purchase aloe from other countries to meet contract commitments with their principal buyer in the US.

WIA currently employs 30 people full time, and has an average payroll of about \$100,000 per year, for an average of 55 to 65 employees. In addition, employment generated by the concentration of the gel at the Bath Estate involves the equivalent of about one and a half full time jobs.

WIA is also encouraging local farmers to grow aloe, and will sell young aloe plants (often on credit), and guarantee to purchase of mature leaf for processing. At the moment outside of WIA's 70 acres, there are 4 pilot plots owned by local farmers, of 1.5 acres. For an initial investment of \$750 per acre, the WIA project manager reports that farmers can gross \$1500 per acre per year in the first year and over \$2000 per acre per year thereafter. Labor requirements are about 1 person per acre, including processing, and aloe costs about \$370 per acre per year to produce after the initial investment. The manager hopes there will be a total of 50 acres of small farmer production in 1987, and 100 in 1988.

The project has no arrears on its 057 loan, and the loan officer reports that, aside from some slow payments, there have been no arrears of concern to them in the past.

Difficulties faced by the project appear to be minor, but output in the third year of the project is about half that anticipated in the pre-funding analysis (see Appendix B.2). The shortfall is explained by a number of factors: Acreage under production is currently 70 acres, instead of the 100 acres anticipated. This is partly offset by a higher density of planting - 4000 plants per acre instead of the 3000 originally envisaged. Output per plant is in the range of 10 to 15 lbs per plant per year, instead of the 15 to 20 originally forecast, and finally, the processing of leaf into raw gel has exhibited a gel/leaf output ratio of 40 - 45% (by mass), instead of the 50% anticipated at the outset.

Prices however, have held stable. While the original calculations assumed a price of \$3.00 per gallon of gel (before concentration), the project has been receiving \$3.25. This price differential has not, however, made up for the shortfall in production. Thus, while the project had anticipated gross sales of about \$1 million for year three, actual receipts have proven to be about half that. The project manager attributes the shortfall to a minor problem with nematodes (a parasite), and some browning of the leaf which has lowered gel output. He believes those problems are now largely under control, and says he doubts there are any serious constraints, at this point in time, to expansion of production.

Evaluation Team Assessment: The Windward Island Aloe Company appears to be a viable endeavor, with reasonably strong promise for the future, assuming prices hold stable and productivity can be increased. Direct employment for 1988 is projected to average about 75 people. Independent small farmer production adds to total output and accounts for additional employment impact.

3. LAAD - Eastern Caribbean Agencies Ltd. - St. Vincent

Eastern Caribbean Agencies, Ltd. (ECA) began as a small, family operated import-export venture. The purpose of the first LAAD loan (\$250,000, approved December 1980) was to expand export sales of fresh tropical produce. The loan was to finance a packing shed installation and equipment plus rolling stock, and to support working capital requirements, primarily to purchase and finance farm production locally. Later loans of \$100,000 and \$250,000 were approved within the past three years. The loans have contributed to a total investment of \$1,280,000. Repayments of \$237,000 (as of September 30, 1986) have been made on USAID funds, representing payments of \$220,000 and \$17,000 on the first and second loans.

Project Achievements: ECA purchases fresh tropical products (such as breadfruit, mangoes, sorrel, yellow plums, soursop, passion fruits, sugar apples, custard apples, and golden apples; and roots crops such as eddoes, yams, sweet potatoes, hot peppers, okras, and callaloo) from farmers in St. Vincent, St. Lucia, Jamaica, Barbados, and elsewhere in the Caribbean, and exports the produce to markets in London, Toronto, and New York. As of 1980, before the LAAD loan, its produce sales were under \$500,000. Gross sales revenues in 1986 were \$2.4 million, of which 67% were extra-regional exports; in 1985 it grossed \$1.9 million, of which 65% were exports. Most recently, ECA negotiated a management contract with Grace Kennedy Company of Jamaica for the export of that company's fresh produce. They are looking to Grenada as another source of produce.

ECA deals with a total of about 1800 farmers in St. Vincent, (perhaps 500 in any given season) of which about 1000 are "medium to large" (five acres or more), each selling about \$150/week to ECA on average over the year. Small farmers who supply to ECA sell about \$75/week average over the year. In 1986, ECA paid out \$518,500 to farmers in St. Vincent alone, and an estimated \$1,230,000 to farmers throughout the Caribbean. To assist the local farmers in their production, ECA extends production credits to about 30 farmers each year, by advancing money for a crop.

ECA has 15 permanent employees who earn \$300 to \$925 per month, and an average throughout the year of 45 daily-paid workers who earn \$5.35 (for new workers) to \$6.00 per day. In addition, ECA buys about \$30,000 in locally produced packing cartons per year.

The LAAD loan officer reports that ECA has serviced its loan regularly since the first loan was disbursed, and there have never been any arrears problems.

Difficulties faced by ECA include the usual agricultural risks of weather and price fluctuations, which they try to minimize by expanding their production base and range of products. In addition, the Assistant Managing Director informed the Evaluation Team of problems they had encountered with the freight connections to Barbados (from which they ship most of their extra-regional exports), the problems being described as a lack of responsiveness, commitment, and consistency. He estimates that ECA suffers spoilage losses of up to \$56,000 per year, and says that this curtails them from expanding as fast as they would otherwise like to do.

In order to overcome their freight problems, the company would like to obtain about \$300,000 financing for a light plane which could carry 2500 lbs per trip, six trips per day to Barbados.

The managers are approaching the Pan American Foundation for these funds.

Evaluation Team Assessment: ECA appears to be the most dynamic by far of all the projects visited by the evaluation team. Growth in sales has been most impressive, and repayments of the USAID funds seem to be met with little difficulty. Employment is generated and the market for small farmers is expanding and stabilizing, due to the facilities and marketing efforts of ECA. The loans probably assisted the growth of the enterprise, and the manager praised the LAAD loan officer for his responsiveness, enthusiasm, and hard work. On the other hand, it is well possible that these entrepreneurs would have raised their financing from another source if LAAD funds had not been available.

The LAAD loan to ECA represents a success story in terms of export growth, employment, and expansion of markets for local farmers, which should be used as a positive example for future USAID supported agricultural lending in the region. The special ingredient in this case appears to be the entrepreneurial talent of the DeFreitas family, their willingness to take risks, support and encourage local farm production, and actively market their product in the developed world.

4. LAAD - St. Vincent Plastics, Ltd. - St. Vincent

LAAD approved a \$35,000 loan to expand the St. Vincent Plastics company in November of 1981, which supported a total investment of \$50,000 to purchase equipment and raw material and to complete physical plant for plastic packaging manufacture. Repayment of USAID funds have totaled \$20,000. The evaluation team was unable to make contact with the company in St. Vincent; interviews were conducted later by telephone.

Project Achievements: This project produces plastic shrink-wrap film for supermarkets, banana protection film, "agrobags" for potting plants, and plastic shopping bags. Employment as of September 1983 included 15 - 20 part time workers, and was expected to expand to approximately 30. After recovering from a fire which closed the plant, the company currently employs seven people full time. Gross sales are about \$74,000 for 90 tons of output. It had exported within the Caribbean region before the fire, and is beginning to export again in 1987.

Difficulties experienced by the project: LAAD's 1983 assessment mentioned "a number of technical and collection problems," and competition which led the owner/manager to re-assess the product line. The company suffered a fire in June, 1985, and was closed

for ten months. The company has spent the past year trying to build up production and recover markets.

The LAAD loan officer reports that principal of \$10,143 had been "overdue," but the loan has been rescheduled.

Evaluation Team Assessment: A firm assessment of this project cannot be made until more time has elapsed. The evaluation team notes that production, employment and sales have resumed since the plant re-opened. The LAAD loan officer expresses confidence in the company and its prospects for future growth.

5. CDB - Integrated Sugar Rehabilitation Project

The CDB provided \$2,207,000 in USAID financing to the government of St. Vincent in August of 1980. The loan was to support the rehabilitation of the sugar refinery, which had been closed since 1862. The 1980 loan supported a total CDB investment of \$7,680,000 in the St. Vincent Sugar Industries (a parastatal organization). The rehabilitation had started in 1977 and was experiencing cost overruns. At approximately the same time, a \$370,000 line of credit was extended to the St. Vincent Development Corporation to provide subloans to sugar farmers (see Chapter IV, below).

At the time of the US Inspector General's audit in 1985, the operation had a debt of about \$13.2 million, showed losses of \$1.5 to \$1.8 million during the first three years of operation, and was projected to lose about \$1.3 million in 1985. The report went on to state, "According to an authoritative source in the company, the factory should never have been built. He said that the Prime Minister wanted to close the factory, but had not announced a decision publicly." In fact, the project was closed at the end of 1984.

Project Achievements: The project reportedly provided employment to about 2000 people in the factory and in associated sugar cane fields during its operation.

Project Difficulties: According to the Inspector General's audit report, "the company's poor performance was due to several factors:

- The company's consultants were not qualified, and consistently underestimated the construction costs.
- Implementation delays totalling sixteen months led to factory construction cost overruns.

- Prices established for sugar cane and refined sugar for local consumption were both too low.
- The company used bank overdraft financing for funding day-to-day operations, increasing interest costs.
- Arrangements for transporting cane to the factory were inadequate.
- The company was poorly managed."⁶

In addition, it was the view of some individuals interviewed in St. Vincent that the decision to open the factory was motivated primarily by a desire to ease unemployment in the country rather than by a well founded belief in the financial viability of the operation. It was further reported that the equipment purchased used from Trinidad (with resources other than USAID funds) was old, obsolete, and didn't function well; and that the factory was managed part time from Canada, and not full time on site.

Evaluation Assessment: The factory was a failure, and the decision to close operation was the only feasible course.

6. CDB - Windward Island Tropical Plants - St. Lucia

CDB approved two loans to Windward Islands Tropical Plants, Ltd, a private company. The first loan was made in 1980 to initiate production of exotic plants for export. Another loan was approved in 1984, for a total of \$255,400, which supported a total investment of \$936,000. Repayments of USAID funds to date total \$26,000. WITP applied for a one and a half year extension of the four year grace period, and was granted a one year extension. Total repayment period is ten years. WITP is 50% owned by a St. Lucian Family, the Barnards, and 50% by a British firm.

Project Achievements: WITP began virtually from scratch, and presently has 30 acres of land under cultivation (11 of which are shaded), growing tropical plants primarily for export to the UK houseplant market. Gross sales revenues for 1986 totalled about \$486,000 (of which 96% were exports), up from \$264,000 in 1985. The owner/manager said he expected sales of about \$700,000 for 1987.

Full time employment has been created for 72 people, including six salaried personnel (foremen, watchmen and a clerk), 40 women

⁶. USAID, the Inspector General, "Review of Selected Agriculture Sector Projects, RDO/C." Audit Report No. 1-538-85-9, July 31, 1985.

engaged in planting, fertilizing, and propagation, and 20 men engaged in heavy field work. WITP also employs ten extra women three months per year for planting. Total payroll in 1986 totalled about \$155,000. In addition, the company purchases from local farmers about \$10,000 of coconut husks (which are ground for potting soil) and \$5,000 of sand per year for potting soil. It has local freight contracts for the transport of refrigerated containers to the docks, worth \$18,500 in 1985 and \$31,500 this year. Local air shipments amount to \$2500 per year.

New technology spinoffs from the project for the region may include tissue culture technology, and general agricultural skills in disease and pest control.

Difficulties faced by the Project: The Barnard's changed their British partners a few years ago. WITP had some difficulties during the early years of the project in growing and selling its products, and had little in the way of relevant expertise to draw on. The managers had to learn much about the shading and irrigation systems by "trial and error".

Unit prices have been declining somewhat in real terms since late 1984, exacerbated by exchange rate fluctuations between the US dollar (to which the EC dollar is tied) and the UK pound sterling. WITP had to drop its prices by 16% in 1984 to adjust for the rise in the US dollar, but has been unable to raise them since then.

The manager reports that WITP may have been tied down by some provisions of the CDB loan, and attempts to request changes in the conditions have met with slower response times at CDB than would be the case at most private banks. For instance, WITP, which experiences a yearly selling cycle, requires a higher overdraft during part of each year; but the company must obtain permission from CDB to raise the overdraft ceiling each year, which then drops back to the level originally agreed upon, necessitating a new request the following year. CDB committee decisions are required to alter any loan provisions and the WITP manager reports it may take weeks to process a single request.

If CDB financing hadn't been available, WITP probably could have obtained financing from LAAD or elsewhere. The CDB loans have somewhat better terms than commercial loans, but the interest rate differential has fallen over the past few years, and the intangible costs associated with a "development loan" (inflexibility and lack of timely responsiveness on the part of CDB) have made the overall desirability of such loans perhaps no higher than a commercial loan. WITP has (as of Feb. 28, 1987) overdue principal of \$18,646, but the CDB's Loans Manager

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expressed confidence that the payment was simply tardy, and said it was not a cause for concern.

Evaluation Team Assessment: On balance, the WITP appears to be a worthwhile subproject. The company is generating rural employment, supporting the purposes of the 007 project. Growth in sales over the past two years has been healthy.

The fact that WITP required an extension of the grace period in their loan, and are currently overdue in their payments indicates that the project may require continued monitoring. CDB and WITP should review the original loan agreement to bring it more in line with current working capital and cash requirements, as WITP's volume of activity has been expanding steadily over the past two-three years.

7. CDB - Carriacou Sheep Project - Grenada

The CDB approved a loan of \$107,000 for the Carriacou Sheep project in May of 1980. The loan supported a total investment of \$322,000 to establish and develop a sheep production enterprise on unutilized government land on the island of Carriacou. The loan was to support the purchase of equipment, a water supply system, animal purchases, land preparation and pasture fencing. The specific goals of the sub-project were increased production of sheep for local consumption (reducing imports), and "increased utilization of the lands" involved in the project (130 acres on two estates). Additional goals were to improve the quality of breeding sheep available to local farmers, to increase the efficiency of sheep production on Carriacou (with local farmers following the example offered by the project) and to provide local farmers with the opportunity to use the marketing channels of the project to dispose of their sheep.

Project Achievements: The project has introduced the breed of Barbados Black Belly Sheep to Carriacou for breeding stock and mutton production. The project had 354 sheep in 1986, of which 240 were breeding ewes. The project employs four individuals: a manager, an assistant manager, and two shepherds.

The Barbados Black Belly sheep are a hearty breed, well suited to difficult conditions. They are very productive, in that female sheep of this breed frequently have multiple births: twins are common, triplets are not unusual, and quadruplets have been born. The breeding unit of the project, 35 acres, is envisioned to serve the wider Caribbean, particularly small farmers. The 95 acre Dunpries estate could support production of up to 45,000 pounds of meat per year. Small farmers can also use the marketing channels established by the project, although this has not

occurred. There have been \$2000 in principal repayments since the loan was made, and there are no arrears.

Difficulties faced by the project: The project was plagued by a number of difficulties from the outset. Carriacou is a small, largely undeveloped island, lacking in (among other things) infrastructure and sophisticated transport facilities. The project was begun in 1978, but the required heavy equipment was not brought to Carriacou until 1985. According to the CDB project officer, although a barge was available for equipment transport, the Grenada Ministry of Agriculture waited until a new jetty was completed in 1985. The land for the site was only partially cleared under contract with a local concern; approval of the next tranche of funding was so slow in coming that the small piece of land was overgrown again and needed another clearing effort.

The project reportedly brought in revenues of \$9,300 in 1986, of which \$4,800 represented sales of sheep for breeding and/or mutton, and the rest was earned from the sale of a tractor and other project assets. Expenses were about \$20,800. The project has experienced negative cash flows for the past three years.

The project was intended to provide an example of modern methods of stock control and livestock husbandry to local farmers: fencing, fodder production for the dry season, controlled breeding, and selective offtake. The manager reports that local farmers are uninterested in the advice offered by the project personnel, and although some farmers are interested in breeding stock (particularly rams), they have not exercised controlled breeding practices. Another major problem appears to be inadequate fodder production, both in terms of quantity and nutritional value.

Officials at the Grenada Ministry of Agriculture believe that lack of management skill probably contributed to the lack of progress; local management, backed by the agricultural officer for Carriacou (from the Grenada Ministry of Agriculture) seemed to question whether the sponsors (the Grenada government) were truly interested in the project: they reported that last year, they made a recommendation to the Grenada Ministry of Agriculture that they either commit the funds necessary to revitalize the project, or close it down. The Grenada Ministry of Agriculture reportedly decided to continue the project, but has not yet come forward with additional capital.

Evaluation Team Assessment: There is scant evidence that this sub-project has made any significant contribution to any of the goals of the OC7 project, under which USAID funds were committed. Employment has been minimal. There is little evidence of an improved market for local small farmers, nor is there evidence of

lowered costs of production for small farmers. The sub-project can not even claim achievement of its own goal of "increased utilization of the lands," (assuming the implicit intention was to establish a financially self-supporting project) as the endeavor cannot cover its operating costs, much less the loan payments. Annual expenses over the past three years have averaged \$18,766, while revenues have averaged \$4,447 even including the sale of project assets. It appears that the Grenada government services the loan out of general revenues.

It is the view of the CDB project officer that the project was never fully or properly implemented. The on-site project manager and the local agricultural officer believe that the project is not viable given the resources currently available. Either way, the project will require concerted effort in order to make it viable: it should either be revitalized and provided with a stronger market orientation, new management, and sufficient resources to make expanding production self supporting; or the project should be closed down, and all the assets (livestock and equipment) sold.

8. LAAD - Tillage Services, Ltd - Barbados

A LAAD loan of \$200,000 was approved for the Barbados Tillage Services, Ltd, in December of 1981 to establish a company which would provide land cultivation and agricultural workshop services to Barbadian farmers. Loan funds were used to purchase tractors, tillage, and workshop equipment. Total disbursements amounted to \$188,000, and were supported by an equity investment from LAAD of \$42,000. Reported repayments of principal to date have totaled \$31,000, but the company is being liquidated and LAAD has written off at least \$80,000. The official balance on the 057 loan currently stands at \$75,000.

Project Achievements: As of September, 1983, LAAD reported that the company employed six people directly. In addition, indirect employment for about "175 full-time equivalent jobs [was] created in the field as the result of bringing or keeping land under cultivation. The project has also benefited some 20 small farmers who would not have been able to work all their land without tillage service... Macro-economic impact has been roughly as projected, representing about \$1,700,000 in national value added."⁷ A USAID portfolio review, prepared shortly after the LAAD assessment, stated "The project currently prepares approximately 2,000 acres per season versus an estimate of 3,000 acres which will be required to make a modest profit." An

7. LAAD, "Project Assessment Updates", Sept. 1983

Agricultural Officer in the Barbados National Bank who was familiar with the company said that its work was in a high order.

Project Difficulties: The tillage services company reportedly suffered from the decline in the sugar industry in Barbados, including the 40% cut in the US sugar quota, and exacerbated by drought. The government had been subsidizing tillage services for small farmers, but the project manager reports that the per acre costs of servicing a small plot are much higher than those for servicing large tracts, due to the costs of transport between many widely scattered small plots. Small farmers (even with government subsidies) cannot or will not pay the amount that tillage services would need to charge to cover all its costs; and there are not enough contracts available from large estates to permit cross-subsidization for small plots. There has been very little demand for tillage services for crops other than sugar cane. The company has been unable to cover its costs and is currently in liquidation.

LAAD originally committed \$30,000 at project startup for a 75% equity position, (the remaining 25% being held by the local partners) but disbursed \$42,000. The USAID loan funds of \$188,000 were in the form of a debenture which was secured by a chattel mortgage on the equipment. Some of that equipment has been sold and LAAD has received partial repayment. LAAD admits that it will suffer a loss which is not determined yet, since some of the equipment is still being sold. In the business and legal negotiations that transpired in 1985-86, LAAD "sold" its 75% position to the local partner, financed the transaction with a debenture, and made other agreements with him to recover its investment. Both sides are consulting legal counsel and although the firm is not legally or technically in bankruptcy or receivership status, the firm is in liquidation.

Evaluation Team Assessment: It appears that the full per-acre cost of servicing small farms (i.e., including overhead and transport) is significantly higher than full per-acre cost of servicing medium and large farms. The difference between the per-acre costs for small plots and those for large plots is scale-derived cost which was perhaps not fully anticipated in the pre-funding analysis. There may be a lesson in the experience of the Tillage Services company for future projects which seek to serve the needs of small farmers: unit costs may be significantly higher than average and should be anticipated in feasibility studies.

IV. LOANS TO DEVELOPMENT FINANCE CORPORATIONS UNDER 007

A. INTRODUCTION

This chapter discusses the loans made to various national Development Finance Corporations (DFCs) under 007. Section B discusses the appropriateness of these loans and the terms of the loan agreements between CDB and the DFCs. Section C contains descriptions of each of the individual DFC loans under 007. Section D provides a summary of DFC performance with the funds from 007.

B. APPROPRIATENESS AND TERMS OF DFC LOANS UNDER 007

The original intent of the 007 project, through which USAID extended \$6.5 million to the CDB in 1978, was to finance agribusiness projects, for which the ultimate beneficiaries would be small farmers and/or the rural poor in the Eastern Caribbean. Loans in excess of \$100,000 would be made directly by the CDB to the borrower; loans less than \$100,000 would be made through the appropriate DFC in the country of the borrower.

There is no record of any loan being approved from the 007 funds until 1979, when the CDB extended a \$882,000 loan to the Barbados National Bank, mostly for subloans in the range of \$1,500 to \$37,500. The funds were explicitly earmarked for agricultural and fishing credits and farm improvement credits.

Presumably, a dearth of potentially viable small agribusiness ventures motivated a search for other avenues for disbursing the 007 funds, and agricultural or Farm Improvement Credits looked like the only source of demand for subloans which would strictly satisfy the criteria that the funds benefit small farmers and/or the rural poor. This shift into agricultural credits to small farmers/fishermen was not envisioned in the project design nor consistent with a strict construction of the 007 Loan Agreement. There is no record of subsequent amendments documenting such a shift, although it moved more than one third of the project funds away from the original purpose of the project.

As discussed in Chapter I, the 007 project was designed to complement and supplement RDO/C's 006 project, under which USAID funds were used by CDB to extend production credits to small farmers through the DFCs. The 007 project sought to address problems in market structure for small farmer crops. Enterprises which reduced the costs of inputs to small farmers and which increased employment opportunities for rural workers in labor intensive enterprises were also eligible for financing. Presumably, a scheme of small farmer production and/or farm

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improvement credits which functioned as an integral part of an overall plan for establishing an enterprise to process the small farmer outputs would be consistent with the fundamental intent of the 007 project. However, where small farmer loans are not functionally important to (and tied to) the establishment of a non-farming enterprise, such utilization appears to depart from the purposes of the 007 project. When 007 funds were lent to small farmers without an identified relationship to a non-farming enterprise, they represented a mere duplication of some of the major functions of the previous 006 project.

The loans extended to the DFC's did not strictly incorporate the 007 Loan Agreement's requirements for appraisal of subprojects:

All project appraisals will be either conducted by the CDB or, if conducted by a DFC or the CIC, reviewed by the CDB. In accordance with its existing practices, the CDB will analyze the technical, economic, financial, and social feasibility of each project." (Annex I,p.5)

CDB did not arrange to approve appraisals of individual subloans made by the DFC's under the 007 loan funds which it extended to them, nor would it have been practical for CDB to do so.

An analysis of the 007 Project Agreement provisions reveals an underlying structure premised on subprojects rather than on lines of credit. Apparently what happened was that RDO/C and CDB quietly agreed to dedicate a significant portion of 007 funds for what were, in reality, 006 purposes-- and to use 006 procedures for this purpose-- without amending the Project Agreement or otherwise acknowledging that the project design had been changed. Presumably, at the time, this course appeared to be a simple, administratively practical, and cost-effective way to serve the intended beneficiaries as well as to respond to pressures to commit funds and show project results. With the benefit of hindsight it appears that, under pressure of reality, a project which RDO/C designed to produce an evolutionary advance in the agribusiness structure of Eastern Caribbean economies quietly experienced an atavistic reversion to type.

According to CDB's current Manager for DFC's (who was not in that position until after all the DFC 007 loan funds were disbursed and who was not present at the negotiations with RDO/C), most of the 007 funds were incorporated into larger programs for Farm Improvement Credits, which also involved funds from other sources. For example, he explained that the 007 funds which were sent to the Antigua and Barbuda Development Bank were combined with funds from USAID 012 (Employment/Investment Promotion) and a fund of general CDB resources to create one large loan designated by the CDB as 19/SFR-A. These funds, in turn, were combined with

Canadian funds to form a Farm Improvement Credit (FIC) program. Most statistics available at CDB on the performance of the DFCs' subloans pertain to their FIC programs, or perhaps their individual SFR loans, but are not available for 007 alone.

Each of the 007 loans to the DFCs had terms of 20 years, including five years grace, with an interest rate of 4% per annum. In addition to the usual conditions applicable to commercial and development loans made by any lending institution, provisions applicable to the 007 DFC subloans all (with some minor variations) stipulated a minimum and maximum subloan amount, a ceiling on the net worth of the borrower, and restrictions on the use of the funds: the subloans could not be used to finance -

- (a) the purchase of land and/or existing buildings;
- (b) working capital except where required for start-up operations;
- (c) refinancing or equity investments; or
- (d) any other purpose which is excluded from financing by the Bank,

"unless the expenditure by the sub-borrower in respect of any such component referred to in this paragraph is met by the Borrower [the DFC] or the sub-borrower."⁸

Withdrawals should not exceed ninety percent of the total costs of the sub-projects to be financed by the sub-loans. There are restriction on the source of the inputs to be financed by the loan:

Goods and services required for carrying out the Project shall ... be procured only in the States and Territories mentioned or referred to in Schedule 4 to this Loan Agreement; and if they are to be financed out of the proceeds of the FIC and EIP portions may also be procured in eligible countries mentioned or referred to in Schedules 2 and 3 respectively.⁹

With regard to recycling of repayments of sub-loans, the CDB provides that the DFCs -

8. Provisions applicable to CDB line of credit 19/SFR-A to the Antigua and Barbuda Development Bank; Article X, Section 10.02 (d)(iv), 1980

9. Ibid., Article IV, Section 4.11.

... may retain from sub-loan recoveries made under the SDF and FIC portions of the loan, and in the form of liquid investments an amount as computed at the close of the previous half year not exceeding 33-1/3% of such recoveries accumulated by the Borrower in excess of the amounts required to repay the Borrower's obligations under these portions of the Loan for the next ensuing six month period... the remaining 66-2/3% of sub-loan recoveries from the SDF and FIC portions accumulated by the Borrower in excess of the amounts required to repay these portions of the Bank loan will be recycled for Industrial Credit or used to repay in advance of maturity a portion of the loan.¹⁰

The evaluation team visited five of the DFCs which received loans from the 007 funds, via CDB. The DFCs concerned were as follows (listed in the order visited by the evaluation team):

- Antigua and Barbuda Development Bank
- St. Lucia Development Bank
- St. Vincent Development Corporation
- Grenada Development Bank
- Barbados National Bank

In addition, a telephone interview was conducted with the Dominica Agricultural and Industrial Development Bank, which has administered an input credit scheme for citrus growers.

A general description of the activities and status of each of the DFC loans are presented below. More detailed descriptions of each of the DFC loans are contained in Appendix C.

C. INDIVIDUAL DFC LOANS UNDER 007

1. Antigua and Barbuda Development Bank

The Loan Agreement: The CDB approved a \$275,000 loan for the Antigua and Barbuda Development Bank (ABDB) in October of 1980; \$260,000 was disbursed in 1981. The 007 funds were combined with USAID 012 funds (Employment/Investment Promotion) and CDB resources into a loan designated 19/SFR-A by the CDB. 19/SFR-A in turn was combined with earlier disbursed Canadian funds (amounting to \$345,000) to form the ABDB's Farm Improvement

10. Ibid., Article X, Section 10.06.

Credit (FIC) program. The FIC loans made by the ABDB included crop production loans (mostly for vegetable crops, but also livestock) and fishing loans. The net worth criteria specified a ceiling of \$150,000.

The Subloans: There have been 25 loans made, mostly for three to four year terms, for the purchase of farm implements, livestock, and boat engines; grace periods are 3-5 months. Of the 25 loans, ten were made for crop production, ranging from a principal of \$3000 to \$22,000 and averaging about \$9,000. Five loans were made for livestock, in the range of \$3,700 to \$9,000. Ten loans were made for fishing, ranging from \$1,000 to \$50,000 and averaging about \$15,000.

Of a total of \$287,000 (principal) lent from 007, \$78,000 represented loans which have (as of Dec. 31, 1986) been totally paid off, \$36,000 were loans being paid off on schedule, and \$173,000 were loans in some degree of arrears. Full reports are behind schedule, but as of June 30, 1985 (the latest full report to CDB), loans under the 19/SFR-A funds had an outstanding balance of about \$239,000; the rest of the resources were being utilized for purposes other than farm improvement credits. Interest rates charged by ABDB are usually 10.5%, per annum, fixed; although some high risk farm loans might carry an interest rate as high as 20%.

