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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PROJECT PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

538-0007

CARIBBEAN REGIONAL - Integrated Agricultural Development
+ ANNEXES A - D

A.I.D.
Reference Center
Room 1856 NS

AID-DLC/P-2147

UNCLASSIFIED

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

UNCLASSIFIED
AID-DLC/P - 2147
March 23, 1976

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Caribbean Regional - Integrated Agricultural Development

Attached for your review are the recommendations for authorization to the Caribbean Development Bank ("Borrower") of not to exceed ten million United States dollars (\$10,000,000) to assist in financing the United States dollar and local currency costs of Borrower's Agricultural Development Lending Program.

The loan is scheduled for consideration by the Development Loan Staff Committee on March 29, 1976 at 2:30 p.m. in Room 3886 NS; please note your concurrence is requested at the end of the meeting. If you are a voting member a poll sheet has been enclosed for this purpose.

Supplementary Annexes referenced in the Project Paper will be distributed at a later date.

Development Loan Committee
Office of Development Program Review

Attachments:
 Summary & Recommendations
 Project Analysis
 Annexes A-D

PROJECT PAPERCARIBBEAN REGIONAL: INTEGRATED AGRICULTURAL DEVELOPMENTTABLE OF CONTENTS

	<u>PAGE</u>
PART I - <u>SUMMARY AND RECOMMENDATIONS</u>.....	1
A. Project Facesheet.....	1
B. Recommendations.....	2
C. Description of Project.....	2
D. Summary Findings.....	4
E. Project Issues.....	4
F. Project Committee.....	5
 PART II - <u>BACKGROUND</u>.....	 6
A. Project Setting.....	6
B. Major Constraints and Opportunities in the Small Farmer Subsector.....	11
C. Relationship to Other AID Programs.....	18
 PART III - <u>PROJECT DESCRIPTION</u>.....	 20
A. Goal, Purpose and Strategy.....	20
B. Operation of the Small Farmer Development Program.....	21
C. Criteria and Methodology for Sub-project Selection and Appraisal.....	22
1. Country Investment Plans.....	22
2. Sub-project Appraisals.....	22
a. Agricultural Production Credit.....	22
b. Agricultural Inputs.....	25
c. Marketing.....	28
d. Feeder Roads.....	33
D. Technical Assistance and Training.....	38

	<u>PAGE</u>
PART IV - <u>PROJECT ANALYSIS</u>	39
A. Technical Analysis.....	39
1. Agricultural Credit.....	39
2. Agricultural Inputs.....	41
3. Marketing.....	43
4. Feeder Roads.....	45
5. Environmental Impact.....	49
B. Economic Justification.....	51
1. Production Credit and Inputs.....	51
2. Marketing.....	57
3. Feeder Roads.....	59
C. Government Policy Analysis.....	61
D. Financial Analysis.....	64
1. Financial Analysis of CDB.....	64
2. Analysis of Interest Spread.....	69
3. Financial Plan.....	70
E. Social Analysis.....	72
1. Beneficiaries.....	72
2. Role of Women.....	77
PART V - <u>IMPLEMENTATION ARRANGEMENTS</u>	79
A. Caribbean Development Bank (CDB).....	79
B. Sub-borrowers.....	81
C. AID.....	81
D. Procurement.....	82
E. Disbursement Procedures.....	82
F. Implementation Plan.....	82
G. Conditions and Covenants.....	8?
H. Evaluation Plan.....	84

LIST OF ANNEXESANNEX A:Exhibit:

* 1.	Statutory Checklist.....	19 pages
2.	Breen/Demas Letter Dated 2/19/75.....	3 "
3.	Loan Application.....	2 "
4.	Draft Loan Authorization.....	3 "

ANNEX B:Exhibit:

* 1.	Marketing Board Sub-project - Illustrative Example.	2 pages
* 2.	Feeder Road Engineering Plans and Specifications...	3 "
* 3.	Prototypical Feeder Road Benefit Data.....	1 "
4.	Logical Framework.....	4 "
5.	Technical Assistance Plan.....	1 "

ANNEX C:Exhibit:

* 1.	Marketing Sub-project - Illustrative Example.....	11 pages
* 2.	Feeder Road Sub-project - Illustrative Example.....	3 "
3.	CDB Loan Terms and Conditions.....	1 "
* 4.	CDB Total Available Resources.....	1 "
5.	CDB Consolidated Financial Statements.....	1 "
* 6.	CDB Ordinary Resource Operations Financial Statements.....	2 "
* 7.	CDB Special Development Fund Financial Statements..	2 "
* 8.	Analysis of CDB Portfolio.....	1 "
* 9.	Projection of SDF Commitments.....	1 "
* 10.	Small Farm Crops.....	1 "

ANNEX D:Exhibit:

* 1.	CDB Member Countries and Board of Governors.....	2 pages
2.	CDB Organizational Chart.....	1 "
3.	Project Performance Tracking Network (PPT).....	2 "

* Annex available in Latin American Bureau, Office of Development Resources' official files.

B. Recommendations

The Project Committee recommends that a \$10,000,000 loan and \$400,000 grant be authorized in FY1976 under the Food and Nutrition Funding Category (FAA Section 103) for the purpose of financing the Caribbean Development Bank's (CDB) "Small Farmer Development Program" as proposed herein. The CDB will repay the loan over a 40 year period, including a 10 year grace period on principal, with interest at two per cent during the grace period and three per cent thereafter. It is further recommended that the following waivers be approved:

- Waiver of 50-50 shipping requirements;
- Authorization of AID-financing of shipping costs on Code 935 (free world) carriers when U.S. carriers are not available;
- Waiver of marking requirements on small non-U.S. procurements.

C. Description of the Project

The goal of the project is to increase the income and standard of living of the small farm sub-sector by stimulating small farmer (less than 25 acres) production and productivity. The means of achieving this goal is to increase, in quantity and quality, the productive resources and services available to small farmers through national and regional institutions.

\$10,000,000 of AID loan funds combined with \$1.5 million of CDB resources would be used to establish a "Small Farmer Development Program" to be implemented over a 4 year period. The Program would operate within the present structure of the CDB's concessionary operations.

The types of sub-project activities to be financed under the Program include:

- (1) agricultural production credit;
- (2) agricultural input distribution;
- (3) marketing; and
- (4) feeder roads.

Overall administration of the program will be the responsibility of the CDB's Agriculture Division, assisted by other Bank Divisions as appropriate. Assistance under the Program would be limited to the LDC member countries of the CDB; namely Antigua, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St. Kitts-Nevis-Anguilla, St. Lucia, St. Vincent and the Turks and Caicos Islands. Participating governments will be required to provide at least 10% of sub-project cost as counterpart contribution.

Prior to the execution of any sub-loan to any LDC the Bank will prepare, for AID approval, a "Country Investment Program" (CIP) which would outline the overall CDB investment strategy for that country. The purpose of the CIPs will be to help ensure that specific sub-projects selected for financing fit within an overall country strategy and thus represent a rational mix of activities in light of the particular LDC situation. Projects preliminarily identified would be measured against the CIP for appropriateness prior to in-depth analysis. The CDB is expected to take positive action in stimulating sub-project activities which accord with the CIP.

The identification, development and selection of specific sub-projects to be financed under the Program will be carried out in accordance with criteria and methodology approved in advance by AID. Sub-projects in excess of \$500,000 or generating an economic rate of return of less than 15% will be subject to prior AID approval. (The \$500,000 limit will be reviewed for appropriateness at the first project evaluation).

A preliminary allocation of program resources by sub-projects is as follows:

Preliminary Resource Allocation of Program Funds (\$000)

	<u>AID</u>	<u>CDB</u>	<u>Total</u>
1. Agricultural Production Credit	4,000	-	4,000
2. Agricultural Input Dis- tribution	1,000	1,500	2,500
3. Marketing	2,000	-	2,000
4. Feeder Roads	<u>3,000</u>	<u>-</u>	<u>3,000</u>
Total	<u>10,000</u>	<u>1,500</u>	<u>11,500</u>

The preliminary resource allocation is intended to be illustrative only and is not based on actual projections of sub-projects. The allocations shown are based on a qualitative determination of what would represent an appropriate mix of activities based on the results of the CDB's Small Farming Study and the analyses performed during intensive review. The actual allocations by type of activity will be based on sub-projects identified and selected in accordance with the procedures described above.