Performance: Many of the loans were listed as arrears, but were described by the accountant as only "slightly in arrears"-having missed only one or two payments. The ABDB personnel said that the best repayment performances were from borrowers who had another source of income which the bank could arrange to garnishee: primarily part time farmers who had regular employment. They also said that the arrears in the crop and livestock sectors appeared to be related to drought and other natural problems; the arrears on the fishing loans were more often due to mismanagement of funds and resulting cash flow problems.

As of February 28, 1987, the ABDB had the following arrears with the CDB: principal - \$29,954.04, Interest - \$29,606.45, Interest on Overdue Amounts - \$2,090.17. The loan is described by CDB's Loans Manager (Finance Department), as "bad." CDB's Treasurer reported to the evaluation team that the Government of Antigua has a very poor record of debt service, although their foreign exchange earnings are quite healthy.

The ABDB is also behind in its reporting: although they are required to submit quarterly reports to CDB, the last one they submitted was in 1985. They have not been visited by CDB since 1985. CDB's manager of DFCs reported that resources spent on

visiting ABDB, advising them, and reminding them of their obligations have not been fruitful. The CDB's limited personnel resources are therefore devoted elsewhere.

The personnel interviewed at the ABDB informed the evaluation team that about \$100,000 of the loans under the 007 funds were not officially documented with CDB, because the documentation offered by the ABDB (e.g., evidence of payment, certificates of product quality) were not accepted by the CDB. They also said that although the 007 funds had originally been disbursed on a reimbursement basis (i.e., they could recover funds only after submitting documentation on each sub-loan), they later began receiving flows under 007, for which they were requested to submit documentation after the fact.

Other comments: The ABDB Agricultural Loans Officer told the Evaluation Team that little extra employment was generated by the loans: most small farms are family operations. They may employ a "hired hand" for part of the season, but the agricultural sector generally faces a labor shortage and has to compete with the tourist sector.

The Agricultural Loans Officer stated that 90% of the farmers rent their land from the government, and most of the other 10% rent from private landlords. The government owns about 60% of all the property in Antigua. The ABDB requires security of tenure for an FIC subloan applicant.

2. St. Lucia Development Bank

The Loan Agreement: The CDB approved a loan for \$500,000 to the St. Lucia Development Bank (SLDB) in October of 1981, and disbursed \$409,000 in January of 1983. The funds were combined with \$351,000 of earlier-disbursed Canadian funds to form St. Lucia's FIC program. The Managing Director of the SLDB stated that the funds are used exclusively for agriculture. Aside from the usual provisions attached to the 007 DFC loans, according to the Managing Director, the conditions pertaining to the SLDB included a net worth ceiling for the sub-borrower of EC\$150,000 (later relaxed) and a provision that borrowers must have collateral for 100% of the amount being borrowed.

It appears that an attempt was made to tie this particular loan to the original purpose of the 007 project. The provisions applicable to the consideration of sub-loans from the 007 funds include:

In making sub-loans out of the proceeds of Portion B [007]-

(aa) the Borrower shall seek to incorporate, to the extent possible and where appropriate, the following elements which help to strengthen the forward and backward linkages of borrowing enterprises to the target group intended to benefit from Portion B:-

- (1) contract buying;
- (2) employee profit sharing;
- (3) cooperative ownership;
- (4) small farmer equity participation;
- (5) enterprise services to small farmer suppliers such as credit in kind and technical assistance.

(bb) Where any of the elements referred to in the immediately preceding provision of this sub-paragraph are considered essential to ensuring the desired target group benefits the Borrower shall require the sub-borrower to implement it as a condition of the sub-loan.¹¹

Given the net worth ceiling, however, some of those conditions appear fanciful: borrowers with a net worth under the ceiling are generally in no position to initiate projects which could employ any of the above provisions.

The Managing Director said it was initially difficult to disburse the loans, because of the conditions attached to them. Many small farmers do not want to get involved in credit; while the net worth ceiling limited loan approvals on the upper end. He pointed out that someone with a good house and two vehicles would probably have a net worth above the ceiling. They appealed for a relaxation of that restriction, and obtained approval in 1985.

The sub-loans: The SLDB agricultural loans usually have terms of three to five years, although some have terms of up to ten years. Approvals of 96 subloans totaled about \$383,000; the loan balances at the time of the evaluation team visit (mid February, 1987) stood at \$173,500. The size of the loans ranged from about \$1,000 to \$32,500; the average principal was about \$3,700. Interest rates ranged from 8.5% to 14% percent, depending on the term of the loan and the amortization schedule. The current interest rate charged by the SLDB for most loans is 12%. Of the 96 subloans listed under the 007 loan, 21 were fully paid off.

The arrears position on the loans from the 007 funds cannot be distinguished from the rest of the FIC program. The SLDB

11. Provisions of SFR/25-STL line of credit from CDB to Saint Lucia Development Bank, Article X, Section 10.01. (iv), 1981

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inherited the FIC program from another development bank, and obtained, in addition, fresh funds (including 007) to expand the program. The SLDB reports on the "inherited portfolio" (which does not include any 007 funds) separately from the "SLDB portfolio" (about half of which are 007 funds). As of 30 September, 1986, only 2.7% of the principal outstanding in the FIC "SLDB portfolio" was in arrears.

The SLDB's loan from CDB under 007 has no arrears for interest; the first installment of principal is not due until January 15, 1988.

Other comments: According to the Managing Director of the SLDB, agribusiness loans made by the SLDB were funded by sources other than USAID 007; they included loans from general CDB funds and from the Inter-American Development Bank channeled through the CDB in a package. The SLDB, based on the conditions, provisions, and restrictions of each of the Portions of that package, determined the most appropriate sort of lending for that portion. The USAID 007 funds, "portion B", were earmarked for small farmer credits. The other two portions funded larger production credits, including an agro-processing company which produces ground spices, coffee, and coconut (which received a loan for \$89,000); and a meat processing company which produces hams and sausages from a mix of local and imported meats. A third agro-industrial project they had "inherited" from another agricultural development bank, had a principal of about \$60,000 which processed local fruit into juices and canned products.

In general, however, the SLDB personnel stated that it was difficult to find viable agribusiness ventures to lend to in the region. The quality of domestic materials compared to imports, the reliability of supply and cost of local inputs, the training and skills required in agribusiness, and the high cost of labor, all contributed to the difficulties facing the agribusiness sector. Although St. Lucia is a large banana producer, there is nothing in the way of a banana processing industry on the island, neither for banana flavoring, banana chips, nor animal feed.

About 60% of the farmers in St. Lucia own their own land, and 40% are listed as renters; although many actually work land owned by other family members and may or may not pay a cash rent.

3. St. Vincent Development Corporation

The Loan Agreement: The 007 loan to St. Vincent was originally extended as part of the Integrated Sugar Rehabilitation Project to the St. Vincent Development Corporation (DEVCO). The amount was \$370,000, approved October 1980 and disbursed December 1980.

The loan was on the books of DEVCO, but administered and disbursed to the ultimate borrowers (individual cane growers), by the St. Vincent Sugar Industries. According to several sources, DEVCO, a parastatal, did not participate directly because the government of St. Vincent felt that the interest rates that DEVCO would have to charge for the 007 funds were too high. Since the St. Vincent Sugar Industries were also government owned, this choice appears to have represented a decision that St. Vincent Sugar Industries was better able to bear the onus of charging the USAID mandated "high" rates than was DEVCO. The end result was curious: In terms of the intended purposes of the 007 project as designed by RDO/C and in terms of the implementing mechanisms built into the 007 Project Agreement, it would have made very good sense to incorporate small farmer loan funds directly into the St. Vincent Sugar Industries Subproject, with DEVCO handling the administration of the program to the extent deemed prudent and administratively cost-effective. Instead, the small farmer loan portion of the package was incorporated into a separate loan for which the 007 Project Agreement in fact had no formally established implementing mechanism. The 006 implementing mechanisms apparently were used instead. The direct involvement of the sugar company in the small loans to farmers in fact occurred for reasons that require special explanation and in ways that proved unfortunate. This is certainly not to say that difficulties which followed would have been avoided had the sugar company subloan itself included the small farmer credit program. But the chain of responsibility would have been clearer and explanations of failure less convoluted.

Sugar growers' repayments were to be taken from their earnings from sale of cane to the Sugar Industries, and remitted to DEVCO. The subloans were closely tied to the larger sugar rehabilitation project, and according to the provisions of the loan, were to be made:

- only for enterprises in the private sector that -
- (i) Expand and/or stabilize the market for the small farmer i.e., those whose agricultural holding are under twenty-five (25) acres;
 - (ii) Reduce the cost of small farmer production; or
 - (iii) increase employment opportunities for rural workers.¹²

12. Provisions of Loan 25/SFR-ST.V from CDB to St. Vincent Development Corporation, Article X, section 10.01 (a), 1980.

Instead of imposing a strict net worth ceiling on lending, the provision stipulated that borrowers with a net worth over EC\$150,000 would have to pay a rate of interest of at least 9.5% per annum. Borrowers with a net worth under EC\$150,000 were to be charged in the range of 7 - 9% per annum (these stipulations follow the provisions of the 007 loan agreement between CDB and RDO/C more closely than those contained in most of the other CDB-DFC loan agreements).

According to the 1985 audit made by the US Inspector General, the St. Vincent Sugar Industries was remiss in administering the loans and reporting to DEVCO. The Inspector General reported that:

No collateral was required from the farmers (other than the sugar crop itself), regardless of the loan amount. According to a CDB Farm Improvement Officer assigned to the Development Corporation, the sugar company often made disbursements in excess of what farmers could repay from their sales of sugar cane. Therefore the Development Corporation reimbursed the sugar company for only a portion of its disbursements to farmers, and the sugar company had to cover the remainder with its own funds. When the sugar company received payments from farmers, it recovered its own funds first and applied the rest to the Development Corporation's loans.

... the sugar company frequently ignored the repayment schedule and deducted too much or too little. Also, long period of time passed between the time the sugar company made the deduction and the time it reimbursed the Development Corporation. The Corporation continued to charge the farmer interest until it received the payment. Because the sugar company frequently collected too much from the farmers, many farmers had credit balances with the Development Corporation which had not been refunded.¹³

The audit report went on to state that DEVCO failed to monitor disbursement, repayments and arrears, and even failed to distinguish between short term loans and medium term loans. At the time of the report, a high proportion of the loans were in arrears, and the report recommended that "no further loans should be made until corrective actions have been taken. It is also apparent that the Development Corporation will require close supervision from the CDB and RDO/C when loan activity resumes."

13. "Review of Selected Agriculture Sector Projects, Regional Development Office/Caribbean." Audit Report No. 1-538-85-9, July 31, 1985, p.15.

As discussed above in Chapter III on the Integrated Sugar Rehabilitation Project, St. Vincent Sugar Industries was closed down at the end of 1984, with substantial amounts of loan funds still outstanding. The loans were, however, guaranteed by the government of St. Vincent; and the entire portfolio was transferred to DEVCO. Since the entire loan was tied to the integrated sugar rehabilitation project, any other use of the funds would require the approval of the CDB and RDO/C.

DEVCO began lending from the 007 funds for agricultural credits other than sugar early in 1985. There is no evidence that the loan program was ever officially halted, as called for by the US Inspector General's audit report. There is no evidence that DEVCO ever formally asked permission from CDB to use the fund for other agricultural purposes until January 16, 1987. The Manager of DFCs at CDB said that they required permission from RDO/C for the transfer, but had not yet formally requested it.

A letter from RDO/C's Agriculture and Rural Development Officer to CDB's (then) Assistant Director for Agriculture, dated July 3, 1986, following a visit to DEVCO by RDO/C's Financial Analyst, noted that "DEVCO's controls and procedures... have strengthened since the visit by the audit team of the AID Regional Inspector General in May, 1985. However, it appears that there is still considerable room for improvement, especially in the area of loan collection." The letter goes on to suggest that CDB "request DEVCO to implement the following recommendations: (a) that the use of uncommitted sugar loan funds for non-sugar agricultural purposes be formally approved by CDB..."

The subloans: The DEVCO officials interviewed by the evaluation team reported that since 1985, DEVCO was using the 007 funds for loans under \$1,000, because most of the other sources of funds in the agricultural programs stipulated a minimum loan size of \$1,000, but some farmers want smaller loans.

DEVCO officials reported that it has had 300 borrowers since the end of 1984, when the sugar factory closed, including about 120 farmers, primarily in banana production (who have received about 85% of the funds), fishermen (about 10%) and livestock owners (about 5%). The loans are primarily production credits, and used to buy fertilizer, seeds, livestock, water tanks, to repair boat engines, and the like. A minority of the loans were larger credits for farm improvement.

Performance: The accountant reported that of a principal outstanding of \$122,000, 36% of it was in arrears.

Since the end of the sugar program, the recycled 007 funds have been listed under the category of Local Funding Source, Agricultural Programme, which also includes local (i.e., St. Vincent) funding sources. DEVCO has repaid \$25,000 of principal to CDB.

4. Grenada Development Bank

The Loan Agreement: The CDB approved a \$296,000 loan from 007 funds to the Grenada Development Bank in April of 1981, which was disbursed in July of 1982. The 007 funds were added to Canadian funds to support two lending programs: a Farm Improvement Credit (FIC) Program, which involved loans as low as \$1,000 dollars, and an Agro-Industrial Credit (AIC) Program, which involved loans of at least \$3,700, but no more than \$100,000. The net worth ceiling of \$150,000 is imposed for farm improvement credits.

The subloans: The GDB split the \$296,000 into two portions: one for Farm Improvement Credits (\$247,371 from 007, accounting for 42% of total CDB-channelled resources for FIC) and one for Agro-Industrial Credits (\$47,746 from 007, accounting for under 4% of resources available for AICs). The FICs have gone to about eighty small farmers (with holdings of about one to ten acres), at \$1,100 to \$2,200 each. Most of the farmers were involved in mixed cultivation: banana, cocoa, nutmeg, and/or vegetables. Fishing was also supported under that program. Most of the loans are short term - up to eighteen months. There have also been some medium term loans of three to five years for infrastructure development: improving private rural roads, planting of perennial crops such as nutmeg, rehabilitation or expansion of agricultural land.

The AICs were primarily for individuals with a net worth of over EC\$150,000. The GDB has only about ten such loans under the 007 program. The AIC loans are US\$15,000 to \$37,000 each, and have supported small concerns producing bread, shoes and leather handbags, construction of guesthouses, acquisition of vehicles (especially pickup trucks and landrovers for farms), fishing boats, and some plantation agriculture. The AICs are longer term loans, usually for five to ten years.

Performance: The repayment record has been better for the AICs than the FICs. Repayments can sometimes be arranged through marketing companies, and the repayment record was best when such arrangements could be made - either through the marketing companies or, in the case of part time farmers, through

employers. Figures from the quarterly report to CDB for December 31, 1986 indicated that about 30% of the principal of the FIC loans was in arrears (of which 40% was in arrears for over 12 months), and that 10% of the principal outstanding for AIC loans was in arrears (of which 40% was in arrears for over 12 months). The arrears figures for December 1984 were 14% for FICs and 11% for AICs.

The CDB reports that the 15/SFR-GR loan has no arrears for interest. The first installment of principal repayment will be due in July of 1987.

Other comments: The GDB personnel said that the farmers face labor problems and falling prices. Several large estates are being sold off, but the bank is not allowed to finance the purchase of land. They reported that agricultural land is selling for about US\$3,000 to \$4,000 per acre; and farmers usually require long term loans. The farmer has to borrow from a commercial bank, and the land is the security for the loan. If the farmer then wants a farm improvement credit from GDB, there is no security for the GDB to lend against. The government of Grenada, however, is divesting many of the estates which were acquired by the previous administration for state farms. The government will sell parcels of land through lease-purchase, and will at the same time guarantee development loans for the lands. The GDB personnel said this system could lead to a higher proportion of loans going to the agricultural sector.

5. Barbados National Bank

The Loan Agreement: The CDB approved a \$882,000 loan to the Barbados National Bank in January of 1979 (designated 6/SFR-BDS). and the funds were disbursed in December of 1979. BNB reports that the 007 funds were combined with another, \$924,000 loan from CDB and with local resources to support a large agricultural lending program. Along with the usual provisions of applicable to the 007 loans, the CDB stipulated that "sub-borrowers shall be charged interest ... at a rate not in excess of eight percent (8%) per annum." Subloans over \$37,500 should be approved by the CDB. The net worth ceiling is set at BDS\$150,000 (US\$75,000) for sub-borrowers. The minimum loan which could be made was set at US\$1,500; the maximum was set at \$150,000 for a cooperative and \$100,000 to any company or individual.

Technically speaking, the BNB is not a DFC, but a commercial bank owned by the government of Barbados. The Manager of the BNB's Agricultural Division stated that much of the loan went into fishing. In December 1982, the entire fishing portfolio (about 60% of the principal outstanding on subloans in the lending

program) was transferred to the Barbados Development Bank, (a true DFC owned by the Barbados Government), by order of the Prime Minister's office. The BDB already had a fishing portfolio, and its terms were easier than those of the BNB. The BNB was also more specialized in agriculture, which may be the reason the portfolio was split, and not transferred in its entirety. The Manager also stated that the terms of their lending to farmers were concessionary, and "semi-development."

The subloans: The agricultural loans under the 007 loan funds are mostly for five to seven years. The average fishing loan approved by BNB had averaged \$11,000, but some were as high as \$37,500; the 44 fishing loans disbursed by BNB before that portfolio was transferred totaled about \$500,000. The farm loans are smaller, averaging about \$6,500 and ranging up to \$25,000. The farm loans have supported livestock production (18 subloans totalling \$112,500 in pigs, dairy, and poultry), mixed vegetable production (4 loans totalling \$21,500) and the purchase of agricultural equipment (6 loans totalling \$52,000). The loans have been used for seed, cultivation, farm improvement, and other similar costs.

In addition, the BNB extended two subloans involving \$230,000 of 007 funds for a hydroponic vegetable production scheme. At least one of the subloans is higher than the \$100,000 amount stipulated by the 007 loan agreement. The subloan appraisal was prepared by CDB, which strongly recommended the project for funding by BNB, although the hydroponic project neither purchases from small farmers nor is labor intensive. It currently sells small amounts of fertilizer and pesticides to neighboring farmers, although there is no evidence that it did so until recently. It appears that CDB asked BNB to extend the subloan, instead of administering the subloan itself, because the 007 loan agreement between CDB and RDO/C stipulated a ceiling of US\$1.0 million for lending in Barbados. CDB had already extended \$882,000 to the BNB, so that an additional loan of \$230,000 would put it over that limit. Meanwhile, BNB's 007 loan was probably not being drawn as quickly as anticipated, so that it still had the resources to extend the subloan.

The Manager of BNB stated that the ceiling on net worth was raised from \$75,000 to \$100,000. He informed that the ceiling had restricted the BNB from making some loans in the dairy industry, where the assets represented by the livestock, farm buildings, and equipment quickly add up.

Performance: The personnel from BNB's agricultural division reported to the evaluation team that their repayment experience with sub-borrowers was mixed. They have an arrears condition which developed recently, partly due to "internal constraints"

related primarily to staffing, and perhaps insufficient vigor in pressing for repayment. They reported that action was now being taken to remedy the situation. Arrears data on the 007 subloans are not available, but the principal in arrears as a portion of principal outstanding on all CDB loans bearing 8% interest rates stood at 36% as of December 31, 1986.

The large hydroponics loan is deeply in arrears. The loan was made in 1982, and BNB personnel report that less than \$5,000 has been paid on it since then. The project suffered from unanticipated competition in local tomato production, and from cost overruns, many in connection with praedial larceny. BNB officials assert that the manager of the project is a highly competent agronomist and a skilled researcher, but lacks business management skills. The project manager, on the other hand, stated that the BNB personnel lacked an understanding of the nature of hydroponic production, and were not responsive to his business needs.

Other comments: The BNB personnel stated that the restrictions on the sources of goods financed by the loans had proven burdensome, especially for the fishermen. Although boat engines available from Japan were of superior quality and were cheaper than those available from eligible sources, the borrowers were not allowed to purchase the Japanese products with the loan funds. In addition, the BNB was not allowed to use the 007 funds to refinance projects that had "gone off stream" under the provisions, even if prospects for reorganization and eventual profit were high.

When asked by the evaluation team about the prospects for agro-industry in Barbados, the BNB personnel indicated that the future looked very good in that sector. The Ministry of Agriculture was taking an active interest in the sector, especially since the sharp cut in the U.S. sugar quotas. In the view of the BNB personnel, agro-processing is definitely needed to stabilize the market for much agricultural produce. Likely prospects include canning of local vegetable production and peanut butter. Irrigation would also support "off season" production, and reduce requirements for imports. They stated that interest in agro-processing was lacking in Barbados in the past because of the strength of the sugar industry - up until this season, Barbados' U.S. and British markets were stable and the prices guaranteed. The reduction of the US sugar quota has caused considerable concern, and producers will soon begin an active search for alternative products.

Large sugar estates occupy about 85% of the agricultural land on Barbados; but most farms are quite small, in the range of one half to five acres in size. Most farmers own their own land.

6. Dominica Agricultural and Industrial Development Bank

This loan is presented in CDB's records as the Integrated Citrus Development Project. The evaluation team was directed by the CDB to the Cooperative Citrus Growers Association in Dominica. When the evaluation team interviewed the manager of the coop, it was revealed that the coop had not concluded any loan agreement with CDB involving OOF funds. It was learned that the initial intent of the Integrated Citrus Development Project was to provide a \$610,000 loan to the Cooperative Citrus Growers Association (CCGA) in Dominica for the purchase of new packing equipment, with a companion loan to a DFC to support an input credit scheme for citrus farmers. However, during the negotiation procedure, the CDB asked that the cooperative hire new personnel, with specified levels of training and/or experience, for several positions, and made this a condition of the loan. The CCGA, after some deliberation, decided that the new personnel would increase their overheads to a level they could not sustain, given their costs of production and the market price they could expect for their product. The CCGA therefore decided against the CDB loan, and obtained financing instead from the Canadian Development Foundation.

The Loan Agreement: In 1981, CDB channelled a \$176,000 loan to the Agricultural and Industrial Development Bank of Dominica to finance the input credit scheme alone. Many of the usual DFC terms apply, the interest rate charged to the AIDB is 4%, they have had a five year grace period and have a 15 year payback period.

Subloans: Since October, 1981, the AIDB has made 94 loans to citrus farmers. The loans are in the range of \$200 to \$2000 (average about \$1,000) usually with a term of one to three seasons. The AID bank bought fertilizer and sold/loaned it to citrus growers on credit for one season. There is no collateral involved, but sales through the CCGA are pledged to repayment of the input credit. According to the manager of the input credit scheme, recycled funds can be lent directly to citrus growers in cash or in kind, for citrus or other fruit crops. The interest rate charged is 10%.

The CCGA will document the marketing record of its members to assist their loan applications, and extend a limited "guarantee" to the loan. The guarantee is limited to the extent that CCGA will administer and remit loan repayments directly to the bank out of the proceeds earned by grower/borrowers who bring their harvest to the coop.

Performance: Repayments by citrus growers have not been impressive. The manager of the input credit scheme said that in many instances, fruit brought in by farmers to the CCGA was not sold, so the loans went into arrears. At one point, the bank had \$65,000 outstanding in subloans and/or invested in inventory, which took about three years to clear. At the moment, the input credit scheme has EC\$8,000 (US\$3,000) in principal outstanding, of which EC\$6,600 is in arrears. The rest was recovered, repaid by the farmers. As reported by the AIDB, the balance of the resources available under 007 are being utilized for agricultural purposes other than the citrus input credit scheme, although mostly within the citrus sub-sector.

Major difficulties facing the input credit scheme include the market constraints faced by the growers, which limit their incentive to expand production (and keeps demand for loans low). As noted in the 1985 US Inspector General's audit, the subloan agreement was signed at a time when the British pound began to fall relative to the US dollar. Since the growers' inputs were priced primarily in dollars and their products were paid for in British Pounds, the margins were seriously reduced by the change in the exchange rate. The price received by the grower was insufficient to encourage production for the export market, and there was little demand for loans. As of the end of 1984, the bank still had over \$140,000 in cash available, and additional grower inputs lying idle. The official recommendation of the Inspector General was

that RDO/C ... obtain evidence that the Caribbean Development Bank has (i) requested the National Commercial and Development Bank in Dominica (now the AID Bank) to immediately repay that portion of the subloans which is not being used, and (ii) has authorized the Bank to appropriately dispose of agricultural inputs.¹⁴

There have been \$33,000 in repayments to CDB on the loan since then; the official loan balance on record at the CDB is therefore \$143,000.

The CCGA subsequently renegotiated its contract with its UK clients, agreeing on a fixed price of EC\$11.30 (US\$4.185) per carton, of which EC\$7.30 goes to the coop to cover packing costs and EC\$4.00 goes to the grower. In addition, incentive payments of up to EC\$1.50 per carton are paid to farmers for production

14. USAID Inspector General, "Review of Selected Agriculture Sector Projects, Regional Development Office/Caribbean." Audit Report No. 1-538-85-9, July 31, 1985, p. 5.

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which reaches the coop for the first three shipments in August of each year. These shipments are timed for a market window in the UK, which precedes the larger harvests of other world grapefruit producers. Exports were 32,000 cartons in 1985 - up from 31,000 in 1985, but still down from the high of 163,000 cartons exported in the 1978/79 season (before two major hurricanes and the fall of the UK pound). The manager of the CCGA expressed the opinion that the primary constraint to expansion is still the price received by the grower.

The manager of the input credit scheme at the AID Bank reports that a new market for grapefruit has opened up which may lead to increased demand for loans from citrus growers: The new market is provided by the expansion of Dominica Agro-Industries, an agroprocessing company which purchases grapefruit from local growers for processing into juice for export to the US. Although the unit price paid for grapefruit is lower than that offered by the CCGA during the export season, the overall value as well as volume of purchases from small farmers is higher for DAI, because the latter will take lower quality fruit, and will purchase year round.

C. SUMMARY OF DFC PERFORMANCE

A summary of the DFC use of 007 funds is presented in Exhibit IV.1. It can be seen that there have been almost 700 sub-loans extended, the average size loan has been just under \$3,000, the interest rates charged have averaged 9.6% (weighted average). Although it was not always possible to distinguish 007 resources from other resources in pooled lending programs, as of the most recent reports by the DFCs to the CDB, use of resources in the approved agricultural lending programs for subloans appears currently to be only roughly half of the resources (recycled 007 funds and other resources) available. In at least some cases, the balance of recycled 007 resources were put to other uses, (generally still within agriculture), a procedure which may have been necessary in order for the DFCs to repay their 007 loans: interest receivable on the sub-loans within some of the approved agricultural lending programs, (taking no account of arrears or non-performing loans), would be insufficient to cover interest payable on 007 resources. Principal in arrears on all lending programs involving 007 resources is currently estimated at about 30% of principal outstanding on subloans.

It appears that use of 007 funds marked for the DFCs were shifted from agribusiness into Farm Improvement Credits (FICs) and production credits due to a lack of demand for agribusiness loans and/or an inability on the part of most of the DFCs (at least as

Exhibit IV.1

SUMMARY OF DFC'S USE OF USAID 007 FUNDS

DFC	007 AMT DISBURSED	007 AMT OUTST'NG 12/86 <1>	(in US\$)		AVG SIZE	PERCENT SUBLOAN	
			ANNUAL INTEREST PAYABLE	NO. SUB- LOANS		INT'ST RATE	PRINCIPAL IN ARR'S
Antigua and Barbuda Development Bank	\$260,000	\$260,000	\$10,400	25	\$11,500	10.5%	26%
Barbados National Bank <3>	\$882,000	\$774,000	\$30,960	73	\$9,300	8.0%	36%
Dominica Agric. & Indus. Dev. Bank	\$176,000	\$143,000	\$5,720	94	\$926	10.0%	83%
Grenada Development Bank <2>	\$296,000	\$296,000	\$11,840	80	\$2,000	8.0%	30%
St. Lucia Develop- ment Bank	\$409,000	\$409,000	\$16,360	96	\$4,000	12.0%	3%
St. Vincent Development Bank	\$370,000	\$345,000	\$13,800	300	\$741	12.0%	40%
TOTAL/AVERAGE <4>	\$2,393,000	\$2,227,000	\$89,080	668	\$2,724	9.8%	30%

- <1> GDB first instalment due 1987-07-15; SLDB first instalment due 1988-01-15
- <2> GDB reports it also has about 10 AIC of \$15-37,000 each, interest rate of 9.5 - 11.5%
- <3> Portfolio split in 1982; fishing loans sent to Ba'dos Development Bank. % arrears based on all CDB financed ag. loans at BNB. Average size of sub-loans excludes one sub-loans for \$230,000.
- <4> Totals 007 amt. disbursed, amt. outstanding, no. subloans; weighted average for average size, interest rate, and percent subloan principal in arrears.

SOURCES:

007 Amounts disbursed, outstanding, annual interest payable: CDB files
 No. sub-loans, Avg. size, interest rates: interviews with DFC officials
 Subloan principal in arrears: estimates based quarterly reports by DFCs to CDB on lending programs including 007 funds.

150%

perceived by CDB and RDO/C) to assess and administer such loans. There is considerable evidence that conditions attached to the DFC loans, particularly the ceiling on the net worth of the borrower, may have stood in the way of potential loan approvals for true agribusiness. While the Loan Agreement between CDB and RDO/C defines the indirect beneficiaries of the project as "small farmers" (specifically, those exploiting under 25 acres of land), the loan conditions attached to the 007 funds substitutes a net worth ceiling which appears to be (in many cases) more restrictive than the provisions of the 007 loan agreement. For instance, agricultural land in Grenada is currently selling for EC\$8,000 - EC\$10,000 per acre. A debt-free farmer owning 20 acres of land valued at EC\$8,000 per acre is already over the net worth ceiling of EC\$150,000, not counting the value of his/her home, any farm buildings, vehicles, or other assets.

Several of the DFC personnel interviewed by the evaluation team stated that they were sometimes hindered even from making FIC loans because of the large number of restrictive conditions attached to the loans. In particular, they cited the restriction on the borrower's net worth, and the restrictions against lending for the purchase of land and refinancing as obstacles to approval of otherwise promising loan applications. In at least some cases, 007 funds had to be utilized for purposes other than the approved lending programs (but usually still within the agricultural sector) in order to keep them from lying idle.

Most of the loans disbursed within the approved programs were Farm Improvement Credits to small farmers growing bananas, citrus, vegetables, spices, or cotton; some went for livestock and a significant portion went to support fishermen. Loans financed production inputs such as feed and fertilizer, and/or for farm implements and equipment, boat engines, or livestock acquisition. There was no opportunity for the evaluation team to assess the impact of these subloans at the level of the ultimate borrower, and often the only information available was on the portfolio performance of the FIC programs.

There is little evidence that the DFC loans supported any of the specific purposes of the project, with the possible exception of employment creation, very loosely defined. The first project purpose, the stabilization or expansion of markets for small farmers, was not supported directly by any of the DFC sub-loans, although the DFC loan tied to the operation of the ill-fated St. Vincent Sugar Industries did assist the sugar production project, which had that purpose. Most identifiable loans, with the exception of the Dominica citrus input credit scheme, (and perhaps the loan for St. Vincent cane growers) did not go toward lowering the costs of any other inputs.

The final purpose, employment creation, may have been served to a minor extent insofar as farm improvement credits involved temporary employment (e.g., building a fence or clearing new land). In addition, at the margin, small farmer's ventures may have been supported to the extent that they had no pressing need to search for employment for themselves nor perhaps their families. But, according to most DFC personnel, small farmers usually do not employ people other than family members, except an occasional "hired hand" on a temporary basis. Thus, loans to small farmers may keep them from joining the ranks of the unemployed, but it does not generate significant employment for others.

The primary reason the 007 project provided for loans to "labor intensive enterprises" was to create new employment opportunities for the rural poor. It is certainly true that many small farms are themselves "labor intensive enterprises." But loans to small farmers, however labor intensive their operations may be prior to receiving project financing, do not necessarily increase "labor-intensive employment of the rural poor", as USAID usually defines that concept. The detailed project description contained in Annex I of the Loan Agreement provided that a subproject must be labor intensive with a ratio of total fixed investment per job of not more than \$7500 (later increased to \$10,000). Discussions with DFC personnel and examination of selected loan applications clearly indicate that some farm improvement loans extended by DFCs did not meet this criterion.

Therefore, with the dubious exceptions of the loans tied to the failed St. Vincent Sugar Industries, and the presently moribund citrus input credit scheme, the DFC loan programs apparently did not serve the purpose of the 007 project to any significant degree.

The conclusions of this evaluation support the conclusions of the earlier, 1984/5 evaluation of DFC performance conducted for the Caribbean Development Bank:

The interviews carried out with agribusiness operators in each of the four countries visited suggest that few linkages are being established due to DFC agricultural lending activity. The USAID Regional Agribusiness Development Project (RAD)[007], ... sought to support linking elements such as contract buying, employee profit sharing, cooperative ownerships and farmer equity participation. During our site visits we found little visible evidence that these elements were being promoted or developed between

growers and processors, growers and distributors, processors and distributors and/or processors and processors.¹⁵

Even on their own terms, subloan performance was highly variable across DFCs, ranging from about 2% of principal in arrears to over 80%, with most in the range of 15% to 35%. The variation appears to be more closely related to the administration of the individual DFCs than the performance of the agricultural sector in the individual countries. Most DFC personnel reported that their best repayment records were associated with part time farmers whose wages could be garnisheed. As reported by some DFC personnel, the worst arrears cases arose over recalcitrant debtors or "disputes" surrounding the loan, and not over inability to repay.

In the early 1980s, at the time the loans were disbursed, real interest rates in some countries may have been negative (nominal interest rates were set at 8% in Barbados while consumer prices were rising at a rate of 14%; interest rates in the OECS states generally ranged from 10% to 12% while consumer prices were often over 15%). The low to negative real interest rates may have boosted demand for loans during the early years of the program. However, real interest rates climbed during the period 1981 through 1985, as nominal interest rates were maintained while inflation dropped to 3% per annum and less. Current loan demand passes a "market test" in that it demonstrates some willingness on the part of borrowers to pay positive real interest rates for credit.

It appears, however, that none of the loan schemes utilizing 007 resources (now operating with recycled 007 funds) are operating at full capacity or anything approaching full capacity. The evidence therefore suggests that demand for the FIC loans is relatively low, so that funds diverted from agribusiness (presumably due to lack of demand) still failed to find a sufficient and sustained market within the broadened farm improvement credit programs.

At best, the FIC programs, although significantly divergent from the original intent of the DFC loans under the 007 project, could be said to support the ultimate goal of the project, which is to increase the standard of living of small farmers and the rural poor. In addition, given the scarcity of local agricultural products for processing, which may be a major constraint to agribusiness, the FIC loans may be acting to relieve that constraint and thus may lay the groundwork for viable agro-

¹⁵. Arthur D. Little, Inc., "Evaluation of the CDB/AID Private Sector On-Lending Programs," Jan. 1985, pp. 128-129.

processing industries in the future. The FIC loans can also be viewed as supporting somewhat the diversification of agriculture from the traditional export crops of the Caribbean, into vegetables and livestock for local consumption and some non-traditional exports such as tropical fruits. Given the increasing labor difficulties faced by the agricultural sector in the Caribbean, small farmer, family run agriculture may represent the future for the agricultural sector in the region.

The above comments are only speculative, however, and there is little available evidence either to prove or disprove them. The fact that the DFCs are repaying their loans to the CDB, or that sub-borrowers are repaying their loans to the DFCs does not mean that the loans are generating their own return. The frequent statements of DFC loan officers, that their best repayment records were from farmers who were employed, may mean that some loans were repaid from wages, and not from agricultural earnings. It is therefore difficult to come to any conclusion about the impact of the 007 DFC loans on small farm enterprises.

V. APPLICATION OF GENERIC SCOPE OF WORK

A. INTRODUCTION

The justifying premise underlying both agribusiness projects can be stated as follows:

"If programs of medium to long term agribusiness credit are initiated in the Eastern Caribbean, then investors will establish agribusiness enterprises which will purchase the output of small farmers on a regular basis, or which will provide goods or services to small farmers at lower costs than prevailed in the past; if the agribusinesses function successfully, then the incomes and standards of living of small farmers and the rural poor will be increased."

The projects did supply credits to several agribusiness enterprises, but there were very few viable agribusiness enterprises established as a result. The failure of either project significantly to increase the number of agribusiness establishments in the Eastern Caribbean through the provision of agribusiness credit implies that a lack of credit was not the primary impediment to the growth of agribusiness in the region and/or that other constraints impeded progress despite the lifting of a credit constraint. In other words, both projects appear to have suffered from the same serious design flaw.

This Chapter assesses the impact of the two projects within the larger framework of RDO/C's Private Sector Program by means of the "Generic Scope of Work." The contract between USAID and Louis Berger International, Inc. provides for the application of a Generic Scope of Work in order to facilitate a program analysis of RDO/C's portfolio of private sector oriented projects. The Generic Scope of Work is modeled on the USAID Logical Framework for project design, but it analyzes project design in terms of a standardized program framework. Use of a standardized framework makes it easier to compare these projects with other private sector projects supported by RDO/C, and to integrate the results of individual project evaluations into an overall evaluation of RDO/C's private sector program. The generic scope of work is reproduced in full in Appendix A of this report, with elements relevant to this agribusiness evaluation highlighted.

The present evaluation is one of some fourteen evaluations of RDO/C private sector projects which Louis Berger International, Inc. is carrying out over a period of two years. Project evaluation results will be synthesized and incorporated into two annual program reports. No single private sector project is expected to achieve the full range of program goals and purpose elements included in the generic scope of work. However, when

all of RDO/C's private sector projects are considered together as a program, reasonably complete coverage is anticipated.

The generic scope of work (Program LogFrame) was created long after 007 and 057 were initiated, and in fact, is being used to evaluate the projects after their primary task - disbursement of loans - has been completed. Thus the generic scope of work necessarily imposes a degree of retroactive uniformity on the original designs of the individual projects, centering on statements of program goals and purposes. The 007 project, for instance, was not confined to the private sector. It was anticipated, in fact, that CDB would work closely with several public sector bodies and make some loans to projects initiated in the public sector. It was noted, however, that most agriculture and certainly most agribusiness is carried out in the private sector, so CDB was encouraged to seek out private sector entities to which it could lend the 007 funds.

In order to reduce the potential for conflict with existing project design documents, the generic scope of work (1) generalizes concepts commonly used in existing private sector project LogFrames; (2) focusses on goal level measures at the program level as contrasted with purpose level measures that are typically emphasized in project designs; and (3) addresses program purposes in terms of purpose elements, subcategories of purposes into which the purposes of all RDO/C private sector projects can be disaggregated. The generic scope of work articulates three goals for RDO/C's private sector program: an economic development goal, an institutional goal, and a policy goal (the latter is not applicable to either 007 or 057). The generic scope of work specifies some forty "purpose elements," a master list to which each RDO/C private sector project can be related at the purpose level.

Causal Paths: The first step in the assessment of project design is concerned with logical relationships between the enumerated project purpose elements and the stated goals of the program. We attempt to answer the question - "If the purposes of the project are being achieved, how is this achievement contributing to the fulfillment of the ultimate goal?"

Evaluation Evidence: The second step in the assessment of project design is the evaluation of evidence of project-related outputs which contribute to the achievement of the purpose elements, and of the relationship between the output observed and the purposes identified and defined.

The evaluation focusses primarily on bottom-line impact at the micro-level, in order to assess what has been the impact of the project, given the other factors involved in the identified outcome.

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The Economic Development Goal of RDO/C's private sector program can be stated as follows:

To increase the contributions of privately owned business establishments to employment, production, productivity, net foreign exchange earnings, and/or to improved standards of living in the Caribbean.

The Institutional Goal of the program may be stated as follows:

To increase the capacities, efficiency, and sustainability of institutions serving the private sector in these countries.

The goal of the 057 project reads as follows: "To improve the standard of living of the Caribbean poor." It has, in addition, a sub-goal, "to stimulate economic and agricultural growth and create employment." Its stated purpose is "to initiate and expand private agribusiness investments in the Caribbean." The goal of the 007 project is "to increase the incomes of the small farmer and the rural poor." Its purpose is to "increase the capacity of the CDB and LDC institutions to develop, finance and implement agribusiness and labor intensive enterprises which are based on the local production and participation of small farmers and the rural poor." LBII has identified eleven of the purpose elements of the generic scope of work (out of a Master List of over forty purpose elements) which are applicable to the two projects. These are outlined under the pertinent goals for analysis, below.

B. ECONOMIC DEVELOPMENT GOAL OF 007 AND 057

Under the economic development goal, "to increase the contributions of privately owned business establishments to employment, production, productivity, net foreign exchange earnings, and/or to improved standards of living in the Caribbean," the following purpose elements can be found in the project papers of both 007 and 057 (although priorities and emphasis differ):

- To encourage local investment
- To provide long term financing for businesses
- To provide short term financing for businesses
- To identify and tap new markets
- To develop infant industries
- To improve production methods
- To introduce new technology
- To encourage risk-taking and entrepreneurship.

1. Causal Paths

According to the project strategies as articulated in the project papers for the two projects, the growth of agribusiness was constrained in large part by a lack of credit. Agro-processing was also constrained by a lack of inputs (i.e., agricultural produce for processing). Agricultural production, in turn, was constrained in part by a lack of credit, and in part by a lack of organized markets for agricultural outputs. The combined situation was described by many observers at the time as a "chicken and egg" problem. An earlier project (006) provided credit for agricultural production. The 007 project, and later the 057 project, were to provide financing for agribusiness. In particular, the agribusiness industry was said to need long term financing, as local commercial banks were unwilling to extend long term credits on risky ventures. There was little discussion in either project paper of short term financing. The investments in agribusiness which would take place as a result of the provision of financing through the two projects, were to relieve the final constraint to the "chicken and egg" problem, a solution wherein farmers would have reliable and expanding markets for their output and agribusinesses would have the inputs they need for their production.

Both 007 and 057 were to create or organize new markets for agricultural production and thereby encourage its growth. The new markets were expected to be primarily internal, involving improved linkages within the Agricultural Industry, broadly defined. Since most agricultural production of interest to new agribusiness would likely be small farmer production (i.e., crops other than plantation sugar and other traditional crops, which were already well established and generally not in search of new markets which could be met by local agribusiness), the growth in purchases of agricultural production by agribusiness would increase small farmer sales and thus probably small farmer income as well. To the extent that agricultural development in the Caribbean is hampered by the absence of scale economies, (and most agricultural experts in the region have cited this lack as a primary impediment to development), the growth of the new markets for agricultural output, by increasing scale, would contribute to an increase in both production and productivity (e.g., farmers with a large and sure market for their produce may be able to justify the purchase of farm implements which would increase land and/or labor productivity and bring more land into production).

Compared to the traditional export crops, most of which were exported under established (though often stagnant or declining) markets, new agribusiness activities would tend to encourage production of non-traditional crops. The production of non-traditional crops and their processing would constitute infant

industries. The growth of these new industries, in slack rural labor markets, should involve a net increase in employment, providing, in particular, a significant number of unskilled and semi-skilled jobs well suited to the target group of the rural poor. Some of the agribusiness products might be exported, and many more would substitute for processed food imports, which should contribute to a net saving of foreign exchange, (if not net earnings). The diversification should reduce the vulnerability of the economies to fluctuations in international commodity markets.

Included in both 007 and 057 were elements of or provision for technical assistance for agribusiness, designed to improve production methods and/or introduce new technologies. Such assistance was expected to facilitate the establishment and growth of infant industries (contributing to the growth in employment and income as described above), and to increase productivity in agribusiness itself.

The 057 project (explicitly) and, to a lesser extent, the 007 project (implicitly), intended to encourage risk taking and entrepreneurship in agribusiness in the Caribbean. A possible lack of entrepreneurs in agribusiness was not explicitly cited as a constraint to agribusiness expansion in the 007 project paper (1977), although the degree of risk in the industry was. Up to \$1.3 million of the project budget was earmarked for CDB equity investment, which theoretically could have been used to share the agribusiness risk between investors and donors. The 007 loan agreement, however, did not encourage the use of equity investment, and USAID would not share in the risk itself.

A possible lack of entrepreneurs in agribusiness is cited in the 057 project paper (1980) as a constraint to agribusiness development, (which was probably a lesson from the difficulties experienced by 007 in the previous two-three years). LAAD was also permitted to take equity stakes in Caribbean agribusiness ventures, (again without USAID participation in the risk). It faced few restrictions on lending, and was expected to work with local entrepreneurs to expand agricultural markets and employment. The lack of restrictions against existing entrepreneurs (although this was not explicitly described) and the sharing of risk through LAAD equity participation, would tend to widen the pool of investors, make investment in agribusiness more likely, and thereby contribute to the growth in employment and incomes as described above.

2. Evaluation Evidence

Both projects experienced considerable difficulty in disbursing the USAID funds for agribusiness. It appears that viable agribusiness projects were difficult to find; that although long

term financing was made available, the anticipated level of investment failed to take place. While CDB was expected to disburse \$6.5 million on 78 subprojects in eight countries, only five subprojects were ever funded, totalling \$3.9 million; LAAD disbursed just over \$1.0 million to four subprojects in the Eastern Caribbean. In terms of impact, the results as of 1986 included direct employment of almost 250 full time job equivalents, \$1.25 million in direct purchases from regional farmers, and at least \$74,000 in sales of agricultural inputs.

An additional \$2.4 million of 007 credits went via the CDB to DFC lines of credit, where most of it was dispensed to small farmers as farm improvement credits and production loans, much of it as short term credit. Although the small farmer credits presumably benefited many of the borrowers, there is no evidence that the credits contributed in any significant way to established project purposes or objectives.

The evaluation team specifically queried personnel at several of the DFCs as to the employment situation among small farmers. They all reported that most small farmers rely primarily on family labor and will only occasionally employ "hired hands" on a short term, seasonal basis, probably during a harvest. Many small farmers are themselves employed part time and/or seasonally. A farm improvement credit (which may go, e.g., to erect a fence around crop or pasture land, to repair a private road, or to dig a well), probably does involve employment opportunities, but only on a temporary basis. To the extent that a loan would improve their farming operations, small farmers may feel less of a need to search for employment for themselves, which in turn might mitigate the economy's unemployment problem, but such loans do not generate a significant number of new employment opportunities.

One other claim which might be made on behalf of the agricultural credits is that some of them "lowered the cost of small farmer inputs" (one of the objectives of the 007 project). The input credit schemes implemented as parts of the Integrated Citrus Production project in Dominica and the Integrated Sugar Rehabilitation project in St. Vincent would have had this effect. However, the sugar project failed in St. Vincent, and the demand for citrus input credits in Dominica has been so low that the US Inspector General recommended a substantial deobligation; currently, \$140,000 of the original \$176,000 line of credit remains outside the approved input credit scheme, although it is not idle.

Part of the problem with the two projects may have been the difficulty in finding markets for agribusiness products. The most successful projects were each producing for a specialized export market niche; only one (ECA) has in turn provided a new

market for small farmers in the area, amounting to over \$1.2 million per annum. The aloe project and conceivably, the Sea Island Cotton project, could develop into such markets. They are each non-traditional products and could be described as infant industries. Together, Eastern Caribbean Agencies, Windward Island Tropical Plants and Windward Islands Aloe employ 194 people directly (full time job equivalents). Total direct full-time employment generated by 007 and 057 is 244. The projects generate gross foreign exchange earnings of about US\$2.6 million. None of the successful projects were based on agribusiness sales in a local market: the St. Vincent sugar industry, which intended to substitute local production of sugar for imports, failed and was closed; the Carriacou sheep project, which was to produce mutton mostly for local consumption, has had sales only 11% of that anticipated, and the future of St. Vincent plastics is in some doubt.

The improvement of production methods and/or the introduction of new technology has been a minor feature of several of the sub-projects, particularly the more successful ones. It is noteworthy, however, that these features were usually introduced at the initiative of the entrepreneurs involved in the private sector projects. Eastern Caribbean Agencies in St. Vincent experiments with new strains of seeds and conducts research into new production methods, which it then encourages its small farmer suppliers to adopt. Windward Island Tropical Plants in St. Lucia had to learn how to improve its production methods by trial and error, and by making special trips to established nurseries in Florida to study alternative production methods. The owner of WITP believes that his employees have acquired improved agronomic techniques, including the safe and efficient use of fertilizers, irrigation, and pesticides. Windward Islands Aloe has helped small farmers start pilot plots for aloe production, and hopes to expand small farmer production of aloe to 100 acres within two years. HyGro Gardens in Barbados, (the one agribusiness project funded through a DFC, and not particularly successful) produces vegetables for both domestic consumption and export, utilizing hydroponic technology adapted by the entrepreneur. The Montserrat Sea Island Cotton project has received some technical assistance, although most of it has been funded by sources other than 007. The Carriacou sheep project was intended to provide extension services to small sheep farmers on the island, and to provide an example of the advantages of modern methods of livestock husbandry. The manager of the project reports, however, that farmers have not adopted the changes expected.

With regard to encouragement of risk-taking and entrepreneurship, it appears that both parent projects found this more difficult than originally anticipated, judging from the difficulty they had in finding viable projects and disbursing funds. LAAD found more entrepreneurs than CDB, which seemed to be more comfortable (if

not successful) with public sector entities and made only one loan to the private sector. It is noteworthy that the three most successful subprojects evaluated (Eastern Caribbean Agencies, Windward Island Tropical Plants, and Windward Islands Aloe), are all in the private sector; and that none of the public sector subprojects could be judged successes. Agribusiness, as a productive enterprise requiring market responsiveness and a flexible organization, probably requires a strong entrepreneurial orientation. Although risk taking and entrepreneurship can be encouraged by donor-funded projects, no entrepreneurs will be created by them. In addition, most businessmen both inside the Caribbean and outside, find the high risks associated with agribusiness daunting. In this regard, the risk-sharing features of the new HIAMP project may allow that project to succeed where 007 and 057 failed.

C. INSTITUTIONAL GOAL OF 007 AND 057

Under the institutional goal, "to increase the capacities, efficiency, and sustainability of institutions serving the private sector in [Caribbean] countries," the following purpose elements can be found in the project papers of both 007 and 057 (although priorities and emphasis differ):

- To create financial institutions to meet unmet needs
- To develop investment promotion institutions
- To create and strengthen support institutions for small and medium sized industry

1. Causal Paths

Both the 007 and the 057 projects were primarily designed to create financial institutions to meet unmet needs. The 007 project purpose is explicitly "to increase the capacity of the CDB and LDC institutions to promote, develop, finance and implement agribusiness and labor-intensive enterprises which are based on the local production and participation of small farmers and the rural poor." The CDB, the DFCs, and LAAD were all in existence as institutions prior to the agribusiness project; however, CDB and the DFCs had done very little, prior to 1977, to meet the needs of agribusiness, and it was deemed necessary to establish a specific pool of funds to serve agribusiness needs. LAAD was already established in agribusiness financing, but its work was all in Latin America, so the 057 project was designed to expand its activities into the Eastern Caribbean.

At the time the project papers were written (in 1977 and 1980, respectively) it was felt that the lack of financing was a major constraint to the development and expansion of both agribusiness

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and agriculture in general. The project loans were to operate as revolving funds, with repayment to USAID by CDB and LAAD over periods ranging from twenty to forty years, at interest rates of 2-4%. DFCs received 20 year loans from CDB at 4%. Since most sub-projects had a repayment period of under ten years (and many under five) and interest rates ranged from 8-13% for subprojects, repayments could be recycled to support the agribusiness industry for several project generations at least. Assuming that all funds are disbursed quickly to subproject borrowers, and that the sub-loans perform well, the project loan funds, even after repayment to USAID, should support agribusiness lending programs indefinitely. In the process, the established institutions of CDB, the DFCs and LAAD would build up their capabilities to administer lines of credit, and serve and advise sub-borrowers in the agribusiness sector. As the End of Project Status for 007, the Project LogFrame specifies "Rate of commitment for eligible subprojects reaches 3.0 million/ year. Rate of disbursement for eligible subprojects reaches \$2.5 million per year." The EOPS for 057 specifies "LAAD strengthened institutionally by additional staff and new office in Barbados."

Since there was minimal agribusiness activity in the Caribbean at the time 007 and 057 were initiated, both project papers recognized the need for the implementing agencies, CDB and LAAD, respectively, to act as investment promotion institutions in the field of agribusiness. CDB was specifically charged with developing and disseminating literature on its agribusiness funds. The End of Project Status for 007 includes "A system of subproject identification and promotion established and functioning effectively." The 057 project's explicit purpose is "to initiate and expand private agribusiness investments in the Caribbean."

The 007 project was also intended to promote support institutions for small and medium sized business, broadly defined. Specifically, the project was to encourage agribusiness arrangements which included elements of: "contract buying, ... cooperative ownership, small farmer equity participation, and enterprise services to small farmer suppliers." The Dominica Grapefruit Cooperative and the involvement of the St. Vincent Sugar Industries, in their role of assisting small farmers apply for credits, could fit under this rubric.

2. Evaluation Evidence

Neither 007 nor 057 should be described as successes under the criterion of the institutional goal. Nor, however, should they be entirely written off as failures, for at least some important lessons have been learned. As a financial institution, LAAD had an impressive record for agribusiness, but it was unable to

achieve in the Eastern Caribbean what it had achieved elsewhere in the Americas. Since 1980, LAAD has extended finance to at least one very successful venture in the Eastern Caribbean (Eastern Caribbean Agencies, Ltd.), and one moderately successful, promising venture (Windward Islands Aloe). The CDB can count only one moderate success, Windward Islands Tropical Plants. The DFCs have not lent to agribusiness (with the exception of one poorly performing loan extended by the Barbados National Bank for hydroponic vegetable production), and have been effectively restricted from lending for agribusiness.

Judged by the performance of the loans the DFCs did make (mostly farm improvement credits and agricultural production credits, many with a high proportion of arrears), it is doubtful that many of them are capable of administering agribusiness loans, as they are not even doing well with agricultural loans. It appears that as of December 31, 1986, most of the DFCs have only about half of their loan funds outstanding in subloans within the approved agricultural lending programs (which in most cases combine 007 resources, now recycling, with other funds), and arrears are about 30% of the principal outstanding on the subloans. Although most of the DFCs are repaying their 007 loans to CDB on schedule, it is clear that in some cases, the repayments are coming from sources other than profits on subloans made under approved programs. On the other hand Barbados National Bank and St. Lucia Development Bank have managed some agribusiness lending, and probably could do more with the 007 funds, given less restrictive provisions. The SLDB has three agribusiness loans in its portfolio, all of which were funded by sources other than 007.

The lack of success in the development of the Financial Institution functions of the implementing agencies is inseparable from their poor record as investment promotion institutions. As has been noted in subsection A, above, neither 007 nor 057 came close to fulfilling their mandate in terms of numbers of agribusiness investments in the Eastern Caribbean, much less successful agribusiness investments. LAAD, although it opened an office in Barbados in 1981 to serve the Eastern Caribbean, closed it again five years later. The establishment of a Barbados office was considered by USAID as an indicator of the achievement of End of Project Status in the 057 LogFrame.

The establishment of support institutions made very little progress. The two institutions established with the DFCs to supply input credits to small farmers - the Integrated Citrus Development Project in Dominica and the Integrated Sugar Rehabilitation Project in St. Vincent - have foundered or failed; the former due to lack of interest on the part of citrus growers (due primarily to the poor market for their product) and the latter due to the failure of the larger sugar rehabilitation project.

* * *

The evaluation of the two agribusiness projects with respect to the goals of RDO/C's larger private sector program, indicates that both must be judged qualified failures in the Eastern Caribbean. Disappointments began with the difficulties in finding potentially viable agribusiness ventures to finance, and continued to plague most of the individual subprojects and DFC loans from 1977 to the present. The projects cannot be judged complete failures, because a few successful or near-successful agribusinesses were financed with project funds. Those subprojects were those that had characteristics which could place them near the borderline as potential subjects for commercial (i.e., non-concessional) financing.

Conclusions, recommendations and lessons learned are presented in the following chapter.

VI. CONCLUSION

A. INTRODUCTION

This chapter is divided into five sections, of which this Introduction is the first. Section B compares planned with actual use of funds for the 007 and 057 projects. Section C summarizes principal evaluation findings. Section D contains the recommendations of the evaluation. Section E presents program lessons learned.

B. ANTICIPATED AND ACTUAL UTILIZATION OF PROJECT FUNDS

This section compares uses of funds which were postulated at the time the projects were designed with disbursements actually made.

1. Regional Agribusiness Development Project (007)

Anticipated Uses of Funds

The CDB Project Paper contemplated utilization of total funds of \$6.950 million, \$450,000 of which were grant funds for adaptive research, with the balance of \$6.5 million to be used for subproject equity and debt financing.

The \$6.5 million loan and repayment terms were divided into two segments as follows:

(a) Funds available for equity financing of sub-projects:

(Terms: 40 years, 10 year grace,
2% during grace - 3% thereafter) \$1,300,000

(b) Funds to be used for or loan financing of sub-projects:

(Terms: 30 years, 10 year grace,
2% during grace - 3% thereafter) \$5,200,000

CDB was required to contribute a total of \$260,000 towards costs of the program, \$125,000 for enterprise technical assistance and \$135,000 for administrative costs.

Actual Uses of Funds Compared

Exhibit I.2 in Chapter I above, provided details on a project-by-project basis of funds utilization by CDB. Summary tabulations of disbursements of funds by the CDB are as follows:-

RDO/C Contribution

<u>Grant Funding</u>	\$450,000
<u>Equity Financing</u>	- None-
<u>Loan Financing</u>	
Private Sector Agribusiness Company	254,000
Public Sector Agribusiness Companies	3,652,000
Cooperatives	- None-
DFCs (Primarily Farm Improvement Credits)	2,393,000

	\$6,299,000
	=====

CDB Contribution toward cost of implementing 007:

Preparation, Appraisal, Implementation of Loans for sub-projects	\$163,473
Preparation, Appraisal, Implementation of Grant funds for research	100,849

	\$264,322
	=====

CDB fully utilized the \$450,000 grant. A list of eight adaptive research studies funded under the Regional Agribusiness Development Project is contained in Appendix D. The CDB made no equity investments in any project. Although at first glance, the 007 loan agreement appears to feature the equity finance component, the more detailed description of the project contained in Annex I to the 007 Loan Agreement describes the use of equity financing essentially as a last resort to fund a marginal project, or as a special mechanism intended to bring about the earliest possible transfer of agribusiness equity directly to small farmers. Given the very high risks to the

providers of equity in such situations. it is not surprising that CDB in fact did not invest in sub-projects meeting the criteria for 007 equity investments. (See Recommendation 1 in Section D of this Chapter).

Of the \$6.3 million disbursed by CDB in the form of loan financing, only 4% was disbursed directly to the private sector in connection with one project which has been fairly successful. No funds were disbursed to cooperatives (although CDB had planned to lend about \$600,000 to the Cooperative Citrus Growers Association of Dominica, a plan which eventually fell through).

Almost 58% of CDB's loan financing went to public sector sub-projects. Of that portion, fully 60% represented financing for a project which failed, and at least two more, for another 20%, apparently cannot service their loans out of their own revenues. It appears that one of these two projects could be salvaged through privatization. (See Recommendation 3 in Section D of this Chapter.) The fourth public sector project was not evaluated. Almost 38% of the 007 loan funds were disbursed to DFCs as loans to support existing Farm Improvement Credit programs, a purpose outside those described in the 007 project paper and loan agreement. Of the DFC loan funds, it appears that only about half were being utilized as sub-loans in the approved agricultural lending programs (utilizing recycled 007 and other resources) as of December 1986.

2. Agribusiness Expansion Project (057)

Anticipated Uses of Funds

The LAAD loan paper for the Agribusiness Expansion Project had as its stated purpose the initiation and expansion of private agribusiness investments in the Caribbean. Total loan funds of \$6 million were authorized on terms of a 20 year repayment period with five years grace and an interest rate of four percent.

A major intention of this loan was to make an existing agribusiness ICI, LAAD, stronger financially and institutionally. This was to be accomplished by attracting additional private capital into LAAD equal to the amount of the AID loan, i.e. another \$6 million. This private capital could be allocated \$4 million for Central/South America and \$2 million for Caribbean sub-projects (see Exhibit I.1, above). In addition, the project paper specified that LAAD would channel \$7.3 million in reflows from previous AID loans into the Caribbean. Therefore, the project was expected to draw at least \$15.3 million into the Caribbean for agribusiness (\$6 million from USAID, \$2 million in private capital, and \$7.3 million in recycled funds from previous AID-funded LAAD projects). In addition, LAAD stated that based

upon its past experience, the fact that private promoters were also investors and that there would be other associated financing (entrepreneurs' resources and other loans), it could be anticipated that total project funding from all sources would reach an estimated \$18 million for the Caribbean.

Under the terms of the 057 project, AID authorized the use of up to \$2 million of AID funds in non-English-speaking Caribbean countries, and specifically designated \$4 million for use in the English speaking, Caribbean LDCs (which included RDO/C's primary interest area of the OECS states and Barbados, as well as Belize, the British Virgin Islands, the Cayman Islands, and the Turks and Caicos).

Actual Uses of Funds Compared

The 057 Project paper contained a list of estimated "Sub-Project Demand" in the Caribbean, which can be summarized as follows, and compared with actual provision of funds by LAAD:

AREA	PROJECTED DEMAND FOR LAAD FUNDS (\$000)	FUNDS PROVIDED* (\$000)	ACTUAL VS. PROJECTED (%)
OECS + Barbados	3,895	1,080	(28)
Anguilla, Turks, Caicos	**	365	N.A.
Belize, Trin. & Tob.	4,400	2,770***	(63)
Haiti, Dominican Rep.	8,210	2,955	(36)
TOTAL	16,505	7,170	(43)

* LAAD Funds from all sources including 057, reflows of USAID loans, and equity

** Not projected

*** No projects funded in Trinidad & Tobago

It should be noted that the projected total demand for funds to be provided through LAAD (\$16,505,000) was \$1,205,000 higher than the \$15,300,000 that the Loan Paper anticipated that LAAD would provide in the Caribbean. For the project as a whole, LAAD provided 43% of the amounts projected in the demand forecast. It fell furthest away from the projections in Barbados and the OECS states (28%). It came closest in Belize (63% of the total for Belize and for Trinidad and Tobago), and reached 36% of the projected totals in Haiti and the Dominican Republic.

Although LAAD use of AID financing for the project as a whole in the Caribbean (and even for the English-speaking LDCs) represented 92% of the AID resources available under 057 (see

Exhibit I.3), LAAD's use of its own internal resources fell far short of AID/Washington's expectations as outlined in the project paper (\$2 million in LAAD new capital plus \$7.3 million in reflows from previous USAID loans to LAAD). LAAD provided less than 17% of the \$9.3 million indicated in the Project Paper and could not even place the full \$2.0 million from new LAAD capital resources as called for by USAID. Of the \$1,542,000 of LAAD's own resources placed in the Caribbean, only 3% was invested in RDO/C's area of interest, and that amount only in one project in Barbados, which ultimately failed. LAAD placed none of its own money in the OECS. Details are presented in the following tabulation.

AREA	TOTAL FUNDS PROVIDED THRU LAAD		007 FUNDS		OTHER LAAD RESOURCES	
	(\$000)	(%)	(\$000)	(%)	(\$000)	(%)
OECS + Barbados	1,080	(15)	1038	(18)	42	(3)
Anguilla, Turks, Caicos	365	(5)	365	(6)	0	---
Belize	2,770	(39)	2150	(38)	620	(40)
Haiti, Dominican Rep.	2,955	(41)	2075	(37)	880	(57)
TOTAL	7,170	(100)	5528	(100)	1542	(100)

LAAD's use of its own resources also contrasts significantly with the breakdown of total project investments (which includes all sources including local investors' resources). Total project investment may be compared with use of LAAD internal funds as follows.

	Total Project Investment		Internal LAAD Resources	
	(\$000)	(%)	(\$000)	(%)
OECS + Barbados (4 projects)	2,090	13	42	3
Anguilla, Turks & Caicos (3)	1,190	7	-	0
Belize (9)	4,925	31	620	40
Haiti, Dominican Repub. (11)	8,335	52	880	57
Total Project Funding	\$16,055	100	\$1,542	100

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Total project investments approached 90% of the \$18.0 million total anticipated from all sources for agribusiness in the Caribbean. Of the total project funding/ investment of \$16,055,000, 51% took place in the English speaking Caribbean, and 13% took place in RDO/C's area of interest.

If USAID thought the project would influence LAAD to place its own resources in the OECS states, it was woefully mistaken. LAAD succeeded in negotiating a sufficiently flexible geographical mandate for itself such that it could and did avoid making very large commitments in the Eastern Caribbean microstates.

C. ASSESSMENT

1. Neither CDB nor LAAD succeeded in funding a significant number of viable agribusiness enterprises in the OECS states.

CDB funded one moderately successful enterprise in the OECS (Windward Island Tropical Plants, St. Lucia) in the amount of \$254,000. LAAD funded three projects in the OECS. One of these (Eastern Caribbean Agencies in St. Vincent, to which \$600,000 of 057 funds were disbursed) has been very successful. One (Windward Island Aloe in St. Vincent, to which \$215,000 of 057 funds was disbursed), has been moderately successful. One enterprise (St. Vincent Plastics in St. Vincent to which \$35,000 was disbursed) has had a fire and may be considered to have uncertain prospects. One of the three parastatal enterprises to which CDB extended loans (Montserrat Sea Island Cotton, to which \$644,000 was lent) has been consistently showing losses, but has a potential for success if restructured as a private enterprise. Figure VI.1 shows, for each 007/057 sub-project, 1986 indicators of business performance and 1986 indicators of target group benefits. Judged by the relatively narrow geographic standard of their respective contributions to agribusiness development in the OECS states, LAAD appears to have done a better job than CDB, although neither the 007 project nor the 057 project may be judged a success.

2. It is quite conceivable that the economic costs of the 007 project will exceed its economic benefits.

The evaluation team did not perform a retrospective cost-benefit analysis of either project. However, given the magnitude of the resources which CDB placed in one parastatal which failed (St. Vincent Sugar Industries, \$2,207,000) and two which are foundering (Carriacou Sheep, Grenada, \$107,000; Montserrat Sea Island Cotton, \$644,000) and the uncertain or ephemeral character of benefits from most other uses of project funds, it is possible

Exhibit VI.1

BUSINESS PERFORMANCE AND BENEFITS TO TARGET GROUPS, 1986

PROJECT NAME	YEAR	USAID FUNDS DISBURSED	BUSINESS PERFORMANCE 1986	GROSS SALES 1986	-- 1986 BENEFIT INDICATORS --		
					MARKETS FOR FARM PRODUCE	INPUT SALES	EMPLOYMENT
Carriacou Sheep	1980	\$107,000	POOR	\$4,000	none	n.ap.	4
Montserrat Cotton	1980	\$644,000	FAIR	\$113,000	\$4,400	N.A.	39
M.I. Tropical Plants	1980	\$257,000	GOOD	\$518,500	\$14,000	n.ap.	75
St. Vincent Sugar	1980	\$2,207,000	FAILURE	none	none	none	none
M.I. Aloe	1984	\$215,000	GOOD	\$400,000	none	none	59
Eastern Carib. Agencies	1980	\$600,000	EXCELLENT	\$2,400,000	\$1,230,000	N.A.	60
St. Vincent Plastics 1/	1981	\$35,000	FAIR	\$74,000	n.ap.	\$74,000	7
Barbados Tillage 2/	1981	\$220,000	FAILURE	N.A.	N.A.	N.A.	N.A.

GROSS SALES - Gross sales by loan recipient (MSIC sales average 1985/86)

MARKETS FOR FARM PRODUCE - Total purchases from Caribbean farmers by loan recipient

INPUT SALES - Total sales of inputs to agriculture or agribusiness by loan recipient

EMPLOYMENT - Number of direct full time employees of loan recipient

N.A. - Data not available

n.ap. - not applicable

1/ St. Vincent Plastics is recovering from a fire which closed the plant for ten months in 1985/86

2/ Barbados Tillage Services closed operation in 1986 and is in liquidation.

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that the project ultimately will show a negative rate of return. Of the \$3.9 million placed in agribusiness subprojects by CDB, only one sub-project, the Windward Islands Tropical Plants, Ltd (providing the equivalent of about 75 full time jobs), is currently self-sustaining. The rest have either closed down, or have been unable to cover their operating costs. The assets in which the St. Vincent Sugar Industries loan were placed appear to be idle and now largely valueless.

The \$2.4 million of resources reprogrammed for small farmer agricultural and farm improvement credit programs of the DFC's have not been fully utilized in CDB-approved programs after the initial subloan disbursements. There is an indication that there has been a substantial shortfall in demand for the reprogrammed funds. Arrears on subloans in the agricultural lending programs were about 30% as of 1986. Although some of the DFC loans may have been put to good financial and economic uses other than those originally intended, there is little evidence that the DFC loans have contributed significantly to project objectives (improving markets for small farmer production, reducing costs of small farmer inputs, or generating rural employment).

Nine adaptive research studies were funded by CDB at a cost of \$450,000 in project funds. With the exception of a study entitled "Fisheries Development - British Virgin Islands," there is no evidence that the studies undertaken contributed to any of the 007 sub-projects studied by the evaluation team. It is conceivable, however, that some of the studies made a contribution to the agribusiness sector outside the ambit of the 007 project.

3. The expectation, articulated in the 007 project design, that the availability of project funds would create markets for the outputs of small farmers in the OECS states-- primarily by creating food processing industries catering to local and regional markets-- now seems unwarranted on the basis of the experience of both the 007 and the 057 projects.

The most successful agribusiness subprojects financed by 007 and 057 have been those exporting to market niches in the United States and Europe. The least successful subproject was the only one engaged in the processing of food for local consumption. Of the three successful agribusiness subprojects supported by 007 and 057 in RDO/C's area of interest, only one has provided a market for the outputs of small farmers.

4. The expectation, reflected in the designs of the 007 and 057 projects, that making medium to long term credit available to businessmen on reasonable terms would release significant

constraints to agribusiness development in the OECS states appears to have proved unwarranted-- at least in the case of loans made to larger enterprises. Covenants and other restrictions applied to smaller agribusiness loans which were to be made by the DFC's under the 007 project effectively defeated this portion of the 007 program, and prevented it from receiving a fair test.

In their initial configurations, the two projects together made available more than \$12 million for financing agribusiness. That so few agribusiness subprojects were financed in the OECS states (seven utilizing \$4,065,000) and so few have successful track records (three utilizing \$1,072,000 in project funds) suggests, either that other serious constraints should have been addressed or that the fundamental agribusiness potentials of the area are quite limited, at least for larger businesses.

Ironically, the 007 project never gave the DFC's a fair chance to demonstrate their capacities to make agribusiness loans to smaller enterprises. The slightly concessionary conditions applied to the terms of 007 loans to agribusinesses supposed to flow through DFCs were more than counterbalanced by the cumulative effects of restrictions on these loans applied by USAID and CDB.

Designed into the project were numerous criteria, conditions, and restrictions. Subprojects which were justified primarily on the basis of employment generating capacity were required to have a capital/ employment ratio under \$7,500 (later raised to \$10,000). Subprojects which tended to benefit large farmers as well as small ones were supposed to ensure that over half their benefits would go to small farmers; and if there was any doubt, the subprojects would be required to make special provision for active small farmer participation. Sub-loans could not be used for the purchase of land or existing buildings, nor to provide working capital (except where required for start-up operations), refinancing, or equity investments. When the CDB began to extend lines of credit to the national DFCs (for sub-loans of up to \$100,000), RDO/C insisted on the establishment of a net worth ceiling on the borrower (ranging from US \$56,000 in most of the OECS to US\$75,000 in Barbados), which would apply to all individual borrowers (including spouse) and, in some cases, any member of a borrowing company or corporation. USAID insisted on those terms and conditions, (including, informally, the "net worth" criteria) apparently to be absolutely sure that funds reached the intended beneficiaries, even if such restrictions precluded the success of the project. One observer has described this phenomenon as "Death by Covenant."

D. RECOMMENDATIONS

1. RDO/C and CDB should reconcile their agribusiness financing program objectives for the OECS with their respective institutional attitudes toward risk.

Financing agribusiness in the OECS states is not a field for the fearful. Agribusiness is risky business, particularly on small islands with weather, water and soil problems. Careful and judicious policies have an important place in the field of development finance, but they are not really congruent with achieving bold objectives developed in the face of previously intransigent constraints. Where collaborative undertakings between two cautious institutions are involved, protective devices affecting subprojects easily can proliferate in response to real or fancied dangers. Under such circumstances, each institution needs to be realistic about how much safety it really requires. If institutional requirements for safety basically preclude commitments to hazardous ventures, and the achievement of program objectives require commitment to such ventures, then either the safety requirements or the program objectives must be changed.

The designers of the 007 project recognized the difficulties of creating financially self-sustaining nontraditional agribusinesses in the OECS states. However, the project design did not squarely face the problem of risk. The project did indeed permit the CDB to devote up to \$1.3 million of the AID loan to equity financing, which was to be used to sweeten marginal situations and accomplish a certain amount of social engineering. However, USAID's financial position was protected by its status as a creditor. In effect, RDO/C was saying to a regional development banking institution with a history of solid but largely traditional achievement: "Let's you take an equity risk on the chanciest aspects of agribusiness in the OECS states," a type of activity that was both perilous and new to CDB. In retrospect, it does not seem surprising that CDB made no equity investment of any kind. Nor is it surprising that CDB did not greatly increase its exposure profile in making a few direct subloans to relatively large agribusiness enterprises. The limited number of credits which it did extend to agribusiness subprojects were to three parastatal enterprises backed by governments (which in turn have traditionally been sustained by donors) and to one enterprise owned and managed by very well-connected and substantial private interests. Subsequent events demonstrated that, in giving the bulk of its enterprise loans to parastatals, the CDB in fact chose its own financial security (government guarantees) over efficiency in the marketplace.

A substantial portion of 007 funds were eventually dedicated to institutionally "safe" DFC small farmer lending programs-- an area in which problems in loan selection and administration would be subject to much less potential criticism than in lending to enterprises. The intention of the 007 project design to develop the capacity of DFCs to finance agribusiness and employment generating enterprises (as opposed to small farm enterprises, the responsibility of the earlier 006 project) was defeated before the activity got underway. The cumulative effects of USAID and CDB restrictions and covenants made achievement of this project objective impossible.

In extending the 057 loan to LAAD. USAID hoped that substantial resources would be put into the OECS states, but the loan terms were structured in such a way that LAAD could invest most of resources in countries with fewer fundamental limitations to agribusiness than those present in the OECS states-- and indeed it did. The performance of the enterprises which LAAD financed in the OECS was better than that of CDB. But LAAD's program in the OECS was basically a failure for lack of sufficient volume, and LAAD closed its regional office. Once again, RDO/C's project design basically said, "Let's you take a risk on agribusiness in the OECS." LAAD chose to take most of its risk elsewhere.

It has been argued by some observers that the lesson of the LAAD project is that there does not exist in the OECS states a sufficient coterie of entrepreneurs who are willing and able to make agribusiness investments: that the problem lies as much in the area of human resources as in the physical characteristics of the region. It was not so much that LAAD was unwilling to undertake risks in the OECS-- so the argument goes-- it was rather that there were not many local businessmen who wished to take the plunge -- and that those few venturers who did have the needed combination of resources and enterprise were not willing to share ownership with outside investors. RDO/C's High Impact Agricultural Marketing and Production Project (HIAMP), currently in its start-up phase, will put such contentions much more rigorously to the test than did LAAD.

2. The High Impact Agricultural Marketing and Production Project (HIAMP) should be carefully monitored and regularly evaluated for project performance, achievement, and impact. RDO/C should give HIAMP full support during the critically important early stages of the project.

HIAMP was in its early stages of implementation at the time the LBII evaluation team examined the agribusiness projects undertaken by CDB and by LAAD. Neither assessment of HIAMP's project design, nor its early progress was within the Scope of Work of the LBII evaluation team. RDO/C did ask, however, that the team identify portents in the histories of the CDB and LAAD

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projects that could have particular application to the future of HIAMP.

The records of the preceding agribusiness projects clearly indicate that HIAMP project evaluations should not be deferred as they were in the case of CDB and LAAD. Three key questions should regularly be addressed in the course of quarterly project reviews as well as in evaluations:

a. Is RDO/C giving project management the support it needs, particularly during the critical early stages of the activity?

The history of the 007 project suggests that the responsible parties, RDO/C and CDB, shied away from the riskier and more innovative aspects of the project (including equity investments and direct loans to privately owned enterprises which could, theoretically, declare bankruptcy) from the outset. Is RDO/C's sense of commitment to HIAMP strong enough and its tolerance of risk high enough so that RDO/C will be able to provide needed support to the project when and if the going gets really tough?

b. Will enough investors come forward to invest in new or expanded agribusiness activity to justify the magnitude of the resources programmed for the project?

The experience of 007 and 057 suggests that the scope for agribusiness investment in the Eastern Caribbean may be quite limited. Although HIAMP may be better designed and staffed to make optimal use of those opportunities which do exist, its potentials may be of a much lower order of magnitude than anticipated in the project design.

c. Will HIAMP hold to an approach in which private investors control subprojects and bear the larger share of equity risks?

If it is true that local OECS agribusiness investors are few in number and unwilling to share control with outsiders (one interpretation of the LAAD's results in the area), pressures to show project accomplishment and to move RDO/C funds could result in the "parastatalization" of HIAMP in a number of subtle and not-so-subtle ways. An analogous "reversion to type" took place in the 007 project as pressures to move money produced a throw-back to the earlier 006 small farmer loan project financed through CDB by RDO/C. A basic premise of USAID's support for the private sector is that when ventures are controlled by businessmen and the largest share of risks are borne by them, the

likelihood of successful outcomes is greater than when control and risk lies with governmental instrumentalities. It will be advisable for project reviews to analyze arrangements made by HIAMP with a keen eye as to how subproject control and risk in actuality is distributed between the private and public sectors.

3. The Montserrat Sea Island Cotton Project should be restructured for privatization or closed down.

According to the current company manager, the prospects for the Montserrat Sea Island Cotton Company to achieve financial viability in hand weaving of Sea Island cotton are negligible. The concept of an "integrated industry" with Sea Island cotton and local hand weaving should be abandoned. Hand weaving of cotton products can proceed with other strains of cotton, purchased locally or imported, depending on which offers the lowest price. Sea Island Cotton should be sold for the highest possible price on any market. A Sea Island Cotton Industry might be feasibly built up on a step-by-step basis, with the initiation of each new step contingent upon commercial viability.

4. The Carriacou Sheep Project should be restructured or closed down.

As currently designed and staffed, the Carriacou sheep project is generating very little income and yielding almost no benefits. The project manager and the local Agricultural Officer have both petitioned the Ministry of Agriculture in Grenada to either take steps to improve the project (which would require fresh funds) or terminate the project. Although the official decision of the Government of Grenada was to continue with the project, no action has yet been taken to improve the project. Project performance has lagged very far behind projections, and- even with the sale of assets--the project has continued to show a substantial negative cash flow.

5. RDO/C and/or other institutions should publicize the private sector successes which CDB and LAAD financing have supported in the OECS states, giving particular emphasis to the achievements of Caribbean entrepreneurs.

Recognition of entrepreneurial success in the agribusiness area can have the effect of encouraging other local businessmen to start new agribusiness ventures. RDO/C, LAAD, CDB, and perhaps local business associations should collaborate on appropriate publicity and/or awards. While the importance of development

financing should be recognized in such publicity, the focus of such publicity should be on the success of the owners and managers of the assisted enterprises. Eastern Caribbean Agencies, Ltd., is particularly deserving of recognition on the basis of its performance to date. Windward Island Tropical Plants and Windward Islands Aloe may be candidates for such recognition in the near future if their performance continues to improve.

6. Project officers and loan approval committees should work closely with potential sub-borrowers to devise a realistic set of targets against which sub-project performance can be measured. While target inflation may be an inherent aspect of project and sub-project proposals, post-approval targets should be set realistically, giving due regard to typical degrees of agribusiness risk and the cost of that risk.

All the sub-projects evaluated had difficulty meeting the targets set for them at the time of the pre-funding analysis. In most cases, the shortfall had less to do with the capabilities of the implementors, and much more to do with inflated forecasts (see Appendix B). The problem of inflated forecasts has plagued many RDO/C private sector projects, and is clearly related to the "selling job" required for donor funding. A retrospective assessment indicates that "sensitivity analyses" of anticipated subproject rates of return usually failed to encompass the range of fluctuation in prices and outputs that are characteristic of agribusiness. Embedded in the sophisticated veneer of subproject appraisals have been some credulous assumptions concerning the predictability of prices and costs, and concerning the magnitudes of the risks associated with agribusiness projects. The appraisals lack a fundamental sense of reality, and an understanding of the dangers and opportunities for investors-- and for every institution associated with the agribusiness financing process.

E. USAID PROGRAM LESSONS LEARNED

1. Those agribusiness subprojects which had the highest levels of commercial viability also provided the most significant and sustained benefits to the economies of their nations. Those subprojects which were not commercially viable have provided disappointingly few economic benefits.

On the basis of the evaluation evidence, it is clear that those agribusiness ventures financed by 007/057 which have been commercially viable are also those which have provided the sought for economic benefits in the form of employment, exports, and increasing the standards of living of the poor. Those

agribusinesses which have not been commercially viable have not been able to deliver significant benefits to the target group (Refer to Exhibit VI.1, above). The most commercially successful project has been the largest purchaser from small farmers. The creators of the largest amounts of employment are the three most commercially successful projects. The commercially successful subprojects have provided the highest levels of quantifiable benefits to intended project beneficiaries.

2. Privately owned agribusiness projects have been distinctly more successful than government-owned projects, but some of the private projects reviewed in this evaluation have experienced financial difficulties.

The three most successful projects examined during the evaluation were all privately owned. None of the public sector subprojects could be described as successful. LAAD was more private-sector oriented than CDB, which may help to account for their relatively higher success rate in agribusiness, although they, too found it difficult to find viable projects in the Eastern Caribbean. It appears that CDB was hampered in part by its public sector outlook, which, in combination with the onerous USAID loan conditions, led CDB's loan officers to avoid the private sector almost completely.

3. Loans to parastatal enterprises covered by Government guarantees cannot be assumed to be ultimately "safe" loans.

The CDB placed \$3.0 million in three parastatal agribusinesses, none of which demonstrated self-sufficiency. The responsible governments are repaying their loans to CDB, and CDB is repaying its loan to USAID. However, the productive resources in which the loans have been invested, have been underemployed or dissipated. One failed and was closed, and the other two would require major restructuring and new resources in order to achieve viability. In the end, the loans must be repaid. Wasted resources must be paid for by the economies of the nations whose governments guaranteed the loans and/or by those donors (including USAID) who continue to provide assistance to the economies of these countries.

4. The most successful agribusiness sub-projects in the Eastern Caribbean under 007/057 have all been exporting products to market niches in industrialized countries.

The successful projects among the two portfolios were all oriented toward an export market niche. A "niche" requires only a modest scale of inputs: Windward Island Aloe produces on about

70 acres. Windward Island Tropical Plants produces on 30 acres, and Eastern Caribbean Agencies collects production from roughly 1000 - 2000 acres of mostly small plots (averaging about two acres each) scattered through St. Vincent, St. Lucia, Barbados, and Jamaica. The export markets of North America and Europe provide a scope which is larger by many orders of magnitude than the markets of the Eastern Caribbean. The potential promise of the Montserrat Sea Island Cotton Company, too, lies in just such a niche in the export market.

AFTERWARD

This evaluation report of two agribusiness projects, the Regional Agribusiness Development Project (538-T-007) implemented by the Caribbean Development Bank and the Agribusiness Expansion project (538-0057), implemented by the Latin American Agribusiness Development Corporation, has been commissioned by the funding agency, USAID RDO/C. The evaluation report has been written to reflect the concerns, interests, and perspectives of RDO/C, which differ in some ways from the concerns, interests, and perspectives of the implementing organizations. A major theme of this evaluation report is the divergence between the primary project purposes (considered from the point of view of RDO/C), and some of the activities undertaken during implementation of the projects. The primary purposes of both agribusiness projects, from the point of view of RDO/C, were: 1) to improve the markets for small farmer production (an earlier project, the Integrated Agriculture Development Project, 538-T-006, was designed to promote small farmer output), 2) to lower the costs of production for small farmers, or otherwise to strengthen the linkages between small farmer agriculture and other sectors of the economy; or 3) to invest in labor intensive enterprises (not necessarily "agribusiness") which would "increase employment opportunities for rural workers." The overriding goal of both projects was to increase the standard of living of the rural poor in the Caribbean.

It appears that the constraints on the potential for agribusiness expansion in the Eastern Caribbean were well understood by RDO/C and by the two organizations chosen to implement the projects at the time the project agreements were negotiated. Substantial latitude and flexibility in terms of geography and types of lending activity were in fact incorporated into both project agreements. During the course of project implementation, both implementing organizations made considerable use of the latitude available to them. In the end, however, neither CDB nor LAAD, nor both together for that matter, had been able to find and finance a substantial number of agribusiness enterprises in the Eastern Caribbean.

The focus of the two projects on innovative agribusiness development in the Eastern Caribbean was significantly blurred by the use of legal and administrative flexibility. Many of the DFC subloans made under 007 stretched the concept of "labor intensive enterprise" to the point where this ostensibly innovative project was using a substantial portion of its funds for purposes that were virtually identical to those which RDO/C had funded under its previous project with CDB. From the point of view of the implementing organization, however, this type of critique may appear to represent unmerited criticism of its decisions and

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activities, especially since RDO/C agreed with CDB's judgement and explicitly approved several of the specific lending programs proposed (in accordance with project requirements). The evaluation team wishes to affirm that findings and conclusions of this report are not intended to question the legality or prudence of the administrative procedures followed by the implementing organizations.

APPENDIX A

I. EVALUATION SCOPE OF WORK

A. PURPOSE OF EVALUATION

1. To determine the success of both projects in achieving the established goals which were to increase the incomes of the small farmer and the rural poor (T-0007) and to improve the standard of living of the Caribbean poor (0057).
2. To assess the effectiveness of two intermediate credit institutions (ICIs) in accomplishing the purposes of the projects which were to increase the capacity of the Caribbean Development Bank and LDC institutions to promote, develop, finance and implement agribusiness and labor intensive enterprises which are based on the local production and participation of small farmers and the rural poor (T-0007) and to initiate and expand private agribusiness investments in the Caribbean (0057).
3. To analyze stated program and project objectives and measure the impact of the activities of the two ICIs in meeting those objectives and in making a contribution to the development of LDCs in the Caribbean. For purposes of this Evaluation that shall include the nine states of Anguilla, Antigua-Barbuda, Barbados, Dominica, Grenada, Montserrat, St. Kitts-Nevis, St. Lucia and St. Vincent.
4. To identify lessons learned and make recommendations concerning the direction of policies related to both ongoing and future assistance by AID in agribusiness development through ICIs and other programs, with particular reference to the LDCs of the Caribbean.

B. FOCUS OF THE EVALUATION

The focus of the evaluation will be the analysis of project/program achievements, an assessment of the performance of the two ICIs, and an impact analysis of sub-loans and investments of the ICIs.

A second focus will be a critical examination of the causes for the obvious short-fall in project sub-loans by both ICIs compared to projected activity and loan demand at the time both projects commenced in 1977 and 1980.

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A third focus will be on a comparative analysis of the business and commercial needs and practices of the ICIs on the one hand and the business and commercial needs and practices of the private sector in the LDCs on the other hand. Relative to ICIs operations, a critical analysis will be made as to the effect of AID loan provisions, money market conditions, the possible conflict between AID developmental objectives and ICIs financial and profitability requirements, and such other factors that will help explain the lag and ultimate deficiency in the full implementation of both projects.

A fourth focus will be on analysis of the data and information obtained in the above process and suggest ways to remove possible constraints and obstacles to ICI activity and make their activity more responsive to AID's developmental objectives in general and the development and enhancement of private sector agribusiness activities in particular as a force in achieving broader development goals in the Caribbean.

C. PRINCIPAL EVALUATION TASKS

Principal evaluation tasks will included the following:-

1. Prepare detailed impact evaluations on nine (9) sub-projects financed by the ICIs. This is the total number preliminarily identified as having been implemented during the life of the projects, which had combined funds available of \$12.5 million.
2. A critical analysis of the disparity between 1. above and the potential forty-eight (48) projects with a combined estimated demand for funding of \$6.9 million identified at the time of project authorizations. These estimates were listed as indicators of total potential agribusiness funding in the LDCs.
3. Evaluation of the factors present in the LDCs which might explain the slow pace of agribusiness development. Possibilities to be explored and examined are:
 - (a) physical constraints
 - (b) business and commercial practices
 - (c) adequacy of crop production and facilities to support non-traditional agribusiness development.
 - (d) evaluate presence of required entrepreneurial capability and incentive to embark upon new ventures.

4. Examine the operations of both ICIs with a critical review of the internal resources, staff time and overall dedication of organization effort which were applied to the admittedly difficult task of promoting and developing agribusiness ventures in the LDCs.
5. Prepare a concise general economic analysis with specific emphasis on agriculture and agribusiness of the nine (9) LDCs as background against which to assess the impact of economic constraints on project implementation.
6. Document the final utilization and disposition of funding provided by AID to both ICI's.
7. Evaluate the initial selection of these two ICIs as appropriate vehicles to accomplish the developmental goals and purposes formulated by AID at the time the projects were authorized. Relevant here is the public sector character of the one institution (CDB) and a private result-oriented institution (LAAD) with an eye on the bottom line and the production of financial results for its Board of Directors and shareholders
8. Examine the possible conflicts and obstacles to effective project implementation created by conditions and covenants imposed by AID at the time of project authorization which might have affected institutional effectiveness and flexibility in meeting the established goals and purposes.

D. METHODOLOGY

LBII will prepare an Evaluation Schedule and Work Plan which will be submitted for AID's clearance on or about February 4, 1987. The schedule will cover the period through February 27th which is the completion date of the Evaluation and the date upon which the Evaluation Report will be submitted.

Preliminarily, the Work Plan will include the following:-

1. Meetings in Barbados with officers and staff of the Caribbean Development Bank.
2. Meetings with Robert L. Ross, President of LAAD, head-quartered in Coral Gables, Florida, and J. Hunter Martin, Vice-President, head-quartered in the Dominican Republic. It is hoped that Ross' travel plans will permit a four party meeting in Santo Domingo between Ross, Martin and the Evaluation Team. Due to his involvement with the loan negotiation in 1980, but more importantly his position as Chief Executive Officer, it is felt that only Ross within

LAAD can effectively address the Team's questions concerning ICI borrowing, lending, equity capital and money market issues as those issues affect the attainment of AID's development objectives using ICI as one conduit.

3. Visits to recipients of financing and project sites of the sub-project equity or loan investments made by both ICIs. The purpose of these visits will be to make individual project impact studies.

4. Solicitation of factual data from each ICI regarding:-

(a) Screening Information Forms, including an Evaluation of Project Impact on target groups, which were submitted at application time for each project financed by the ICI, whether a success or failure.

(b) A comparative analysis of the projected demand for agribusiness loans as per Project Papers dated 1977 and 1980 versus actual performance as at 12/31/86. Of particular interest will be a project-by-project tabulation as to final action taken by the ICIs on the joint 1976 Caribbean Development Bank/USDA study team identification of twenty-seven (27) potential investments in seven (7) countries (that team did not include Antigua-Barbuda or Barbados in their joint study). CDB had previously identified four (4) other projects in Barbados which will be included in this analysis making a total of thirty-one (31) ventures with a potential demand for \$2.9 million of sub-project financing.

The Project Paper on LAAD (0057) identified seventeen (17) potential investments with an estimated demand of \$3.9 million of sub-project financing.

(c) Itemization of the ultimate uses, including any de-obligations, of the total \$6.5 million of loan funds and \$450,000 of grant funds made available to CDB (T-0007) and \$6.0 million made available to LAAD (0057).

(d) Meetings with the staff of HIAMP in Barbados following a review of their analyses and data. That \$40 million, 5 year project has a direct relationship to and is apparently the successor to the T-0007 and 0057 projects of 1977 and 1980.

E. EVALUATION REPORT FORMAT

The evaluation report will contain:

1. An Executive Summary covering the purpose of the evaluation, the methodology used, findings, conclusions and recommendations. It will also include comments on development impact and lessons learned. It will be complete enough so that the reader can understand the evaluation without having to read the entire document, that is, the summary will stand on its own as a self-contained document.
2. A copy of this Scope of Work. Any deviation from the Scope will be explained.
3. A listing of the evaluation team, including country personnel, each person's field of expertise and the role which each played on the team.
4. A clear presentation of the evaluation recommendations, in a separate section of the report, so that the reader can easily locate them.
5. A discussion of previous evaluations reviewed with a brief discussion of the conclusions and recommendations made in earlier reports. The evaluators will briefly discuss what use was made of previous evaluations in their review of the project.
6. A separate section on the development impact of the project. This section will clearly present the development benefits resulting from the project.
7. The project's lessons learned will be clearly presented. These will describe the causal relationship factors that proved critical to project success or failure, including necessary political, social and bureaucratic pre-conditions within the host countries and USAID. There will also be a discussion of the techniques or approaches which proved most effective or had to be changed and why. Lessons relating to replicability and sustainability will be discussed.

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II. OUTLINE OF "GENERIC SCOPE OF WORK"

A. PROGRAM GOALS

1. Economic Development Goal:

To increase the contributions of privately owned business establishments and the institutions which serve them to employment, production, productivity, net foreign exchange earnings, and/or improved standards of living in specific Caribbean countries.

2. Policy Goal: (not applicable to Agribusiness)

To improve the climate for private investment and expanded international trade in these countries.

3. Institutional Goal:

To increase the capacities, efficiency, and sustainability of institutions serving the private sector in these countries.

B. PROJECT PURPOSE ELEMENTS

(Intended results which contribute to the program goal)

1. To attract foreign investment
2. To encourage local investment
3. To develop land for industrial and commercial uses
4. To provide factory buildings
5. To provide long term financing for businesses
6. To provide short term financing for businesses
7. To provide financing for housing
8. To provide financing for consumer durables
9. To provide other consumer credit
10. To create financial institutions to serve unmet needs
11. To improve business management skills
12. To improve management systems
13. To improve record keeping and accounting skills
14. To improve skills of supervisors
15. To improve labor relations skills
16. To improve marketing skills
17. To improve skills of laborers and office workers
18. To develop investment promotion skills
19. To develop investment promotion institutions
20. To improve production methods

21. To introduce new technology
22. To identify and tap new markets
23. To improve service or reduce costs of public infrastructure utilized by productive activities
24. To encourage risk-taking and entrepreneurship
25. To encourage reliance competition and market mechanisms of resource allocation
26. To divest state-owned enterprises
27. To replace government force account activities with government contracting
28. To establish ground rules under which enterprises and cooperatives can compete with government parastatals and force account activities on the basis of efficiency
29. To adopt tax structures which encourage private initiative
30. To reduce the burdens of import and export controls and other forms of regulation of the business community
31. To improve labor-management relations
32. To reduce distortions of market forces in international trade
33. To develop infant industries
34. To foster regional economic integration. (increase market size and access)
35. To integrate the efforts of members of the business community to improve conditions of doing business
36. To create and attract membership to business associations
37. To broaden the constituency of business associations
34. To encourage dialogue between government and business on matters of mutual interest
38. To promote the purposes and programs of the business organizations among the public at large
39. To convey to policy makers an understanding of the decision-criteria of foreign investors
40. To create or change government policies
41. To create or change legislation
42. To create or change government procedures and practices
43. To reduce imports
44. To promote exports

C. PROJECT OUTPUTS

(Outputs to be related to individual purposes)

1. Technical Assistance Tasks Completed
2. Promotional materials distributed
3. Trade shows attended
4. Prospects followed up
5. Visits made
6. Financing Drawn Down by End Users
7. Persons Trained
8. Manuals Prepared
9. Institutions in Place and Providing Outputs
10. License agreements made
11. Public Infrastructure Projects Services Provided
12. New ventures undertaken
13. Representations made to government officials and legislators
14. Divestiture plans prepared
15. Contracting procedures written
16. Policy studies completed
16. Labor-management conferences held
17. Relationships with decision-makers established
18. Memberships on policy-making bodies and advisory committees held
19. Recommendations on legislation, regulations, and procedures made
20. Media message circulation achieved
21. Equity investments
22. Technology studies completed

D. PROJECT INPUTS

(AID inputs, Other Donor inputs, and inputs provided by recipient institutions and individuals to be shown separately)

1. Funding

AID to CDB (007)	\$5.2 million for loan financing \$1.3 million for equity financing \$450,000 grant for adaptive research
AID to LAAD (058)	\$4.0 million of total \$6.0 to be used for Caribbean sub-projects.
CDB (under 007)	\$260,000 of Technical Assistance to Enterprises
LAAD (under 058)	\$2.0 million of total \$6.0 of new commercial banks - AID matching funds to be used for Caribbean sub-projects \$7.3 million of internal LAAD resources some of which was to be used for Caribbean sub-projects.

2. In-kind contributions
3. Policies
4. Planning
5. Project Management
6. Recruitment
7. Client interaction
8. Consultant support

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E. CHANGES IN OTHER FACTORS

1. Macro-economic conditions in host countries and in countries which constitute their principal export markets and/or sources of supply.
2. Social, political and economic conditions as perceived by the target group.
3. Scale of problems addressed in comparison with scale of resources devoted to problem solution.
4. Market conditions and technological trends in specific key industries and industry segments prevailing worldwide or in particular export markets.
5. Government-policies external to those which are the subject of the program.

APPENDIX B

SUBPROJECT STANDARDIZED ANALYSES

B.1 MONTSERRAT SEA ISLAND COTTON COMPANY, LTD

Project: Montserrat Sea Island Cotton Company, Ltd.
Plymouth, Montserrat

Personnel: Patrick B. Walker, Managing Director

ICI: CDB

Information: Interviews with Managing Director, CDB feasibility
study, CDB financial records

Amount: US\$644,000 Date: 08/80

Credit Terms: 11 years including 3 years grace. Principal
repayment in sixteen equal semi-annual
installments. Interest rate to the government of
Montserrat of 4% per annum; 9.5% per annum for
MSIC, with the governments interest earnings to
support the industry.

Purpose: The project embraces the cultivation and
harvesting, ginning, spinning, and hand-weaving of
West Indian sea-island cotton for the production
of high-quality items such as stoles, skirt
lengths, table cloths, and clutch bags. The
products to be sold in the tourist markets of the
Caribbean. 007 Loan used to purchase equipment and
renovate factory (see Exhibit B.1.a). Total
investment: \$858,000.

Project Impact: a) expected at loan application -

It was anticipated that the project would create a substantial number of new jobs (234 man-years by 1985), a substantial number of which would be taken by rural workers (see Exhibit B.1.b); and would achieve a capital labor ratio of less than \$6,000 per job.

At the time of the review of suitability of the project for financing, it was estimated that by the time the project was fully developed, total assets would amount to EC\$3,000,000 and annual

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sales would reach EC\$2,383,500, including foreign exchange earnings of EC\$2,000,000 per year (see Exhibit B.1.c).

At the time of the loan appraisal, retail sales from the pilot project in Montserrat were averaging some EC\$4,000 per month. Fifteen retailers in Antigua, Barbados, and St. Lucia were shown samples and "based on their reaction, it is estimated that initial orders totalling approximately [EC]\$200,000 will be forthcoming..." Based on the initial sales reaction, the interest of one Barbados commission agent and statistics on tourist expenditures on handicrafts and souvenirs in the region, the following sales projections were made for Project Years 1-4:

	(EC\$ '000)
1981 Initial orders - Ant., B'dos, St.Lucia - Montserrat sales	200.00 50.00
1982 Full orders including LDCs and Trin&Tob	750.00
1983 20% increase on PY2 + additional export sales - Jamaica, USVI and Bahamas	1,350.00
1984 20% increase in sales to Barbados, T&T and the LDCs + matching exports to Jamaica, USVI and Bahamas	2,160.00
1985 10% increase on PY 4	2,376.00

MSIC expected to gin 114,000 lbs of seed cotton per year, to spin 20,000 lbs of lint by year 2 and a greater amount by year 3, and to have 120 hand looms in operation.

The major risks were expected in the cotton cultivation stage, particularly in finding labor. MSIC proposed to offer an incentive scheme for agricultural labor, which would enable the workers to earn more than twice the current standard daily agricultural wage in Montserrat.

Project Impact: b) As of December 31, 1986 -

1986 employment includes 17 weavers (the number was 30 in 1983; and 14 in 1985) and 22 other factory and administrative personnel. Payroll for 1986 totaled EC\$245,700 (=US\$91,000) (see Exhibit B.1.d).

MSIC has produced no cotton on its own lands for two years; but purchased 4000 lbs of unginned cotton from 30 farmers in 1986, paying EC\$3.00 per pound. In 1985, they purchased 4500 lbs from 25-30 farmers, and in 1983 and 1984, they purchased 5000 - 5500 from about 35 farmers, paying EC\$2.00 per pound.

Gross sales climbed from EC\$150,700 in 1981/82 to EC\$325,900 in 1984/85. They dipped to EC\$278,400 in 1985/86, and are estimated by the Managing Director to total EC\$333,000 in 1986/87.

Background: Began as hand-weaving cottage industry with imported cotton yarn with sales of EC\$4,000 per month; export sales of ginned lint in the range of 16,500 to 64,200 lbs annual during 1974/5 - 1978/9 crop years, earning EC\$89,000 - 215,000. (US\$33,000 - 80,000).

Cred. History: In arrears for \$201,250.00 of principle (there have been no principal payments made), \$20,118.39 of interest; charged \$6,284.20 interest on overdue amounts. Company has requested rescheduling of principle - no decision yet from CDB.

Comments from
Other Reports: None.

Exhibit B.1.a.
Montserrat Sea Island Cotton Company

PROPOSED INVESTMENT AND FINANCING

EC (\$'000)

Investment Items	Equity	CDB Loan	Total
Existing Equipment ^{1/}	210.0	-	210.0
Proposed Manufacturing Equipment ^{1/} (c.i.f. prices)	234.0	649.8	883.8
Fixtures and Office Equipment ^{2/}	-	27.0	27.0
Factory Renovations ^{2/}	234.0	676.8	910.8
Physical Contingencies ^{3/}	-	243.0	243.0
Price Contingencies (10%) ^{4/}	11.7	82.4	94.1
Incremental Fixed Capital Investment	245.7	1,002.2	1,247.9
Total Fixed Capital Investment	24.6	100.2	124.8
Initial Working Capital ^{5/}	270.3	1,102.4	1,372.7
Price Contingency on Working Capital (10%)	480.3	1,102.4	1,582.7
Pre-operating Expenses:	74.0	479.0	553.0
- Training	-	47.9	47.9
- Incorporation Expenses	20.0	-	20.0
Interest during Implementation	5.0	-	5.0
TOTAL	579.3	1,629.3	2,208.6
	-	107.4	107.4
	579.3	1,736.7	2,316.0
	25%	75%	100%

1/ See Appendix VI

2/ See Appendices VII and VIII

3/ Calculated on the basis of 5% for equipment and fixtures and 20% for renovations

4/ This contingency is adequate since the price of the reconditioned spinning plant (representing 56% of proposed equipment costs) will be held firm up to mid-August 1980 by which time an order will be placed if the loan is recommended for approval by CDB.

5/ Initial working capital estimates as detailed at Appendix IV are based on Table 2.4 and Appendices XVIII-XXI.

Source: CDB Pre-Funding Analysis

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Exhibit B.1.b.

Montserrat Sea Island Cotton Company

WORK FORCE BY EMPLOYMENT CATEGORY

Year	Managerial and Supervisory	Clerical and Secretarial	Technical and Skilled	Semi-Skilled and Unskilled*	Total
1981	6	6	67	37	116
1982	6	6	67	41	120
1983	8	6	90	56	160
1984	9	6	130	70	215
1985	9	6	140	80	235

* Includes agricultural workers.

Exhibit B.1.c.

PROJECTED PROFIT AND LOSS STATEMENTS - 1981-1985

EC (\$'000) EXPRESSED IN NOMINAL PRICES

Items	1981	1982	1983	1984	1985
Revenue ^{1/}	270.4	866.0	1,659.9	2,817.8	3,277.3
Less: Cost of Sales ^{2/}	205.7	475.0	836.1	1,272.3	1,492.2
Less Profit	54.7	391.0	823.8	1,545.5	1,785.1
Less: Administration and Selling Expenses	101.3	214.1	395.4	521.3	578.9
Profit/(Loss) before Interest and Bank Charges	(46.6)	176.9	428.4	1,024.2	1,206.2
Less: Interest and Bank Charges	107.4	165.0	165.0	165.0	165.0
Profit/(Loss) before depreciation and amortisation	(154.0)	11.9	263.4	859.2	1,041.2
Less: Depreciation and amortisation	81.0	131.0	131.0	131.0	131.0
Net Profit/(Loss)	(235.0)	(119.1)	132.4	728.2	910.2

Source: CDB Pre-Funding Analysis

^{1/} Selling prices are assumed to increase at the rate of 7.5% per annum

^{2/} See Appendix XXXI.

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EXHIBIT B.1.d

MONTERRAT SEA ISLAND COTTON COMPANY. ACTUAL EMPLOYMENT 1983 - 1986

JOB TYPE/TITLE	AV. MONTHLY WAGE (EC\$)	PERSONS REQUIRED/YEAR				TOTAL WAGES PAID/YEAR (EC\$)			
		1983 PY 3	1984 PY 4	1985 PY 5	1986 PY 6	1983 PY 3	1984 PY 4	1985 PY 5	1986 PY 6
Weavers	780	30	17	14	17	109,600	85,500	46,100	79,100
Sewers	400	1	1	2	2	5,200	5,200	10,400	10,400
Spinners	450	22	5	6	12	113,900	66,900	30,400	31,400
Factory Mngrs.	900	2	2	2	2	19,800	19,800	21,000	23,600
Clerk	600	1	1	1	1	7,100	7,400	7,400	7,700
Typist Receptionist	600		1	1	1		6,200	6,200	7,700
Sales Person	500	1	1	1	1	5,400	5,400	5,400	6,400
Sales Coordinator	2,000	1	1	1	1	24,000	24,000	24,000	24,000
Accountant	2,100			1	1			25,400	25,400
General Manager	2,400	1	1	1	1	28,800	28,800	28,800	30,000
TOTALS		59	30	30	39	313,800	249,200	205,100	245,700

- a. Full-time equivalent jobs created: 39.5
- b. Four year average annual wage of all jobs created: EC\$6,416 = US\$2,376
- c. Capital/labour ratio: US\$21,450
- (No individual Pre-Funding Employment Form. See text for Pre-funding Employment Targets)

B.2 **WINDWARD ISLANDS ALOE**

Project: Windward Islands Aloe, Ltd
 Petit Coulibri Estate, Dominica

Personnel: Marshal (Berny) and Loye Barnard, General Managers

ICI: LAAD

Information: Interview with project managers, LAAD pre-funding analysis, USAID and HIAMP personnel, LAAD loan performance summary, 9/30/86

Amount: US\$150,000 Date: 05/84
 US\$ 65,000 Date: 10/85

Credit Terms: Five years repayment with 24 months grace. Loan to be disbursed in two or more stages. Principal repayment in seven equal semi-annual installments. Interest rate 11% per annum net to LAAD Caribe S.A., payable quarterly.

Purpose: First loan to start up venture. \$90,000 for young aloe plants, \$35,000 for farm equipment and \$25,000 for aloe processing equipment to start up production of aloe gel for export. Total investment: US\$530,000.

Project Impact: a) expected at loan application -

The Windward Islands Aloe project was expected to introduce a new, non-traditional export crop for Dominica, to generate employment and export earnings, and to encourage small farmer production of aloe. Cash flow anticipated at the time of the prefunding analysis is presented in Exhibit B.2.a.

WIA purchased 331 acres of land, of which 100 acres were expected to be cultivated. 75 acres were to be cultivated in aloe by mid 1985.

Production assumptions included 4000 aloe plants per acre, 20 lbs of leaf per plant per year, gel production of 50% of leaf by weight. 1986 forecast: (60 acres * 4000 plants/acre * 20 lbs leaf/plant * 0.5 lbs gel/lb leaf) + (15 acres * 4000 plants/acre * 20 leaf/plant/year * 0.5 year * 0.5 lbs gel /lb leaf) = 2,700,000 lbs gel. Assuming 236 gallons per ton of gel, and a price

of US\$3.00 per gallon, gross sales were expected to total at least US\$ 955,800.

Small farmer cultivation, over the long run was expected to involve an additional 100 acres.

Peak employment was expected by early 1986, at 70 full time jobs and 20 part time. Indirect employment was expected for 30 persons each for a total of 3 months per year in the D.A.I. processing plant. By January 1986, wages were expected to reach \$1833 per person per year for full time employees, and \$250 per year for part time employees, for a total wage bill at WIA of US\$133,000. DAI employees' wages attributable to aloe production expected to total \$500 per person per year (see Exhibit B.2.b).

National Value added: Sales were expected to reach US\$1.0 million by 1987. It was assumed 15% should be subtracted for materials imported (fertilizers, chemicals), so that value added was expected to total \$850,000 annually.

Foreign exchange earned, net after raw material imports and hard currency interest, was expected to exceed \$830,000 annually, beginning 1987.

Project Impact: b) As of December 31, 1986 -

WIA has 70 acres in aloe cultivation, with 250,000 plants in all.

Production during 1986 proceeded with 250,000 plants each yielding 10 to 15 lbs of leaf per plant, with gel production of 40 - 45% gel per pound of leaf. The general manager reported they were producing about 4500 lbs of gel per day, eight months per year. He uses a conversion factor of 8.6 lbs per gallon, so 1,080,000 lbs of gel is equivalent to 125,581 gallons. The price received is US\$3.25 per gallon of raw gel (WIA actually concentrates the gel ten fold, and receives US\$32.50 per gallon of 10X concentrate), so total sales should therefore have been about US\$400,000. Actual reported sales for 1986 through mid-November, 1986 were about \$377,000. The Manager reports that problems of production include nematodes and browning of the leaf in the field. Production bottlenecks have also been

reported in the DAI concentrating plant. The managers project sales of US\$793,000 for 1987.

WIA has employed 30 people full time for the past three years, and had an average payroll of 55 people full time during 1986, whom it paid an average of EC\$90 per week (= US\$33.33). The total wage bill at WIA for 1985 was therefore approximately US\$95,333. Employment at the D.A.I. concentrating plant is much less than envisioned, with 4 people working 2 hours/day every day and another 6 people working 8 hours/day two days per month. In addition, two truck drivers make two round trips per day between the estate and the concentrating plant. The Manager projects full time employment of 75 for 1988 (see Exhibit B.2.b)

Four pilot plots of 1.5 acres for small farmer production of aloe have been established. WIA sells young aloe "pups" for EC\$0.25 each (and will extend credit - accepting payment for the pups when the farmers bring in mature aloe leaf nine months later). They will pay EC\$0.10 per lb of leaf brought into WIA for processing. Farmers can gross EC\$4,000 per acre per year in the first year of production and EC\$6,000 after they mature. The initial investment is EC\$2,000 per acre for the first year of production, and crop maintenance is about EC\$1000 per acre thereafter. Labor requirements are about one person per acre, including processing of raw gel. WIA hopes there will be a total of 50 acres of small farmer production in 1987 and 100 in 1988.

All production is exported to the U.S. The manager reports no difficulty in marketing his entire output. It has been reported that WIA must purchase additional gel from other sources to meet contract commitments in the US. Future markets may include Europe and Japan, which show increasing interest in aloe products; and Dominica, through Dominica Coconut Products, which manufactures soaps, lotions, and cosmetics.

National Value added, following the same assumptions employed during the initial project application, would be US\$400,000 less 15% = \$340,000. Net foreign exchange earnings, subtracting interest due on foreign debt, would appear to total over \$316,000.

Background: New project

Cred. History: LAAD reports no arrears. Payments on principal not yet due.

Comments from

Other Reports: No previous reports

Exhibit B.2.a.

LAAD

NAME WINDWARD ISLANDS ALOE, LTD. Project Financial Performance

Spread In Thousands	Type Date	PY1		PY2		PY3		PY4	
			%		%		%		%
Net Sales		-		420.4		1,062		1,062	
Cost Of Goods Sold		-		161.2		406.3		406.3	
Gross Margin		-		259.2		655.7		655.7	
Operating Exp.		20.0		44.0		54.5		54.5	
Administrative Exp.		67.7		151.9		185.3		185.3	
Operating Income		(87.7)		63.3		415.9		415.9	
Other Income		9.3		2.8		6.0		6.0	
Other Expense Agrinet (non-cash)		40.0		-		-		-	
Interest Expense		8.3		22.0		15.3		11.6	
Depreciation & Non-Cash		25.4		25.4		25.4		25.4	
Earnings Before Taxes		(152.1)		18.7		381.2		384.9	
Income Taxes (Refund)									
Net Income		(152.1)		18.7		381.2		384.9	
Source Of Funds									
Net Income		(152)		19		21		385	
Depreciation		25		25		25		25	
Increase - L.T. Debt		150		-		-		-	
Sales Of Stock		-		-		-		-	
Sales Of Fixed Assets		-		-		-		-	
Other Accounts - Net		90		-		-		-	
Total Sources		113		44		406		410	
Application Of Funds									
Dividends/Withdrawals									
Invested In Fixed Assets		177		-		-		-	
Reduction - L.T. Debt		-		-		43		43	
Purchase Of Stock									
Change In Working Capital		(61)		44		363		367	
Total Applications		113		44		406		410	

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EXHIBIT B.2.b

PROJECT ASSESSMENT SUMMARY AS OF 1983
WINDWARD ISLANDS ALOE, LTD

PROJECT FACTOR	FORECAST		ACTUAL	FORECAST		REMARKS
	PRE-LAAD	YEAR ONE PROJECTION 1984	YEAR THREE ESTIMATE 1986	YEAR FIVE PROJECTION 1988	AGGREGATE PROJECTION	
1. Target Group Benefits:						
Employment						
- Direct	0	30	55	70	n/a	
- Indirect	0	0	4	30	n/a	(DAI plant)
- Part-time	0	20	0*	20	n/a	
Full-time equivalent	0	34	59	104	n/a	
Income						
- wages: direct	0	\$52,000	\$95,333	\$153,000	\$613,000	
- wages: indirect	0	0	\$2,520	\$18,900	\$84,400	(DAI plant)
- wages: part-time	0	\$5,000	0*	\$6,400	\$28,300	
full-time equivalent	0	\$57,000	\$97,853	\$178,300	\$725,700	
2. Macro-economic Benefits:						
National value added:	0	0	\$340,000	\$850,000	\$2,500,000	
Foreign Exchange earned	0	0	\$316,000	\$830,000	\$2,400,000	
Increased Food Production	0	\$3,000	N.A	\$10,000	\$34,000	(sideline fruit)

* Included in direct full-time

N.A - not available

n/a - not provided by LAAD

Sources: Forecasts - LAAD 1983, 1986 Estimate - based on information supplied by WIA.

B.3 **EASTERN CARIBBEAN AGENCIES, LTD**

Project: Eastern Caribbean Agencies, Ltd.
Kingstown, St. Vincent

Personnel: Marcus DeFreitas, Managing Director; Douglas
DeFreitas, Assistant Managing Director/ Director
of Operations

ICI: LAAD

Information: Interview with Asst. Managing Director, LAAD
Prefunding Analysis, LAAD Portfolio Assessment
9/83, LAAD Loan Performance Summary, 9/86.

Amount: US\$250,000 **Date:** 12/80
 US\$100,000 00/84
 US\$250,000 00/86

Credit Terms: Five years repayment with 2 months grace. Loan to
be disbursed in two or more stages. Principal
repayment in seven equal semi-annual installments.
Interest rate 12% per annum net to LAAD Caribe
S.A., payable quarterly.

Purpose: First loan: Packing shed improvements and cooling
facility - \$10,000; packing equipment - \$3,000;
rolling stock - \$85,000; and to support working
capital requirements (produce purchases, advances
in cash and in kind to farmers, and prepaid leases
on warehousing space in Trinidad and the UK)-
\$100,000; pay down outstanding mortgage obliga-
tions - \$50,000. Total investment: \$1,280,000.

Project Impact: a) expected at loan application -

ECA's financial record (from 1978 - 1980) at the
time of the LAAD loan application, and projections
to 1982, are presented in Exhibit B.3.a.

It was expected that the ECA project, over the
life of the LAAD-CARIBE loans, would generate in
excess of US\$3.0 million of value added to the
economy of St. Vincent and more than US\$4.0
million in foreign exchange. It would create and
sustain jobs, directly and indirectly, for over
1500 people working both in crop production and
produce distribution. It would provide for a more
rationalized, consistent and dependable channel

through which St. Vincent's and, eventually, other islands' produce could get to market - at a profit for farmers and distributor alike (see Exhibits B.3.b. and B.3.c.)

Before the loan, the company payroll stood at 25 employees; wages averaged \$150/month for field crew and \$235/month for administrative staff. By 1986, ECA's payroll was expected to number 55, including 40 persons engaged in packing and handling and 15 in purchasing, agronomy and administrative positions.

The project assessment assumed that for every acre of land required to produce crops for ECA's trade, at least 1.5 hired farm laborers, apart from the land-owner, would participate in the production and delivery of those crops. This was expected to translate into about 266 full time job equivalents, up from 59 in 1980 (the latter calculated as follows: \$325,000 paid to farmers in 1980; with gross income of \$1500/acre; therefore 217 acres sown to ECA trade * 1.5 workers per acre (plus ten truck drivers). Weighted labor dollar equivalent per acre of product sold to ECA assumed to be \$250; 217 acres * \$250 = \$54,250. Average daily wage was \$3.50; \$54,250 divided by (\$3.50/day * 270 days/year) = 57 field jobs. Ten truck-hauling jobs estimated to equal 2 full time equivalent jobs; 2 + 57 = 59. Total income was \$55,755. Projection to 1986 based on assumption of ECA purchases from local farmers increasing by a factor of almost 4.5; all other calculations scaled up accordingly: 4.5 * 59 = 266.

On average, it was assumed that each acre of land sown for ECA trade produces a gross income to growers of \$1,500. Costs were estimated at a maximum of \$1,000 per acre; yielding farmers \$500 net income. In 1980, 110 farmers sold to ECA, each devoting just under 2 acres to production for ECA. Net income was calculated at \$108,500. The assessment projected an increase of 75% for the first year, involving 83 new farmers each with 2 acres. By 1985, they expected 471 farmers would be supplying to ECA, involving an increment of \$355,500 over the 1980 figure.

It was expected that by 1985, 50% of ECA's requirements would be made up by new production, as opposed to production that would have been available and sold even if ECA were not buying. In addition, as a result of ECA's making available the necessary inputs and technical assistance for farmers to meet contract terms, yields were expected to improved by an increment of up to 80% by 1985. Productivity in purchasing and packaging throughput was expected to increase by an increment of 25% by 1986.

Local value added was calculated as the average profit per acre multiplied by ECA's acreage requirement plus aggregate field wages, less 15% for local purchases. National Value Added was calculated, after adjusting for ECA's non-produce business, as local value added plus all other ECA value added expense in St. Vincent, plus ECA's profit, less the value, at cost of goods other than crops purchased by ECA in St. Vincent and less the value of ECA purchases of inputs outside St. Vincent. The figure was estimated to be approximately \$200,000 as of 1980. Increments were calculated on the basis of ECA's purchase plan forecasts, and was expected to reach \$850,000 by year five. Net foreign exchange earnings were assumed to closely approximate total sales, less any import expenditures (trucks, jeeps, etc). This was estimated at \$275,000 in 1980; and projected to total \$1,150,000 in year five.

Project Impact: b) As of December 31, 1986 -

In 1986, ECA paid out EC\$1.4 million (US\$518,500) to small farmers in St. Vincent alone. (Precise data are not available on purchases from farmers in other islands). The assistant managing director said about 300 Vincentian farmers sold to ECA in 1986, and devoted about 2.5 acres each to production. He added that farmers' costs amount to about 75% of gross earnings, so that Vincentian farmers took home a total of about US\$129,625 or US\$432.00 each. Total sales from ECA in 1986 totalled US\$2,407,000. The assistant manager reported that total purchases from farmers have maintained roughly a constant proportion of ECA gross sales, so that farmers in the Caribbean selling to ECA grossed \$1,230,000. If costs

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remained a constant proportion of gross earnings, then Caribbean farmers took home a total of about \$307,500.

The ECA payroll has 60 people, including 45 persons engaged in packaging and handling and 15 in purchasing, agronomy, and administrative positions. Pay for the packaging personnel totals EC\$16.00 per day (US\$5.93/day = about \$170/month). Administrative personnel earn EC\$800 - 2500/month (average about US\$400/month). There are about 750 acres under production in St. Vincent for ECA, which would involve about 1.5 workers part time, or 1125 workers plus about 16 truck drivers (aside from the small farmers themselves). If the weighted labor dollar equivalent per acre has stayed approximately the same since 1980 in comparison with daily wages, then the full time jobs are about 200, and wages, at about \$4.80 per day, total \$259,200 on St. Vincent alone. For the entire ECA supply area, if acreage to sales and employment to sales ratios have remained constant, then there were about 1780 acres under production for ECA in 1986, employing the equivalent of 470 full time workers whose earnings would total \$609,000 (see Exhibit B.3.b).

If the same assumptions about value added and foreign exchange made in 1980 still hold true, and if ratios of value added to local purchases and of net foreign exchange earnings to gross foreign exchange earnings still hold, then value added in St. Vincent was approximately US\$320,000 in 1986. Foreign exchange earnings amounted to US\$1.6 million, less any purchases of imported vehicles or equipment (see Exhibit B.3.c).

Background: Existing company expanded with LAAD loans.

Cred. History: LAAD reports there have been no arrears on any loans to DCA. Total balance outstanding to LAAD as of 9/30/86 was \$363,000

Comments from Other Reports: The LAAD Project Assessment Update of 9/83 reported that "This project has made significant progress toward meeting anticipated impact in terms of jobs - about 200 full-time equivalent jobs created - income and macro-economic benefits.... Work with farmers has been very

successful in that standards for quality, delivery and packing are being established island-wide. Macro-economic impact now includes over \$1,000,000 in foreign exchange earnings with corresponding levels of value added. Inter-island trade has also been undertaken and, more recently, the company set up West Indian food outlets in Canada with projections for similar outlets in the US and UK by year end."

LAAD RATIOS AND COMPARISONS: Eastern Caribbean Agencies, Ltd.

DATE →	12-31-78	12-31-79	12-31-80	12-31-81	12-31-82	
Work Cap. (Line 12 less 36)	69	35	173	378	553	
Current Ratio	2.1 to 1	1.25 to 1	3.25 to 1	4.71 to 1	3.81 to 1	to 1
Worth to Debt Ratio	1.63 to 1	.79 to 1	.85 to 1	.99 to 1	1.19 to 1	to 1
Acid Test Ratio	.43 to 1	.17 to 1	.65 to 1	2.25 to 1	2.28 to 1	to 1
Sales to Receivable (Days)	30	13	16	32	47	
Cost of Sales to Inv. (Days)	170	103	108	77	74	
Profit to Worth (Percentage)	18 %	- %	29 %	22 %	35 %	%
	UNAUD.	UNAUD.	EST.	EST.	EST.	
(\$'000)						
OPERATING DATA (Period Ending)	12-31-78	12-31-79	12-31-80	12-31-81	12-31-82	
Net Sales	300 %	629 %	900 %	1700 1100%	2100 1100%	100%
Cost of Goods Sold	322 74%	526 83%	675 75%	1190 70%	1470 70%	%
GROSS PROFIT	78 26%	103 17%	225 25%	510 30%	630 30%	%
GEN. ADMIN. EXPENSE	31 10%	61 10%	100 11%	180 11%	216 10%	%
Depreciation	2 1%	14 2%	18 2%	50 3%	70 3%	%
Income Tax	16 5%	(10) 2%	36 4%	100 6%	124 6%	%
Other Operating Expenses						%
Net Other Income/Charges	- %	(46) 7%	- %	- %	- %	%
FINANCIAL EXPENSE	7 2%	7 1%	16 2%	25 1%	35 2%	%
NET PROFIT (LOSS)	22 7%	(15) - %	55 6%	155 9%	185 9%	%

CHANGES IN WORKING CAPITAL	12-31-78	12-31-79	12-31-80	12-31-81	12-31-82
Beginning Working Capital		69	35	173	378
Net Profit (Loss)		(15)	55	155	185
Dividends/Withdrawals					
24 Inc. (Dec.) Non-Current Assets		(37)	(62)	(50)	(10)
47 Inc. (Dec.) Dividend Debt		3	132	100	-
NEW EQUITY		15	13		
WORKING CAPITAL	69	35	173	378	553

RECONCILIATION OF NET WORTH	12-31-78	12-31-79	12-31-80	12-31-81	12-31-82
Beginning Net Worth		124	124	192	347
Revaluation of Assets					
Net Profits		(15)	55	155	185
Less: Dividends or Withdrawals					
Other					
NEW EQUITY		15	13	-	-
ENDING NET WORTH	124	124	192	347	532

REMARKS:

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EXHIBIT B.3.b

PROJECT ASSESSMENT SUMMARY AS OF 1980

PROJECT: EASTERN CARIBBEAN AGENCIES, LTD., KINGSTOWN, ST. VINCENT, WEST INDIES.

	FORECAST			ACTUAL	FORECAST	
	1980 PRE-LAAD	1981 YEAR ONE PROJECTED	1985 YEAR FIVE PROJECTED	1986 ESTIMATE	AGGREGATE INCREMENT PROJECTED	REMARKS
TARGET GROUP BENEFITS EMPLOYMENT						
Direct Employment	25	38	55	60	30	
Indirect Employment	336	596	1512	2670	1176	
Indirect Emp. Full-Time Equiv.	59	104	266	470	207	
Total Full-Time Equiv.	84	142	321	530	237	
INCOME						
Participating Farmer Suppliers	110	193	471	711	361	Per Capital Annual take home now \$500
Net Take-Home Per Acre*	\$500	\$500	\$500	N.A		
Acreage Employed For ECA	217	380	928	1780	711	
Net Take-Home of Farmer - Suppliers	\$108,500	\$190,000	\$464,000	\$307,500	\$335,500	
Field Labour Wages	\$3.50/day	\$3.50/day	\$4.55/day	\$4.80/day	\$1.05/day	
Project Field Laborer Aggregate Wages	\$55,755	\$98,280	\$326,781	\$609,000	\$271,026	
Direct Employees - Operations Wage	\$150/mo.	\$150/mo.	\$262/mo.	\$177/mo.	\$112/mo.	Better than average
Direct Employees - Admin. Salaries	\$235/mo.	\$235/mo.	\$411/mo.	\$400/mo.	\$176/mo.	Better than average
Direct Employees-Operations Wage Aggregate	\$36,000	\$54,000	\$125,760	\$95,580	\$89,760	
Direct Employees-Admin. Salary Aggregate	\$14,100	\$22,560	\$73,980	\$72,000	\$59,880	
Total Income Generated by Project for Target Group	\$214,355	\$384,840	\$990,521	\$1,084,080	\$776,168	

* Assumes that participants have achieved with ECA, and will sustain a constant take-home average of \$500 per acre.. employing the equivalent of 2 acres per participant.
N.A - not applicable. Sources: Forecast - LAAD 1980, 1986 Estimate - based by information provided by ECA.

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EXHIBIT B.3.c

EASTERN CARIBBEAN AGENCIES

	<u>FORECAST</u>		<u>ACTUAL</u>	<u>FORECAST</u>		<u>REMARKS</u>
	<u>PRE-LAAD</u>	<u>YEAR ONE PROJECTION</u>	<u>YEAR FIVE PROJECTION</u>	<u>1986 ESTIMATE</u>	<u>AGGREGATE INCREMENT</u>	
<u>PRODUCTION AND PRODUCTIVITY</u>						
Field Production Increase over Pre-Project	15%	20%	50%	N.A	50%	Includes production previously left in the field.
Field Productivity Increase over Pre-Project	Basis	25%	80%	N.A	80%	*Function of potentials on land.
Purchasing & Packaging Productivity	Basis	10%	25%	N.A	25%	
<u>RURAL DEVELOPMENT & SYSTEMS</u>						
Technical & Capital Assistance	Minimal	200% increase	1,000%	N.A	1,000%	Cash, kind
Local Value Added	\$139,617	\$245,038	\$702,446	N.A	\$562,831	
Farm to Market System	Linkage & Planned Production and Marketing Made Possible (See Text)					
<u>MACRO ECONOMIC IMPACT</u>						
National Value Added-Annual	\$200,000	\$350,000	\$850,000	\$757,000	\$650,000	
National Value Added Accum.	\$200,000	\$550,000	\$2,800,000	N.A	\$2,800,000	(Sum of years)
Foreign Exchange Produced-Annual	\$275,000	\$480,000	\$1,150,000	\$1,613,000	\$875,000	
Foreign Exchange Accum.	\$275,000	\$755,000	\$3,900,000	N.A	\$3,900,000	(Sum of years)
Foreign Exchange saved	-	-	-	-	-	
Local Non-Crop Procurement	Basis	75%	430%	N.A	430%	Packaging, Electricity
Environmental Impact	-	-	-	-	-	
Increased Food Production-Local	-	-	-	-	-	

* Productivity increases are assumed to be skewed in the farmer take-home calculations, which have been averaged to show a constant \$500/acre.

Sources: Forecasts - LAAD, 1986 Estimate - based on information supplied by ECA.

N.A - not available

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B.4

ST. VINCENT PLASTICS, LTD.

Project:

St. Vincent Plastics, Ltd
Kingstown, St. Vincent

Personnel:

Mr. Jim I. Lockhart, owner and General Managers

ICI:

LAAD

Information:

telephone interview with Owner/General Manager,
LAAD portfolio assessment 9/83, LAAD Loan
Performance Summary 9/86

Amount:

US\$ 35,000

Date:

11/81

Credit Terms:

Five years with 12 months grace. Principal
repayment in nine equal semi-annual installments.
Interest rate 12% per annum on outstanding
balances to LAAD Caribe S.A., payable quarterly.

Purpose:

Company engaged in the manufacture and export of
plastic packaging, primarily for agricultural
produce. Initial proposal: loan for expansion of
production purchase of extrusion equipment to
produce blown film for banana crop protection,
printing machinery, cutting machinery, complete
construction of plant, working capital,
refinancing of mortgages. (Original loan proposal
was for \$180,000). Total investment: \$50,000.

Project Impact: a) expected at loan application -

The financial assessment performed for the pre-
funding analysis is reproduced in Exhibit B.4.a.

Employment benefits related almost exclusively to
the creation and sustaining of jobs in the plant.
By year five, the company's activities were
expected to create and sustain several indirect
jobs related to handling and transporting finished
products. Before the loan, SVP employed 16
people, with a payroll of \$35,000. By year five,
SVP was expected to employ 27 people, and generate
3 indirect jobs. Income was expected to total
\$65,000 for SVP employees and \$8,000 for indirect
jobs (see Exhibit B.4.b)

The production of plastic film protection for
banana crops was expected to save farmers from

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crop losses.

Local value added is calculated as the company's sales less payments to other companies for goods and services. It was calculated as about \$30,000 before the loan, and expected to reach \$150,000 by year five. National value added was expected to equal local value added. Foreign exchange was calculated as export portion of sales, less imported resins; this was about \$70,000 before the loan, and was expected to rise to \$210,000 in 1986. Foreign exchange saved was calculated as the domestic portion of sales, less imported resins; this was about \$10,000 in 1981, and was expected to rise to \$30,000 by year five.

Project Impact: b) As of December 31, 1986 -

The evaluation team was unable to make contact with St. Vincent Plastics, Ltd. for a site visit; contact was eventually established by telephone. The owner/manager reported that the company had suffered a fire in June, 1985, and that the plant was closed until April, 1986. The company is now attempting to regain its previous production and marketing level. It was covered by insurance.

The company currently employs 7 people full time on one shift. Management hopes to expand into two shifts soon. Wages range from EC\$86 to \$175/week (US\$31.70 - 64.80) (see Exhibit B.4.b).

The company is now producing about 90 tonnes of plastic shopping bags and potting bags per year, with gross sales of about EC\$200,000 (US\$74,000). Management hopes to get back into production of banana protection film, but faces competition.

The company is about to get back into exporting within the region, although it is currently producing only for the St. Vincent market.

Background: Existing company expanded with LAAD loans.

Cred. History: Grace period extended six months. Repaid \$20,000 of principal; \$15,000 outstanding as of Sept. 1986. \$10,143 of principal rescheduled after fire. LAAD reports no arrears.

Comments from

Other Reports: LAAD 9/83 portfolio assessment stated: "This project after several technical and financial setbacks, now appears to be able to sustain, on a regular-basis, 15-20 full time jobs. The company is producing bags for the grocery trade, plastic film for protection of bananas and, more recently, laminated packaging for items such as biscuits and donuts. Macro-economic impact has been limited to about \$20,000 in added value because of slow sales, but the company has successfully shipped to other islands in the region - Jamaica, St. Lucia, and Trinidad - with good prospects for more exports in the immediate future. "

Exhibit B.4.a.

LAAD

RATIOS AND COMPARISONS St. Vincent Plastics, Ltd.

(US\$ '000)	DATE →	12/31/79	12/31/80	12/31/81	12/31/82	12/31/83	12/31/84	12/31/85
Work. Cap. (Line 12 less 36)		(12)	(33)	(31)	11	33	98	116
Current Ratio		.66 to 1	.41 to 1	.56 to 1	1.19 to 1	1.49 to 1	2.46 to 1	3.15 to 1
Worth. to Debt Ratio		.03 to 1	.03 to 1	.10 to 1	.25 to 1	.44 to 1	.98 to 1	2.33 to 1
Acid Test Ratio		.37 to 1	.05 to 1	.41 to 1	.93 to 1	1.12 to 1	1.87 to 1	2.13 to 1
Sales to Receivable (Days)		32	5	30	43	44	46	45
Cost of Sales to Inv. (Days)		38	55	17	21	27	30	40
Profit to Worth (Percentage)		- %	- %	165 %	61 %	62 %	53 %	44 %
		UNAUD.	UNAUD.	EST.	PROJ.	PROJ.	PROJ.	PROJ.
OPERATING DATA (Period Ending)		12/31/79	12/31/80	12/31/81	12/31/82	12/31/83	12/31/84	12/31/85
Net Sales		103	147	225	320	444	533	639
Cost of Goods Sold		81	107	157	224	311	373	447
GROSS PROFIT		22	40	68	96	133	160	192
SALES G. & A EXPENSE		17	34	34	48	65	70	83
FINANCE EXPENSE		4	7	15	25	20	16	11
TAXES		-	-	-	-	-	-	-
Other Operating Expenses		-	-	-	-	-	-	-
Other Income/Charges		(2)	-	-	-	-	-	-
NET PROFIT (LOSS)		3	(1)	19	23	48	74	90

CHANGES IN WORKING CAPITAL	12/31/79	12/31/80	12/31/81	12/31/82	12/31/83	12/31/84	12/31/85
Beginning Working Capital	(8)	(12)	(33)	(31)	11	33	98
Net Profit (Loss)	3	(1)	19	23	48	74	98
Dividends/Withdrawals							
Inc. (Dec.) Non-Current Assets	(5)	(66)	7	(88)	15	32	(44)
Inc. (Dec.) Deferred Debt	(2)	46	(24)	97	(41)	(41)	(35)
NEW EQUITY		-	-	10	-	-	-
WORKING CAPITAL	(12)	(33)	(31)	11	33	98	116

RECONCILIATION OF NET WORTH	12/31/79	12/31/80	12/31/81	12/31/82	12/31/83	12/31/84	12/31/85
Beginning Net Worth	-	3	2	21	54	102	176
Revaluation of Assets							
Net Profits	3	(1)	19	23	48	74	98
Dividends or Withdrawals	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Other							
NEW EQUITY				10			
ENDING NET WORTH	3	2	21	54	102	176	274

REMARKS:

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EXHIBIT B.4.b

PROJECT ASSESSMENT SUMMARY FORECAST AS OF 1981

I. PROJECT: ST VINCENT PLASTICS, LTD., KINGSTOWN, ST VINCENT, WEST INDIES

II. TARGET GROUP BENEFITS	FORECAST			ACTUAL	FORECAST
	PRE-LAAD 1981	YEAR ONE PROJECTION 1982	YEAR FIVE PROJECTION 1986	1986 ESTIMATE	AGGREGATE INCREMENT
EMPLOYMENT					
Direct employment	16	19	27	7	11
Indirect Employment	-	-	3	-	3
Total Full-Time Employment	16	19	30	7	14
INCOME					
Plant Wages	\$35,000	\$42,000	\$65,000	\$35,000	\$30,000
Other Wages	n.ap	n.ap	8,000	-	8,000
Total Income Generated for Target Group	35,000	42,000	73,000	35,000	38,000
II. PRODUCTION AND PRODUCTIVITY					
In the Plant	BASIS	+10%	+120%	N.A	+120%
V. RURAL DEVELOPMENT AND SYSTEMS					
Technical & Capital Assistance	n.ap	n.ap	n.ap	n.ap	n.ap
Local Value Added	\$30,000	\$50,000	\$150,000	N.A	\$120,000
Farm to Market System	n.ap	Company to commence production and distribution of protective film for small farmer banana crops.			
V. MACRO-ECONOMIC IMPACT					
National Value Added Annually	\$30,000	\$50,000	\$150,000	N.A	\$120,000
National Value Added Aggregate	30,000	80,000	520,000	N.A	*490,000
For. Exch Produced Annually	70,000	85,000	210,000}		140
Foreign Exchange Aggregate	70,000	155,000	750,000}	\$74,074*	680,000
Foreign Exchange Saved	10,000	12,000	30,000}		20,000
Local Non-Crop Procurement		Packaging, electricity, lubricants.			
Environmental Impact		Minimal waste disposal. Resins recycled.			
Increased Food Production- Local	n.ap	n.ap	n.ap	n.ap	n.ap

* Gross Sales

n.ap - not applicable

N.A - not available

Sources: Forecasts - LAAD, 1981, 1986 Estimate - based on information supplied by SVP.

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B.5**INTEGRATED SUGAR REHABILITATION PROJECT**

Project: St. Vincent Sugar Industry, Ltd.
Mt. Bentinck, St. Vincent

Personnel: (closed, not applicable)

ICI: CDB

Information: CDB Feasibility Study, 1980; CDB Financial records, St. Vincent Development Corporation personnel, CDB and RDD/C personnel, US Inspector General's audit, 1985.

Amount: US\$2,207,000 **Date:** 08/80

Credit Terms: 20 years including 4 years grace. Principal repayment in 64 quarterly installments. Interest rate to the government of St. Vincent was 4% per annum; interest rate to the SVSIL was 9.5% per annum.

Purpose: The loan was used to finance: a) cost overruns of an earlier CDB funded project (BD 79/77) to construct a sugar factory at Mt. Bentinck (loan amt. up to US\$1,877,000); b) purchase of equipment to establish a Mechanical Cultivation and Transportation Service Unit (loan amt. up to US\$360,000) (see Exhibit B.5.a); and c) providing a line of Credit to the Development Corporation (DEVCO) to assist sugar cane farmers in establishing the crop (US\$370,400 - see Appendix C, below). Total investment: \$7,680,000.

Project Impact: a) expected at loan application -

The project, at the time of the 1980 loan proposal, was to complete construction and commissioning of the sugar factory in time to process the first sugar cane harvest starting in March 1981, and to promote the cultivation of 1,800 acres of sugar cane per year by 1982 on the East Coast lands. Output was expected to be 30 tonnes of cane per acre harvested; the conversion factor was expected to be 10:1 - Tonnes of cane : Tonnes of sugar. The projected income and expenditure statement, prepared in 1980, is presented in Exhibit B.5.b.

Prices were expected to remain constant at EC\$50.00 (US\$18.50) per tonne of sugar cane at the farmgate and EC\$1,250 (US\$463.00) per tonne of sugar. This projection was made even though St. Vincent was buying sugar from Barbados at EC\$946.33 per tonne f.o.b., prices only peaked at EC\$1890 per tonne f.o.b. in 1979/80, and projections of the new CARICOM price were between EC\$1,100 and \$1,200 f.o.b. (see Exhibit B.5.c.). The optimistic projection was based on World Bank forecasts, and were considered "conservative" by the CDB due in part to the "increasing importance/value of sugar cane/sugar as a renewable energy resource..." Financial rate of return after tax was expected to be 11%.

Most of the projected sugar production was expected to be locally consumed. Figures from April 1980 showed that the c.i.f. price was EC\$1053.85 per tonne; total landed cost was EC\$1153.11 per tonne; wholesale price was EC\$1299.05 per tonne; and retail price was EC\$1364.00 per tonne. It was "expected that the Government will regulate the importation of sugar, taking into account the levels of expected demand and the production within the country."¹

The project was also expected to incorporate rum production from the molasses of the sugar factory into the operations of the sugar company. The distillery was already available for operation, and did not require additional financing. It had been importing molasses from St. Kitts.

The sugar factory was expected to provide permanent employment for 12 management staff and 46 workers. 26 ranch workers were expected to be employed four months per year, initially. The factory was to employ 151 persons, or 76 full time job equivalents (see Exhibit B.5.d). The mechanical cultivation and transportation unit would employ about six equipment operators and 20 casual workers. Purchases of cane were expected to benefit 266 farmers per year, and to generate a net annual value them of US\$664,000 (see Exhibit

¹. CDB, "Appraisal Report on Integrated Sugar Rehabilitation Project - St. Vincent and the Grenadines, July 1980, p. 28.

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B.5.e). Net income of sugar cane farmers was expected to be about EC\$805 per acre per year. Work in the sugar fields to total 9000 person-days per year.

DEVCO would provide credit to farmers to finance the establishment and harvesting of their sugar cane crops. Small farmers (up to 10 acres) were expected to lease land from government (on 50% of the cane land), the rest would mostly be worked by farmers on privately owned land with plots under 25 acres. DEVCO would receive technical assistance from a CDB Farm Improvement Officer.

Project Impact: b) As of December 31, 1986 -

Project terminated; factory closed as of end 1984.

Background: In December 1977, the CDB approved two loans totalling US\$3 million to the St. Vincent Government to assist in reconstructing a sugar factor at Mr. Bentinck which had been closed since 1962. Total cost was expected to be about US\$4.4 million. Delays and cost overruns put the project behind schedule and necessitated further finance.

Cred. History: As of 2/28/86, US\$276,000 of principal had been repaid, leaving principal of US\$1,931 outstanding. CDB reports no arrears on 007 loan.

Comments from

Other Reports: The US Inspector General's report, written July 1985, concluded as follows: "During its first three years in operation, the company showed losses ranging from [US]\$1.5 to \$1.8 million, and the factory manager projected a loss of \$1.3 million in 1985. By way of comparison, the loan appraisal predicted losses ranging from \$100,000 to \$500,000 in the first three years, and a \$400,000 profit in the fourth year of operation. According to an authoritative source in the company, the factory should never have been built. He said that the Prime Minister wanted to close the factory,..."

"According to CDB and St. Vincent Sugar Industry officials, the company's poor performance was due to several factors:

-- The company's consultants were not qualified, and consistently underestimated construction costs

-- Implementation delays totalling sixteen months led to factory construction cost overruns.

-- Prices established for sugar cane and refined sugar for local consumption were both too low.

-- The company used bank overdraft financing for funding day-to-day operations, increasing interest costs.

-- Arrangements for transporting cane to the factory were inadequate.

-- The company was poorly managed.

"As a result of these problems, St. Vincent Sugar Industry, Ltd. had a debt of about \$13.2 million, and was losing more than a million dollars each year." ²

² Inspector General's Report, p.6, 7/85.

Exhibit B.5.a.

Integrated Sugar Industry Rehabilitation - St. Vincent

FINANCING PLAN

EC (\$'000)

ITEMS	COMMERCIAL BANK OVERDRAFT	BORROWER'S CONTRIBUTION	CDB LOAN	TOTAL
A. FACTORY				
Purchase of site	-	0.196	-	0.196
Purchase of plant	-	1.135	-	1.135
Purchase of spares	-	0.300	-	0.300
Consultancy fee	-	-	0.854	0.854
Civil cost	-	2.000	3.307	5.307
Electrical Installation	-	-	0.695	0.695
Mechanical Installation	-	-	2.057	2.057
Dismantling, rehabilitation	-	2.020	2.905	5.013
Replacement, shipping	-	-	-	-
Modification	-	-	0.190	0.190
Miscellaneous	-	-	0.632	0.632
Working capital	1.450	-	-	1.450
Security fence	-	-	0.081	0.081
Storage tank	-	-	0.460	0.460
Vacuum pan	-	-	0.160	0.160
Interest on loan during construction	-	0.457	1.030	1.487
Price contingencies	-	-	0.510	0.510
Physical contingencies	-	-	0.300	0.300
B. MECHANICAL UNIT	-	-	0.879	0.879
C. DISTILLERY	-	0.500	-	0.500
TOTAL	1.450	6.616	14.140	22.206
	6.5%	29.8%	63.7%	100.0%

Source: CDB Pre-Funding Analysis

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Exhibit B.5.b.

INTEGRATED SUGAR INDUSTRY REHABILITATION - ST. VINCENT
 PROJECTED INCOME AND EXPENDITURE STATEMENT - SUGAR FACTORY (CURRENT PRICES UP TO PY 5)
 EG\$'000'

ITEMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21-25
PROJECT YEARS																					
A. SALES																					
1. Sugar - average dark and washed grey	1,688	4,253	6,870	8,370	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910	8,910
2. Molasses	162	376	498	640	640	640	640	640	640	640	640	640	640	640	640	640	510	640	640	640	640
TOTAL SALES	1,850	4,629	7,368	9,010	9,550																
B. COST OF PRODUCTION																					
1. Sugar cane purchases	900	2,268	3,132	3,346	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564	3,564
2. Transportation costs:																					
- Trucks	121	311	434	469	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
- Tractors	101	259	362	391	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422
3. Fuel, oil, chemical, stores	104	271	389	428	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471
4. Utilities	17	23	28	31	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
5. Out of crop wages (permanent)	238	217	205	215	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226
6. In crop wages (casual)	49	112	164	173	181	181	181	181	181	181	181	181	181	181	181	181	131	151	181	121	181
7. Spares, repairs and maintenance	64	181	254	274	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296
8. Fees, taxes, insurance, etc.	15	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
9. Depreciation	336	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672
TOTAL PRODUCTION	1,945	4,332	5,660	6,021	6,393																
C. GROSS OPERATING MARGIN	-(95)	297	928	2,909	3,157																
D. ADMINISTRATIVE SALARIES	60	176	192	213	235																
E. ADMINISTRATIVE EXPENSES	11	30	40	44	48																
F. SALES EXPENSES	9	33	44	47	51																
G. TOTAL C.T.O & F	.80	239	276	304	334																
H. NET INCOME BEFORE INT. PAYMENTS	(175)	56	652	2,645	2,823																
I. INTEREST EXPENSES OVERDRAFT	145	245	260	250	155	43	-														
J. CDB LOAN	-	1,252	1,252	1,252	1,252	1,174	1,055	917	939	861	782	704	626	547	469	391	313	234	156	78	-
K. INCOME (LOSS) AT YEAR END	(320)	(1,435)	(860)	1,175	1,416	1,606	1,728	1,806	1,884	1,962	2,041	2,119	2,197	2,276	2,354	2,432	2,510	2,589	2,667	2,745	2,823

Source: CDB Pre-Funding Analysis

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SUGAR PRICES 1955-1979 (ACTUAL) AND 1980-1990 (PROJECTED)

("WORLD" (ISA DAILY) PRICE, f.o.b. AND STOWED MAIN CARIBBEAN PORTS)

	CURRENT PRICE		1977 CONSTANT PRICE		EXPORT UNIT VALUE
	\$/MT	£/LD.	\$/MT	£/LRS.	AV. DEVELOPING COUNTRIES \$/MT
ACTUAL					
1955	71	3.2	201	9.1	
1956	76	3.5	707	9.4	
1957	114	5.2	299	13.6	
1958	77	3.5	202	9.2	
1959	66	3.0	171	7.6	
1960	69	3.1	176	8.0	
1961	60	2.7	151	6.8	106.7
1962	61	2.8	157	7.1	108.4
1963	184	8.3	469	21.3	143.1
1964	127	5.7	319	14.5	140.2
1965	44	2.0	108	4.9	104.7
1966	40	1.8	96	4.4	108.6
1967	42	1.9	101	4.6	112.1
1968	42	1.9	107	4.9	113.6
1969	71	3.2	178	8.1	127.0
1970	81	3.7	184	8.3	128.7
1971	99	4.5	208	9.4	135.1
1972	160	7.3	304	13.8	158.2
1973	208	9.5	328	14.9	186.7
1974	654	30.0	828	37.6	434.0
1975	449	20.4	493	22.4	571.1
1976	255	11.5	275	12.5	305.8
1977	179	8.1	179	8.1	227.7
1978	172	7.8	148	6.7	223.3
1979	213	9.9	162	7.4	
PROJECTED					
1980	290	13.2	200	9.1	
1981	316	14.4	200	9.1	
1982	427	19.3	250	11.3	
1985 /a	360	25.4	270	12.2	
1990 /a	750	33.9	270	12.2	

/a Prices for these years represent long-run trend values. The actual price in 1985 is expected to be much higher (around \$350 a metric ton in 1977 constant terms) because of the expected cyclical upswing of prices in the first half of 1980s.

SOURCE: International Sugar Organization (actual); World Bank, Economic Analysis and Projections Department (projected); FAO Trade Yearbooks (export unit values).

EXTRACTED FROM THE WORLD BANK REPORT NO. 814/80 PRICE PROSPECTS FOR MAJOR PRIMARY COMMODITIES.

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Exhibit B.5.d.

Integrated Sugar Industry Rehabilitation - St. Vincent
Direct Employment Creation

JOB TYPE/TITLE	AVERAGE MONTHLY WAGE (EC\$)	PERSON MONTHS REQUIRED/YEAR					TOTAL WAGES PAID/YEAR (EC\$'000s)				
		1	2	3	4	5	1	2	3	4	5
General Manager	2,500	12	12	12	12	12	30.0	30.0	30.0	30.0	30.0
Production Mgr.	2,083	12	12	12	12	12	25.0	25.0	25.0	25.0	25.0
Accountant	1,250	12	12	12	12	12	15.0	15.0	15.0	15.0	15.0
Controller	833	12	12	12	12	12	10.0	10.0	10.0	10.0	10.0
Payroll Officer	800	12	12	12	12	12	9.6	9.6	9.6	9.6	9.6
Sugar Cane Supervisor	800	12	12	12	12	12	9.6	9.6	9.6	9.6	9.6
Shift Foremen	700	24	24	24	24	24	16.8	16.8	16.8	16.8	16.8
Chemist	833	12	12	12	12	12	10.0	10.0	10.0	10.0	10.0
Clerks	600	36	36	36	36	36	21.6	21.6	21.6	21.6	21.6
Senior Pan Boilers	625	24	24	24	24	24	15.0	15.0	15.0	15.0	15.0
Junior Pan Boilers	500	24	24	24	24	24	12.0	12.0	12.0	12.0	12.0
Senior Mechanics	360	288	288	283	288	288	103.7	103.7	103.7	103.7	103.7
Mechanics	320	153	165	171	171	171	49.0	52.8	54.7	54.7	54.7
Junior Mechanics	280	45	57	63	63	63	12.6	16.0	17.6	17.6	17.6
Artisan	320	12	12	12	12	12	3.9	3.9	3.9	3.9	3.9
General Workers	240	94	124	139	139	139	22.6	29.8	33.0	33.4	33.4
Tractor Drivers	320	72	72	72	72	72	23.0	23.0	23.0	23.0	23.0
TOTALS	-	856	910	937	937	937	389.4	403.8	410.9	410.9	410.9

- A. There will be an estimated 76 full-time job equivalents created.
 B. The average monthly wage of all the jobs created will be EC\$443.
 C. The expected capital/labour ratio is EC\$285,606:1.
 (This does not include on-farm labour)

Source: CDB Pre-Funding Analysis

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Exhibit B.5.e.

ESTIMATED VALUE ACCRUING TO SMALL FARMERS FROM INVESTMENTS TO
EXPAND MARKET OPPORTUNITY - FOR THE COMMODITY SUGAR CANE
 (EC\$)

YEARS	ESTIMATED NUMBER OF SMALL FARMERS TO BENEFIT PER YEAR	ESTIMATED NET VALUE OF BENEFIT PER FARMER PER YEAR	ESTIMATED TOTAL NET VALUE TO SMALL FARMERS PER YEAR	ESTIMATED TOTAL NET VALUE TO SMALL FARMERS OVER FIVE-YEAR PERIOD
1	100	4,357	495,700	6,645,250
2	216	5,354	1,156,464	-
3	266	5,782	1,538,012	-
4	266	6,245	1,661,170	-
5	266	6,744	1,793,904	-

Notes:

1. The numbers of small farmers were obtained from a survey done by CDB in 1977 and taking into account the recent leasing of four estates in five-acre lots.
2. Estimated benefits to small farmers were obtained from the sugar cane Model No. 1 in the Appraisal Report which showed a net profit (on-farm labour not costed) of \$901 per acre, per annum (average) at 1980 prices. From this half of the harvesting (labour) costs of \$273 per acre, per annum (average) was deducted, and a projected 8% per annum increase was added - related to increase in projected sugar cane payments which in turn are related to projected sugar prices.
3. The basis of the foregoing is that the small farmer will provide his own labour requirements except for harvesting, for which he will have to hire half of the requirements.

Source: CDB Pre-Funding Analysis

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B.6 WINDWARD ISLANDS TROPICAL PLANTS, LTD.

Project: Windward Islands Tropical Plants, Ltd.
 Choiseul, St. Lucia

Personnel: Laurie Barnard, Managing Director, Graig Barnard

ICI: CDB

Information: Interview with Managing Director, CDB Feasibility
 Study, CDB Financial records.

Amount: US\$184,000 Date: 06/80
 US\$ 73,000 Late: 10/84

Credit Terms: Eleven years with 4 years grace (second loan - 2
 years grace). Principal repayment in fourteen
 equal semi-annual installments. Interest rate
 9.5% per annum (for the 1980 loan) charged on the
 balance outstanding. Interest rate of 12% was
 charged on the 1984 loan.

Purpose: New venture. Project consists of the production of
 foliage plants and marketing of cuttings and
 finished plants for export. Loan financed
 construction of shade houses for production and
 propagation, irrigation, water storage,
 electricity installation, Total investment:
 US\$936,000 (see Exhibit B.6.a).

Project Impact: a) expected at loan application -

The project was expected to achieve annual sales
of EC\$4.0 million (US\$1.48 million), entirely
foreign exchange, from markets in UK, other West
European countries, US, and Canada.

Production would take place on 25.6 acres, of
which 13 would be shaded.

Production would employ 204 persons by Project
Year 4 (1983), with an annual wage bill of
EC\$860,000 (US\$318,500). Wage rates paid by WITP
at the time of loan application were EC\$9.26/day
for men and EC\$8.00/day for women. The capital
labor ratio was projected to be \$14,858:1
(=US\$5500:1) (see Exhibit B.6.b).

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No detailed projections were made of the purchase of locally supplied inputs, or of earnings to be generated from such sales.

Project Impact: b) As of December 31, 1986 -

Gross sales for 1986 were EC\$1.4 million (US\$518,500) f.o.b. St. Lucia. Sales for 1985 were EC\$670,000 (about US\$248,000). WITP expects sales in the range of EC\$1.8 - 1.9 million for 1987. 96% of the sales are for export.

The estate has 30 acres under cultivation, of which 11 are shaded.

WITP employs 72 full time workers, including 3 foremen, 2 watchmen, a clerk, 40 women mostly involved in planting, propagation, and fertilizing; and 26 men, involved in heavy field work, moving of plants, spraying, and cutting. WITP also employs about 10 women 3 months per year for planting. Wages range from EC\$560-EC\$800/month for the foremen, watchmen and clerk, and EC\$2.40/hour for the female agricultural workers and EC\$2.65/hour for the male agricultural workers. Total payroll was about EC\$408,600 (US\$151,333) for 1986. Wages are increased at the rate of about 5% per year (see Exhibit B.6.c).

In addition, WITP buys EC\$20-30,000 worth of coconut husks from local farmers, which they grind and mix with sand for rooting soil. They pay EC\$12-15,000 per year for sand. Local transport of plants in refrigerated containers cost WITP EC\$85,000 in 1986 and EC\$50,000 in 1985. They also paid EC\$6-7,000 for local air shipments.

Background: New company.

Cred. History: Applied for extension of grace period of one and a half years; extension approved for one year. As of 2/28/86, late in loan repayments involving principal of \$18,645.75 and interest of \$11,831.69. Principal repayments to date have totaled \$26,000.

Comments from Other Reports: Project visited by USIG team in 1985. No specific comments. Audit report included WITP among sub-projects progressing satisfactorily.

INVESTMENT COST AND FINANCING PLAN

EC (\$'000)

Windward Islands Tropical Plants

ITEMS	TOTAL	LOAN COMPONENT	BORROWERS CONTRIBUTION	INTERNAL CASH GENERATION
A. LAND				
Land Purchase	160	-	160.0	-
Land Development	30.2	-	19.0	11.2
Site Preparation (open beds)	6.4	-	2.2	4.2
B. BUILDINGS AND EQUIPMENT				
Production Shade Houses	386.5	230.4	74.7	81.4
Propagation Shade Houses	59.0	36.6	7.8	14.6
Rooting Benches	60.9	38.1	7.6	15.2
Packing Shed Office	40.0	20.0	-	20.0
Watchman's House	20.0	20.0	-	-
Rain Shelters	16.0	-	-	16.0
Roads	42.9	-	30.0	12.9
Perimeter Fence	9.8	-	9.8	-
Water Storage	30.0	15.0	-	15.0
Irrigation	96.0	48.0	-	48.0
Vehicle	19.3	-	19.3	-
Shredder	10.0	10.0	-	-
Sprayers	2.6	-	1.3	1.3
Mist Blowers	2.4	-	1.2	1.2
Small Tools	7.8	-	2.4	5.4
Office Furniture	5.2	-	5.2	-
Electricity Installation	16.0	16.0	-	-
Propagation Canopies	93.4	-	45.8	47.6
Hanging Baskets	37.5	7.5	-	30.0
Stock Plants	279.8	-	88.9	190.9
TOTAL BASE COSTS (A+B)	1,431.7	441.6	475.2	514.9
PRICE CONTINGENCY	240.8	50.4	23.2	159.2
TOTAL CAPITAL COSTS	1,672.5	500.0	498.4	674.1

Source: CDB Pre-Funding Analysis

Exhibit B.6.b.

Windward Islands Tropical Plants DIRECT EMPLOYMENT CREATION (Projected)

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JOB TITLE	AVERAGE MONTHLY WAGE	PY 0	PERSON MONTHS REQUIRED/YEAR				TOTAL WAGES PAID/YEAR (EC\$)				
			PY 1	PY 2	PY 3	PY 4	FY 0	PY 1	PY 2	PY 3	PY 4
Foreman	403	-	12	24	120	120	-	4,160	9,360	45,760	52,000
Watchman	316	12	12	12	24	24	3,380	3,380	3,640	7,800	8,320
Clerk	553	-	12	12	36	36	-	5,200	6,240	17,680	23,920
Cultivator	309	72	324	648	1,044	1,044	15,405	101,286	202,028	325,215	325,215
Packer	285	72	288	360	360	420	15,405	83,220	104,025	104,025	121,363
Cutter	312	-	60	120	240	360	-	18,980	37,413	74,826	112,239
Propagator	289	-	12	120	180	360	-	3,468	34,675	52,013	104,025
Transport	335	-	24	36	60	84	-	8,030	12,045	20,075	28,105
TOTALS		156	744	1,332	2,064	2,448	34,190	227,726	409,425	647,394	775,187

No of full-time jobs created = $112.40^{2/}$ (Total person-months required in first 5 years \div 5) \div 12
 Average monthly wage = 310.49 (Total wages paid in first 5 years \div Total person-months required)
 Capital/labour ratio = 14,657.65 (Total capital investment \div Full-time job equivalent)

2/ 204 full-time jobs are created at full development in PY 4.

Source: CDB Pre-Funding Analysis

EXHIBIT B.6.c

WINDWARD ISLANDS TROPICAL PLANTS

DIRECT EMPLOYMENT CREATION - ACTUAL 1984-1986

JOB TYPE/TITLE	*AV. MONTHLY WAGE (1986)	PERSON MONTHS REQUIRED/YEAR			TOTAL WAGES PAID/YEAR (EC\$)		
	EC\$	1984 PY 4	1985 PY 5	1986 PY 6	1984 PY 4	1985 PY 6	1986 PY 7
Foreman	800	36	36	36	28,800	28,800	28,800
Watchman	640	24	24	24	15,360	15,360	15,360
Clerk	560	12	12	12	6,720	6,720	6,720
40 Women - planting, - propagating, - fertilizing	430	480	480	480	206,400	206,400	206,400
26 Men - spraying, - cuttings, - heavy work, - move plants	475	312	312	312	148,200	148,200	148,200
Part time	430	30	30	30	12,900	12,900	12,900
TOTALS		894	894	894	379,483	379,483	379,483

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- a. Full-time equivalent jobs created: **74.5**
- b. Average monthly wage of all jobs : **EC\$468 = US\$173**
- c. Capital labour ratio:
(Total capital investment - Full-time job equivalents) = **EC\$22,416 OR US\$8302**

* Annual 5% increase in wages

Source: Information supplied by WITP.

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B.7**SHEEP PRODUCTION - CARRIACOU, GRENADA**

Project: Carriacou Black-Belly Sheep Ranch
Dumfries Estate and Limplair, Carriacou, Grenada

Personnel: Bernice Moses, Manager

ICI: CDB

Information: Interview with Project Manager, Grenada Ministry of Agriculture Officers (St. George and Carriacou), CDB Feasibility Study, CDB Financial files.

Amount: US\$107,000 **Date:** 05/80

Credit Terms: 20 years including 5 years grace. Principal repayment in 60 quarterly installments. Interest rate of 4% per annum. Total investment: \$322,000.

Purpose: The project proposed to establish a new livestock development scheme to rear 400 breeding ewes plus followers on these lands. At full development, the project annual output was estimated at 665 sheep for slaughter and 95 for breeding purposes. Loan to fund farm equipment, water supply system, and purchase of animals (see Exhibit B.7.a).

Project Impact: a) expected at loan application -

The project was to result in substantial benefits to small sheep farmers by providing breeding stock at prices well below the current import prices. This would encourage small farmers to increase the size and improve the profitability of their operations, thus raising the standard of living for this group.

In addition, the supply of mutton to consumers would increase both from the project and the small farmers. At full development in PY 5 the sales from the project would include about 20,500 lbs of mutton (665 sheep for slaughter), yielding about EC\$53,768; and 95 breeding ewes, yielding about EC\$23,750, and equipment sales. Total revenue was expected to reach EC\$102,760. These earnings would also bring about foreign exchange savings (see Exhibit B.7.b.)

Employment impact was expected to be small. There would be a few permanent employees and some casual labor for pasture and forage crop maintenance.

Another objective of the project was simply to increase the level of utilization of the lands at Limplair Agricultural Station and the Dumfries Estate.

Benefits to small farmers were expected from the availability of improved breeding sheep, the demonstration of and assistance in improved management and husbandry practices, and the provision of the opportunity for small farmers to use the marketing channels of the project to dispose of their sheep.

Project Impact: b) As of December 31, 1986 -

The project has 354 sheep, including 240 breeding ewes. Sales in 1986 were 163 live sheep for about EC\$60 - 70 each (price for sheep less than 1980 farmgate prices quoted in Feasibility Study, which was about EC\$80) so that sales amounted to about US\$4,000. There was no breakdown available on how many sales were to small farmers as breeding stock and how many were sold to butchers for mutton production.

The project employs a manager, an assistant manager, and two shepherds full time. Occasional part time field help is also hired.

The project manager reported that small farmers were not utilizing the project's potential for extension services and were not heeding his advice on herd management. Sheep husbandry practices among the small sheep farmers on the island were essentially unchanged.

Background: New project

Cred. History: As of end 1986, \$2,000 of the principal had been repaid. CDB reports no arrears.

**Comments from
Other Reports:** None.

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Exhibit B.7.a.

Carriacou Sheep Production Project

CAPITAL INVESTMENT AND PHASING

EC (\$)

ITEMS	TOTAL COST	FOREIGN COST	LOCAL COST	INVESTMENT PHASING	
				PY 1	PY 2
1. Buildings					
(I) Repairs to Buildings	12,000	-	12,000	12,000	-
(II) Construction of Sheep Housing	12,000	-	12,000	6,000	6,000
2. Equipment	40,750	40,750	-	36,750	4,000
3. Land Development					
(I) Land Preparation	21,170	-	21,170	9,365	11,805
(II) Pasture Fencing	42,360	-	42,360	21,180	21,180
4. Water Supply System	22,650	14,805	7,845	22,650	-
5. Animal Purchases	74,680	49,680	25,000	38,260	36,420
6. Total Base Cost	225,610	105,235	120,375	146,205	79,405
7. Physical Contingencies*	15,060	5,538	9,522	10,762	4,298
8. Price Contingencies**	33,522	13,760	19,762	16,075	17,447
Total 6+7+8	274,192	124,533	148,659	173,042	101,150
9. Working Capital Requirements	30,565	-	30,565	12,565	18,000
10. Interest during Construction	17,517	17,517	-	6,662	10,855
Total Capital Investment Cost	322,274	142,050	180,224	192,259	130,005

*Physical contingency - 10% of all costs under Items 1 to 4.

**Price contingency - 8% and 10% per annum on foreign costs; and 12% (PY 1) and 10% (PY 2) on local costs.

Source: CDB Pre-Funding Analysis

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Exhibit B.7.b.

SHEEP PRODUCTION - CARRIAGE
PROJECTED INCOME AND EXPENDITURE STATEMENT
 EC (1)

ITEMS	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	PY 8	PY 9	PY 10	PY 11	PY 12	PY 13	PY 14	PY 15	PY 16	PY 17	PY 18	PY 19	PY 20	PY 21	
1. GROSS SALES	4,350	8,335	59,683	88,510	102,760	104,760	102,760	102,760	102,760	132,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760	102,760
2. OPERATING COSTS																						
Salaries, Wages & MIS	6,036	9,168	9,663	10,235	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790	10,790
Animal Health	381	1,137	2,855	2,655	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860
Supplementary Feeds	275	1,370	2,640	2,910	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192	3,192
Pasture Maintenance	-	-	3,352	8,590	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505	11,505
Forage Crop Maintenance	-	-	3,135	3,450	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795	3,795
Fencing Repairs	-	-	1,555	2,540	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790
Buildings Repairs and Maintenance	-	-	1,512	1,663	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764
Vehicle and Equipment Operating Cost	5,465	9,245	10,647	4,362	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085	6,085
Vehicle Insurance	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745	745
Contract Services	-	-	-	3,310	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600
Depreciation	14,552	15,252	15,252	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002	12,002
Total	27,452	36,917	51,166	53,862	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120	59,120
3. Net Income Before Interest Payment	(23,102)	(28,582)	8,516	35,448	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632
4. Interest Payment	6,662	10,855	11,596	11,596	11,596	11,596	10,817	10,816	9,789	9,137	8,459	7,755	7,022	6,260	5,467	4,643	3,786	2,894	1,997	1,083	-	-
5. Income (Loss) At Year End	(29,764)	(39,437)	(3,080)	23,852	32,036	32,036	32,615	32,818	33,843	34,495	35,173	35,877	36,610	37,372	38,165	38,989	39,846	40,738	41,635	42,629	43,632	43,632
6. Cumulative Income	(29,764)	(69,201)	(72,281)	(48,431)	(16,395)	15,641	48,256	81,074	115,317	149,812	184,595	220,062	257,472	294,844	333,025	371,950	411,800	452,582	494,217	536,846	580,478	625,110

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Source: CDB Pre-Funding Analysis

B.8 BARBADOS TILLAGE SERVICES, LTD

Project: Tillage Services, Ltd.
 Bridgetown, Barbados

Personnel: Mr. Alan Wilkie, General Manager

ICI: LAAD

Information: Telephone interview with General Manager, LAAD
 Prefunding Analysis, LAAD assessment 9/83, LAAD
 Loan Performance Summary 9/86.

Amount: US\$188,000 Date: 12/81

Credit Terms: LAAD equity investment of US\$30,000 in common
 shares representing 75% of initial paid-in
 capital, in addition to 057 loan of up to
 US\$188,000. Six and one half years with 18 months
 grace. Principal repayment in eleven equal semi-
 annual installments. Interest rate 12% per annum
 net to LAAD Caribe S.A., payable quarterly.
 Closing fee of 2% of disbursements payable
 simultaneously to disbursement.

Purpose: To establish a company which would provide land
 cultivation and agricultural work-shop services to
 Barbadian farmers. Loan funds are to be used to
 purchase tractors, tillage and work-shop
 equipment. Total investment: \$230,000.

Project Impact: a) expected at loan application -

The company was expected to service approximately 2,250 acres in its first full year of operations, at an average billing of \$72/acre; and 4320 hours of workshop services at an average billing of \$8/hour; and \$3000 in commission income from parts sales. Revenue forecast to increase 15% in 1984, and 10% each in 1985 and 1986 (See Exhibit B.8.a).

It was expected that the project would create direct employment of at least 10 new full time jobs with TS. In addition, as a result of the company's cultivation activities, it was estimated that as many as 300 jobs would be created in the field, primarily to carry out harvests. Sometime employment was estimated at 1 for every 5 acres brought under cultivation as a result of tillage

services; and full time employment was estimated at 1 for every 10 acres brought into cultivation. Daily wages for field labor are about \$12. Incremental farmer incomes are based on average net take-homes per acre of \$350 (see Exhibit B.8.b).

Over the life of the loan, TS was expected to contribute \$1.0 million in value added to the Barbados economy; with \$400,000 foreign exchange savings in the first year of the project and \$1.2 million during the fifth year (see Exhibit B.8.c).

The project was expected to provide essential services to Barbados farmers, enabling them to make more extensive, effective and profitable use of the island's arable land.

Project Impact: b) As of December 31, 1986 -

The Tillage Services company is in the process of liquidation, and is not in operation. The equipment is being sold to repay the loans.

Background: New company initiated with LAAD financing.

Cred. History: LAAD sold its 75% share in the company to the local principal on credit. \$31,000 of the debt has been repaid, \$80,000 has been written off by LAAD, \$75,000 on the 057 loan is still outstanding, but the equipment which represented the collateral for the loans has not all been sold as yet.

Comments from Other Reports: LAAD's 9/83 assessment stated: "This project is on target in terms of employment, including 6 direct employees and about 175 full-time equivalent jobs created in the fields as the result of bringing or keeping land under cultivation. The project has also benefited some 20 small farmers who would not have been able to work all their land without tillage service. In addition to simple plowing, the company is now providing technical guidance on planting, pest control and more recently, on crop selection. Eventually it is hoped that Tillage Services will have an impact on farmers' diversifying from sugar cane production alone. Macro-economic impact has been roughly as projected, representing about \$1,700,000 in

national value added." In another passage, they state, "The project currently prepares approximately 2,000 acres per season versus an estimate of 3,000 acres which will be required to make a modest profit. To increase acreage and revenue, the project is in the process of acquiring additional equipment, which is better suited to the small farmers' needs, and will begin diversifying services offered, such as crop spraying. It is estimated that 600 acres will be cultivated this season which normally would not have access to this service, resulting in an increase of approximately 900 part time jobs."

Exhibit B.8.a.

LAAD RATIOS AND COMPARISONS:

Tillage Services, Ltd. (Projected)

DATE →	12/31/82	12/31/83	12/31/84	12/31/85	12/31/86	12/31/87
Wor. Cap. (Line 12 less 36)	31	53	38	50	66	66
Current Ratio	1.89 to 1	2.51 to 1	2.09 to 1	2.06 to 1	2.40 to 1	3.44 to 1
Wor. to Debt Ratio	.23 to 1	.34 to 1	.48 to 1	.63 to 1	1.05 to 1	2.09 to 1
Acid Test Ratio	1.46 to 1	1.94 to 1	1.35 to 1	1.43 to 1	1.66 to 1	2.52 to 1
Days to Receivable (Days)	41	37	40	39	37	40
Cost of Sales to Inv. (Days)	122	111	106	110	116	116
Profit to Worth (Percentage)	20 %	44 %	37 %	28 %	27 %	27 %
	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
(US \$ '000)						
OPERATING DATA (Period Ending)	12/31/82	12/31/83	12/31/84	12/31/85	12/31/86	12/31/87
Net Sales	150 100%	200 100%	230 100%	250 100%	275 100%	275 100%
Cost of Goods Sold	45 30%	66 33%	86 37%	100 40%	110 40%	110 40%
GROSS PROFIT	105 70%	134 67%	144 63%	150 60%	165 60%	165 60%
Gen. Admin. Exp.	29 19%	31 16%	38 17%	42 17%	50 18%	50 18%
Depreciation	35 23%	35 18%	35 15%	35 14%	35 13%	25 9%
Income Tax	8 5%	21 10%	23 10%	23 9%	28 10%	36 13%
Other Operating Expenses	%	%	%	%	%	%
Net Other Income/Charges	%	%	%	%	%	%
Finance Expense	24 16%	21 10%	18 8%	21 8%	18 7%	12 4%
	%	%	%	%	%	%
NET PROFIT (LOSS)	9 5%	26 13%	30 13%	29 12%	34 12%	42 15%

CHANGES IN WORKING CAPITAL	12/31/82	12/31/83	12/31/84	12/31/85	12/31/86	12/31/87
Beginning Working Capital	20	31	53	38	50	66
Net Profit (Loss)	9	26	30	29	34	42
Dividends/Withdrawals	-	(6)	(7)	(7)	(8)	(10)
24 Inc. (Dec.) Net Non-Current Assets	37	37	(63)	37	37	(5)
42 Inc. (Dec.) Deferred Debt	(35)	(35)	25	(47)	(47)	(27)
WORKING CAPITAL	31	53	38	50	66	66

RECONCILIATION OF NET WORTH	12/31/82	12/31/83	12/31/84	12/31/85	12/31/86	12/31/87
Beginning Net Worth	40	49	69	92	114	140
Revaluation of Assets	-	-	-	-	-	-
Net Profits	9	26	30	29	34	42
Less: Dividends or Withdrawals	(-)	(6)	(7)	(7)	(8)	(10)
Other						
ENDING NET WORTH	49	69	92	114	140	172

REMARKS:

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EXHIBIT B.8.b

PROJECT ASSESSMENT SUMMARY AS OF 1981

I. PROJECT: Tillage Services, Ltd., Barbados West Indies

	<u>FORECAST</u>		<u>ACTUAL</u>
	<u>YEAR ONE</u> <u>1982 PROJECTED</u>	<u>YEAR FIVE</u> <u>1986 PROJECTED</u>	<u>1986</u> <u>ESTIMATE</u>
II. <u>TARGET GROUP BENEFITS</u>			
<u>EMPLOYMENT</u>			
Direct Employment	6	12	
Indirect Employment	350	1,000	N.A.
Indirect Emp. Full-Time Equiv.	175	500	N.A.
Total Full-Time Equivalent	181	512	N.A.
<u>INCOME</u>			
Farmers Owning 10 Acres or Less	50	125	
Farmers Owning 10 Acres Plus	15	25	
Additional Farmer Income Realized, Agg.	\$630,000	\$1,800,000	N.A.
Tillage Payroll	\$40,000	\$100,000	
Field Workers' Wages	\$567,000	\$1,620,000	N.A.
Total Income Generated For Target Group	\$1,237,000	\$3,520,000	N.A.
III. <u>PRODUCTION AND PRODUCTIVITY</u>			
Tillage Company	Plus 4%	Plus 10%	N.A.
In the Field	Plus 2.6%	Plus 9%	N.A.
IV. <u>RURAL DEVELOPMENT AND SYSTEMS</u>			
Technical and Capital Assistance	Min.	Significant	N.A.
Local Value Added	\$2,000,000	\$6,000,000	N.A.
Farm to Market System	Farmers increasingly better able to identify and take advantage of market opportunities.		

N.A. - not available

Sources: Forecasts - LAAD 1981, 1986 Estimate - based on information supplied by Tillage Services

EXHIBIT B.8.c

PROJECT ASSESSMENT SUMMARY - TILLAGE SERVICES, AS OF 1981

	<u>FORECAST</u>		<u>ACTUAL</u>
	<u>YEAR ONE</u> <u>1982 PROJECTED</u>	<u>YEAR FIVE</u> <u>1986 PROJECTED</u>	<u>1986</u> <u>ESTIMATE</u>
V. <u>MACRO-ECONOMIC IMPACT</u>			
National Value Added Annually	\$1,700,000	\$5,100,000	N.A.
National Value Added Aggregate	\$1,700,000	\$1,500,000	N.A.
Foreign Exchange Produced Annually	n.ap.	n.ap.	N.A.
Foreign Exchange Aggregate	See Attachment-		
Foreign Exchange Saved Annually	\$400,000	\$1,200,000	N.A.
Foreign Exchange Saved-Aggregate	\$400,000	\$4,500,000	N.A.
Local Non-Crop Procurement	n.ap.	n.ap.	N.A.
Environmental Impact	Negligible	Negligible	N.A.
Increased Food Production-Local	(All production assumed to be for local market, although project itself is just a catalyst for such production as it is a service project only.)		

n.ap. - not applicable

N.A. - not available

Source: Forecast - LAAD, 1981

fishing loans usually financed the purchase or repair of boat engines.

Terms of sub-credits:

Most loans have a term of 3 - 4 years, although they can be up to ten years with a grace period of 3-5 months; interest rate is usually 10.5% fixed, but may range up to 20% for high risk crop loans. Loan sizes have ranged from EC\$3,000 - EC\$132,000. Most farmers lease government-owned lands, so availability of collateral is limited. Bank may arrange to garnishee wages or proceeds of produce sold to marketing boards.

Sub-loan

Performance: Principal in arrears as a proportion of total principal outstanding stood at 26% as of December 31, 1986.

DFC loan

Performance: The ABDB has made no payments on its loan since 1984, and has the following arrears: Principal - \$29,954.04; Interest - \$29,606.45; Interest on overdue amounts - \$2090.17. ABDB not submitted any reports to CDB since 1985, nor had it been visited by any CDB officer since 1985. CDB has found ABDB documentation of sub-loans insufficient. A total of about EC\$100,000 worth of loans are not officially documented with CDB.

Development

Impact:

The credits did not meet any of the 007 sub-project criteria (expand/stabilize markets for small farmer production; lower cost of inputs for small farmers; or provide employment for rural poor) in any significant way. There is little evidence of progress toward meeting the project purpose (increase capacity to develop, finance, and implement agribusiness and labor intensive enterprises), although the sub-credits may have made some minor contribution to the goal of the project (increase incomes of small farmers and the rural poor).

Interest rates have been positive in real terms (average inflation from 1980 to 1985 was under 5%), so that the loans pass a market test: there was willingness to pay for credit. On the other hand, the extent of the arrears points up potential difficulties in repaying. The ABDB

personnel reported that most of the arrears on crop loans were due to drought and other natural difficulties; fishing projects were said to be generally successful, but subject to sub-optimal cash flow management.

Employment generation has been minimal; most farmers rely primarily on family labor, although the ABDB Agricultural Loans Officer reported that some do employ hired hands on a part time basis. Some farm improvement credits (e.g., building a fence, clearing land) generate temporary employment.

The ABDB personnel reported no requests for agribusiness loans.

**Comments from
Prev. Reports:**

"In Antigua, the program has been only moderately successful. The reasons for this, however, can be traced back to the environmental constraints facing the industry. The country has chronic water shortage problems, necessitating a large-scale water conservation program by the government. The Ministry of Agriculture has strongly advocated catchment basins and the highly efficient drip method irrigation systems. Although the ABDB provides credit for these systems, the short-term direct benefits are not apparent to most of the farmers. Thus, few of them have had the long-term vision and resources to invest in making a catchment or installing a new irrigation system."¹

¹. Arthur D. Little, Inc., "Evaluation of the CDB/AID Private Sector On-Lending Programs." Jan. 1985, p. 126.

DFC loan

Performance:

Principal repayments not due until 1/15/88. CDB reports no arrears on interest. About 80% of SLDB's resources are provided by the CDB. Personnel described the relationship with CDB as very good. Quarterly reports have been submitted regularly. SLDB was most recently visited by CDB in August 1986.

Development

Impact:

The credits did not meet any of the 007 sub-project criteria (expand/stabilize markets for small farmer production; lower cost of inputs for small farmers; or provide employment for rural poor) in any significant way. There is little evidence of progress toward meeting the project purpose (increase capacity to develop, finance, and implement agribusiness and labor intensive enterprises) through the provision of line of credit under 007, since agribusiness lending was effectively hampered by restrictive covenants. The sub-credits may have made some minor contribution to the goal of the project (increase incomes of small farmers and the rural poor).

Interest rates have been positive in real terms (average inflation from 1982 to 1985 was under 5%; during the last three years it was under 2%), so that the loans pass a market test: there was willingness to pay for credit. The arrears have been minimal, probably due in part to good loan supervision.

Permanent employment generation has been minimal; most farmers rely primarily on family labor. Some farm improvement credits generate temporary employment.

The SLDB Managing Director reported that SLDB earmarked the 007 funds for agricultural loans as their most appropriate use, given the restrictions imposed on their use. Agribusiness loans have been extended from sources other than USAID 007, including at least one loan under US\$100,000 made while 007 funds were available.

Comments from

Prev. Reports:

"Since August 1982, 22 FIC loans have been approved with an average value of EC\$4494 (total value \$98,871) [CDB bank records indicate that 007

funds were not disbursed until 1983. Of these 8 (36% are in arrears; the total value of principal in arrears is EC\$2,300 or 1.2% of the value approved. Total funds disbursed appear to amount to EC\$533,349 or about 40% of funds approved by CDB."²

². Arthur D. Little, Inc., "Evaluation of the CDB/AID Private Sector On-Lending Programs," January 1985, p. 124.

Loans are used to buy livestock, fertilizer, seeds, and other agricultural inputs; to repair boat engines, etc.

Terms of sub-credits:

Most loans are short term, and carry an interest rate of 12% per annum.

Sub-Loan Performance:

Principal in arrears as a proportion of total principal outstanding on the 007 line of credit stood at 36% as of December 31, 1986.

DFC Loan Performance:

As of 2/28/86, DEVCO was late for one installment on its repayment to CDB, involving principal of \$6,171.84. Contact between DEVCO and the CDB appears to be regular. However, it appears that the loan disbursements were never halted as recommended by the US Inspector General (see below). DEVCO did not request formal approval for the diversion of the 007 funds for purposes other than sugar until January 1987. CDB has not yet forwarded the request to USAID.

Development Impact:

The current credits do not meet any of the 007 sub-project criteria (expand/stabilize markets for small farmer production; lower cost of inputs for small farmers; or provide employment for rural poor) in any significant way; although the sugar loans halted in 1984 may have contributed to lower costs for inputs. There is little evidence of progress toward meeting the project purpose (increase capacity to develop, finance, and implement agribusiness and labor intensive enterprises), although the sub-credits may have made some minor contribution to the goal of the project (increase incomes of small farmers and the rural poor).

Interest rates have been positive in real terms (average inflation from 1982 to 1984 ranged from 2.7 to 5.4%), so that the loans pass a market test: there was willingness to pay for credit. On the other hand, the extent of the arrears points up potential difficulties in repaying.

Employment generation has been minimal; most farmers rely primarily on family labor.

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Exhibit C.3.a.

PROJECTED DISBURSEMENTS AND SUB-LOAN PRINCIPAL RECEIPTS BY DEVCO
EC (\$'000)

ITEM	PROJECT YEAR	1	2	3	4	5	6	7	8	9	10
A. LOANS											
1.	Planting and maintenance up to first crop harvest	684	513	342	171	171	307	307	307	307	307
2.	Maintenance of ratoons up to harvest	-	213	497	568	568	510	511	511	511	511
3.	Harvest	-	30	30	30	30	30	30	30	30	30
TOTAL LOANS		684	756	869	769	769	848	848	848	848	848
B. PRINCIPAL REPAYMENTS											
1.	Planting Loan PY 0	-	301	70	70	70	-	-	-	-	-
2.	-do- PY 1	-	-	402	94	94	94	-	-	-	-
3.	-do- PY 2	-	-	-	201	47	47	47	-	-	-
4.	-do- PY 3	-	-	-	-	100	23	23	23	-	-
5.	-do- PY 4	-	-	-	-	-	100	23	23	23	-
6.	-do- PY 5	-	-	-	-	-	-	181	42	42	42
7.	-do- PY 6	-	-	-	-	-	-	-	181	42	42
8.	-do- PY 7	-	-	-	-	-	-	-	-	181	42
9.	-do- PY 8	-	-	-	-	-	-	-	-	-	181
10.	Maintenance of ratoons	-	-	213	497	568	568	511	511	511	511
11.	Harvest	-	30	30	30	30	30	30	30	30	30
TOTAL REPAYMENTS		-	331	715	892	909	862	815	810	629	848
CREDIT/(DEDIT)		684	425	154	(123)	(140)	(14)	33	38	19	-
TOTAL CREDIT OUTSTANDING		684	1,109	1,263	1,140	1,000	986	1,019	1,057	1,076	1,076

Source: CDB Pre-Funding Analysis for Integrated Sugar Rehabilitation

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Sub-loan

Performance: Principal in arrears as a proportion of total principal outstanding on the FIC subloans stood at 29.9% for FICs and 9.9% for AICs as of December 31, 1986. GDB personnel reported that repayment records were best in those cases where farmers sell their produce through marketing companies with whom GDB can arrange automatic loan repayment, and from part-time farmers who are employed and where GDB can arrange to garnish wages. Such arrangements can be made for about 25-30% of loans.

DFC Loan

Performance: The first installment for principal repayment to CDB is due July 1987. The CDB extended the GDB a new line of credit of EC\$5 million in 1985 (not 007 funds). GDB is visited annually by CDB, and submits reports quarterly. CDB confirms that GDB reports are current through 31-12-86.

Development**Impact:**

The credits did not meet any of the 007 sub-project criteria (expand/stabilize markets for small farmer production; lower cost of inputs for small farmers; or provide employment for rural poor) in any significant way. There is little evidence of progress toward meeting the project purpose (increase capacity to develop, finance, and implement agribusiness and labor intensive enterprises). The sub-credits may have made some minor contribution to the goal of the project (increase incomes of small farmers and the rural poor).

Interest rates have been positive in real terms (average inflation from 1981 to 1985 has declined from 7.8% to 2.5%), so that the loans pass a market test: there was willingness to pay for credit. Arrears are about average for the DFCs.

Employment generation has probably been minimal; most farmers rely primarily on family labor. Some of the "agribusiness loans" to cottage industry may have generated a few new jobs.

Comments from

Prev. Reports: Not reviewed previously.

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fishing loans made through the BNB was BDS\$22,000 (US\$11,000), although many ranged up to BDS\$50,000 - 70,000 (US\$25,000 -35,000); the farm loans were smaller, most of them in the range of BDS\$10,000 to \$20,000 (US\$5000 to \$10,000) and a few up to BDS\$50,000.

The farm loans are usually for seed, cultivation, livestock (poultry, dairy, and pigs), and farm improvement credits. Many of the farm loans support vegetable production; sugar has been supported by other sources. The intention of the line of credit, according to the BNB personnel interviewed, is to support small farmers (with a net worth of under US\$75,000, later increased to US\$100,000). Fishing loans were used for new boat engines, safety equipment, radio communication.

Terms of sub-credits:

Most loans carry a term of five to seven years, with interest rates limited to 8%.

Sub-Loan Performance:

Principal in arrears as a proportion of total principal outstanding on all CDB - financed agricultural sub-loans stood at 36% as of December 31, 1986. The BNB personnel interviewed reported that their repayment experience with sub-borrowers was mixed. An arrears condition has been developing recently, and the BNB is taking steps to pursue repayment more vigorously. The one large agribusiness loan is considered by the Manager of the Agricultural Banking Division to be a bad loan, and it may be recalled.

DFC Loan Performance:

There has been little contact between CDB and the BNB. According to CDB records, the last supervision visit took place in 1982; the last report was received in 1981. CDB personnel explain that the terms of the CDB-BNB agreement call for reports only until the line of credit was fully disbursed. CDB reports no arrears from BNB. Loan balance stands at \$774,000 as of 2/28/86

Development Impact:

The credits did not meet any of the 007 sub-project criteria (expand/stabilize markets for small farmer production; lower cost of inputs for small farmers; or provide employment for rural

poor) in any significant way. There is little evidence of progress toward meeting the project purpose (increase capacity to develop, finance, and implement agribusiness and labor intensive enterprises) through the provision of the line of credit. The sub-credits may have made some minor contribution to the goal of the project (increase incomes of small farmers and the rural poor).

The hydroponics concern employs seven people and produces vegetables which would, in many cases, have otherwise been imported. Some cucumber production is now being exported. Gross sales have been in the range of BDS\$213,000 to 217,000 over the past three years.

The fishing loans in particular were described as having made significant contributions to the refurbishing of the Barbados fishing industry. Interest rates have been positive in real terms, although lower than those in most of the OECS (average inflation from 1981 to 1985 in Barbados has declined from about 10% per annum to 4%), so that the loans pass a market test: there was willingness to pay for credit.

Employment generation has probably been minimal; most farmers rely primarily on family labor. BNB personnel reported that in general, small farmers wouldn't seek a loan unless they were planning to market their crop, and that farm families live off the farm income to a greater extent than the farm produce itself.

Comments from
Prev. Reports: No previous review.

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C.6

DOMINICA CITRUS PRODUCTION

.DFC: Dominica Agricultural/Industrial Development Bank

Personnel: Mr. Vance LeBlanc, DAIDB

Data Source: Telephone interview with Mr. LeBlanc, CDB financial files on performance of loan., (also, interview with Samuel Anselm, Acting General Manager of the Cooperative Citrus Growers Association)

Amount: US\$176,000 Date: 03/81

Purpose: Revolving input credit scheme for citrus growers.

Credit Terms to DFC: Total repayment period of 20 years with 5 years grace. Interest rate of 4% to CDB.

Background: The original intention of the project was to fund an integrated citrus development project, which was to include a loan of about US\$610,000 to the Cooperative Citrus Growers Association of Dominica to finance the purchase of new packing equipment; with an additional sum to support an input credit scheme for citrus growers. During the loan negotiation period, the CDB requested that the CCGA hire a new project manager, accountant, and field supervisors as a condition of the loan. CCGA declined the loan, on the grounds that the cost of the new personnel would put their overheads too high. In the end, a line of credit of US\$176,000 was extended to the National Commercial and Development Bank (later renamed the Agricultural and Industrial Development Bank), for the input credit scheme alone.

Sub-credits: The input credit scheme was designed as an in-kind crop loan to citrus growers: the bank would purchase fertilizer and other inputs in bulk, and sell them to citrus growers on credit, with borrowers' crop sales (through the Cooperative Citrus Growers Association) pledged to the repayment of the loan. The CCGA assisted the citrus growers in their loan application by documenting past purchases from the growers. The interest rate charged was set at 10%.

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The AIDBank has made a reported 94 loans to citrus growers in Dominica since the credit scheme was implemented. The loans ranged in size from EC\$540 to EC\$5,000, with an average size of about EC\$2500. Although the original CDB funds were earmarked for input credits disbursed in kind for grapefruit production, recycled funds are permitted to be used for cash loans to citrus growers for grapefruit and other fruits.

Terms of sub-credits:

Most loans for one crop season. Interest rate of 10%. No tangible security required.

Sub-loan Performance:

As of first quarter 1987, the AIDBank has only EC\$8,000 outstanding, of which \$6,600 is in arrears. The bank has about EC\$300,000 (US\$111,000) available for lending. A few years ago, the AIDBank had EC\$175,000 in subloans outstanding, much of which went into arrears, as crops delivered by the growers to the CCGA went unsold. Most of the loans were eventually repaid, but demand for new loans (and deliveries to CCGA) dwindled.

The CCGA was formed in 1954, and marketed a peak of 163,000 cartons in 1978/79.

DFC Loan Performance:

As of 2/28/87, US\$33,000 of principal had been repaid to CDB, leaving a balance of \$143,000.

Development Impact:

There is very little evidence that the Citrus line of credit has been put to productive use. The bulk of it has never been put to use, much of the past the existing portfolios have suffered arrears.

The manager of the input credit scheme has expressed optimism for the salvage of the revolving fund, due to a new market for Dominica's citrus growers: Dominica Agro-Industries, which purchases about 2700 tonnes per year for processing into juice concentrate for export to the U.S. DAI pays EC\$154 per tonne, so that gross earnings for citrus growers amounts to about EC\$415,800 (US\$154,000). Meanwhile, the CCGA last year purchased 32,000 cartons (of 17 kg each),

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paying growers EC\$4.00 per carton, yielding them an income of EC\$128,000 (US\$47,400). According to the manager of the input credit scheme at the AIDBank, Dominica Agro-Industries will purchase as much as the growers can sell, which has renewed interest in the growing of grapefruit and should lead to renewed demand for input credits. Although the citrus growers pay a higher price, growers must market during a narrow two month window each year; the Dominica Agro-Industry will buy all year at one lower, but standard price. It is, in effect, a guaranteed market.

Comments from

Other Reports: The US Inspector General's audit (July 1985) reported that "there was almost no demand for loans because of marketing problems. As a result, resources were lying idle which could be reprogrammed to a productive purpose...

"The subloan agreement was signed [in] 1981, at a time when the British pound began to fall relative to the US dollar... Because the inputs were priced in dollars, it became unprofitable to market citrus there... the CDB authorized the Bank in Dominica to make loans to a wider group of citrus farmers, and to sell fertilizer to non-citrus farmers. Still, by the last quarter of 1984, loans to farmers and sale of inputs had almost come to a halt. Between October 1 and December 31, 1984, the National Commercial and Development Bank made four loans to farmers for a total of only \$1,037. During the same period, the bank sold \$406 worth of agricultural inputs. According to the Manager of the National Commercial and Development Bank and the President of the Citrus Grower's Association, the loan program was not operating successfully, and they were not optimistic that it could operate successfully.

"On December 31, 1984, the Bank had \$140,848 in cash available... These resources were essentially lying idle, and should be put to a productive use."³

³. USAID, The Inspector General, "Review of Selected Agriculture Sector Projects, Regional Development Office/Caribbean." Audit report No. 1-538-85-9; July 31, 1985. p. 6.

APPENDIX D

ADAPTIVE RESEARCH CONDUCTED BY CDB UNDER THE
REGIONAL AGRIBUSINESS DEVELOPMENT PROJECT

In addition to the \$6.5 million loan for Regional Agribusiness Development, designated 538-T-007, there was an associated AID Grant, designated 538-0010 to fund adaptive research into agribusiness technology appropriate for the Caribbean LDCs. It was stipulated in the Project Paper that the research was to meet the following criteria:

- a) The technical assistance to be developed should have direct utility in the agribusiness development program.
- b) The technology under investigation will be of utility to more than a single facility.
- c) All basic research has been completed; effective application to the Region will require only adaptive research.

Potential research projects identified in the project paper included Packaging Technology, Alternative Food Processing Technology, Crop Systems, Processing Equipment, Multi-Purpose Processing Facilities, and Grower-Processor Contracts.

In a letter from the CDB addressed RDO/C, dated December 13, 1983, the following Research Projects were listed, with comments as to their status at that time:

1. **Prototype Refrigerated Containers**

Status: Consultants are in the process of determining the optimum routes for commercial testing of the containers.

2. **Feasibility Study on Marketing of Windward Islands Bananas Ripenend Under Controlled Conditions**

Status: Report was submitted on January 3, 1983

3. **Study of Improvement to Huckster Trade and Promotional Programme**

Status: Study Completed. Slight delay in reimbursement of funds to the Executing Agency, due to a misunderstanding, but this is being resolved.

4. **Technical Assistance for Food Processing Adaptive and Research Subsidy - Windward and Leeward Islands**

Status: Project was not approved by USAID and was therefore withdrawn.

5. **Feed Block Supplement**

Status: Experiment has been carried on in Barbados and Report submitted May, 1979.

6. **Coir Fibre Pilot Plant - St. Vincent**

Status: Coordinating Committee agreed to extend the deadline for submitting Report to March 31, 1983. Draft submitted.

7. **Fisheries Development - BVI**

Status: Technical Assistance for Fisheries Advisor and Master Fisherman has been given.

8. **Crop Insurance Feasibility Study for Windward Islands**

Status: Second Interim Report submitted 83-06-23. Prepared and subsequently executed with alternative source of funds after USAID's refusal to provide funding. (Only part of the time relating to Project Preparation allocated to the Aid Grant 538-0010 in respect of these Projects).

There is no evidence that the research conducted contributed in any meaningful way to any of the 007 sub-projects, with the exception of the Fisheries Development Project in the British Virgin Islands.

APPENDIX E

EVALUATION TEAM ASSIGNMENTS AND QUALIFICATIONS

Harvey A. Lerner was the evaluation supervisor. Mr. Lerner established initial contacts with RDO/C and CDB personnel connected with the two projects, contributed to the findings, conclusions, and recommendations of the study, and reviewed each chapter of this report.

Mr. Lerner is Resident Project Manager in Bridgetown, Barbados for Louis Berger International, Inc. (LBII). He is responsible for evaluation, monitoring and project design activities for RDO/C's private sector program which LBII is carrying out under contract with USAID.

Mr. Lerner joined LBII in 1981 and has served as Director of Industry Studies since then. From 1979 to 1981, he was Regional Director of Litigation Consulting for Coopers and Lybrand. Earlier he served as Vice President for Consulting for Checchi and Company, where he was heavily involved in industrial development programs and in evaluation of USAID projects. He also directed a Checchi subsidiary specializing in management counsel to associations and non-profit institutions. Earlier, Mr. Lerner was a Special Assistant in an emergency planning agency in the Executive Office of the President of the United States, where he was concerned with international trade and industrial mobilization matters. He also has practiced law in Worcester, Massachusetts.

Mr. Lerner was graduated in 1954 from Wesleyan University in Middletown, Connecticut, where he was Phi Beta Kappa. He holds a J.D. degree from the Harvard Law School and a Master of Laws degree from the Georgetown University Law Center. He did graduate work in Business Policy at the Harvard Business School and in Economics at Georgetown University. Mr. Lerner has been active in alumni affairs in the Washington, D.C. area, serving as President of the Wesleyan University Alumni Association and as an officer of the Harvard Law School Association of Washington.

Gilbert Lane was the Team Leader of the agribusiness evaluations. He prepared the outline for the evaluation, organized the evaluation schedule, and established contact with Project principals, sub-project managers, and DFC managers. He prepared the drafts of the Introduction, and the chapter on Disbursement of Funds, and the Conclusions, Recommendations, and Lessons Learned. He made major contributions to the analysis of the sub-projects and DFC lines of credit as well as the constraints to agribusiness development. He conducted interviews in Antigua,

Barbados, Grenada, Miami (LAAD Headquarters), St. Lucia, and St. Vincent.

Mr. Lane is the Managing Director of the Agribusiness Development Corporation, Ltd. (ADC). He has been involved in the promotion, feasibility analysis, development, and financing of international agribusiness enterprises. Earlier, Mr. Lane served as President of the International Development Corporation, based in California. In this capacity, he assisted US and foreign companies in business development and project formation, mostly in agricultural project activities in the Middle East. Previously, Mr. Lane served as Senior Vice President for Projects at International Resources and Finance Bank S.A., in London. There, he was responsible for the Bank's activities in project development, finance, and implementation, principally in the Middle East.

He has also worked as a USAID consultant on capital market and financial institution development, and advised USAID on the formation and financing of the Development Industrial Bank of Egypt. He served as Chief of the Private Enterprise Development Office of USAID in Washington in the early 1970s, where he assisted in the development of overseas capital markets in Latin America and Asia. Before that, he served as a Development Loan Officer for USAID in Pakistan. His career began in the private sector, working with Bank of America, California Growth Capital, Inc., Sierra Capital Corporation, and two oil companies.

Mr. Lane studied for a Ph.D. in Economics at Stanford University, received his MBA from Indiana University in 1957, and his BS from the Indiana University School of Business in 1952.

Jacqueline Coolidge was principal author of the chapters on Constraints to Agriculture and Agribusiness in the Caribbean, Sub-Project Analysis, Analysis of DFC Lines of Credit, and Application of Generic Scope of Work; and prepared the Appendices. She also made major contributions to each of the other chapters in the report. Ms. Coolidge carried out interviews in Antigua, Barbados, Dominica, Grenada, St. Lucia, and St. Vincent.

Ms. Coolidge, an economist who is a member of LBII's Development Economics Group, has specialized in studies of the economic impact of development programs and in the design of private sector projects. She was a major contributor to the Evaluation of the Private Sector Investment Assistance Project (also a part of RDO/C's Private Sector portfolio) completed earlier in the year by LBII. She was co-author, with Mr. Lerner, of a major study on the potential for privatization in Somalia's water

resource development industry. She has prepared socioeconomic impact statements for proposals ranging from the expansion of a university in rural Cameroon to the establishment of a new prison facility in Georgia. She has also participated in a marketing study for agricultural produce from Honduras, focussing on access to the U.S. market. Prior to joining LBII, Ms. Coolidge worked as an independent consultant to the World Bank and the UNDP in Somalia and Indonesia, carrying out surveys of their technical assistance and capital development projects in those countries. She also served as a Peace Corps volunteer for two years in Botswana.

Ms. Coolidge earned an MPA from the Woodrow Wilson School of Princeton University, majoring in economics and public policy. Her Bachelor's degree, from the Johns Hopkins University, is in international affairs and international economics.

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