The Agricultural Production Credit Scheme will be implemented through intermediate credit institutions in the LDCs, i.e. agricultural development banks and development finance corporations. The CDB currently provides technical assistance to such institutions in each of the LDCs through CDB Farm Improvement Officers (FIO). At least one FIO is currently assigned to each LDC. For purposes of the production credit scheme the CDB will assign one additional FIO to each intermediary institution to provide for in-country supervision of the scheme and related technical assistance.

The agricultural input distribution element of the program will be financed by both AID and the CDB. The Bank is currently developing a regional private sector project involving the bulk purchase of fertilizers and chemicals for distribution in the LDC's which will be financed from non-AID resources. AID funds would be available for financing input distribution sub-projects on the national level. Satisfactory arrangements for the distribution of inputs in each LDC, will be a pre-condition to AID-financed CDB sub-loans for agricultural production in the LDC.

With respect to marketing sub-projects, all project sub-loans in excess of \$100,000 will be made directly by the CDB. Smaller loans will be made through LDC credit institutions, but will be reviewed and approved by the CDB. Both public and private sector institutions will be eligible for sub-project financing. Feeder road sub-project financing will be handled by direct CDB loans to national governments.

The complementary AID grant funds will be used to finance the cost of technical assistance and training related to the project. These would include certain types of program and project development costs such as surveys studies, advisory services to LDC institutions responsible for sub-project implementation and training of LDC staff. In addition, up to \$500,000 of loan funds would be available for financing CDB direct-hire staff which are responsible for providing project supervision and technical assistance services related to AID-financed sub-projects (e.g. Farm Improvement Officers).

D. Summary Findings

Based on the result of the intensive review it is concluded that the proposed Small Farmer Development Program is technically, socially, and economically sound. The CDB has adequate capacity to administer the Program including specifically:

- The identification, analysis and monitoring of the types of sub-projects activities to be financed under the Program.
- The development of all necessary engineering, financial, and other plans.
- The ability to contract for and administer services of consultants to perform special surveys, studies and analyses or to provide technical assistance to sub-borrowers for which the Bank may not be equipped to undertake; e.g. social analyses, assessment of environmental impact, long term marketing assistance to LDC institutions.

The types of sub-projects selected for financing under the program are appropriate and timely and will address priority constraints in the small farm sub-sector. The criteria and methodology to be applied in the selection of sub-projects for AID financing will assure the greatest possible impact on the target groups.

The project meets all applicable statutory criteria as indicated in the completed checklist attached as Annex A Exhibit 1.

E. Project Issues

The following issues raised during the DAEC review of the IRR for this Project are reflected in a letter dated 2/19/75 from J.R. Breen (LA/DR) to Mr. William Demas, President of the CDB (Annex A Exhibit 2):

1. Benefit Incidence and Target Groups:

The project proposed in the IRR was essentially based on a land settlement approach involving a relatively high cost and small target group. In subsequent discussions between AID and the CDB it was agreed to undertake a study of the small farm sub-sector in the LDCs to assist in designing a project which might affect a larger segment of rural population. The Small Farmer Study was completed in March 1976 and served as the basis for the project as now formulated. The target group is now significantly re-defined to include farmers under 25 acres (see Section IV.E).

2. Agricultural Policies

It is generally understood that many government policies create direct disincentives to the development of agriculture in the Caribbean Region. These policy constraints are discussed in some detail in the Policy Analysis section of the paper (See Section IV.C)

In designing the project, consideration was given to the resolution of this major issue. Criteria and methodology have been established for use by the CDB in determining if LDC government policies might jeopardize the achievement of sub-project and programs expeditions in LDCs. In cases where such policies are clearly disincentives, the CDB will not approve proposals for sub-project loans. Non-approval for sub-project is expected to be followed by explanatory discussions, negotiations and revisions of policies where necessary and as possible prior to reconsideration of sub-project approval.

3. Commitments and Disbursements of Existing AID Loans to CDB-SDF

The two prior AID loans to the CDB-SDF, 538-L-001:\$10 million and 538-L-003:\$12 million, were initially slow to disburse. At the time the IRR was prepared approximately 9% of AID loan funds were disbursed. In the Breen/Demas letter, AID indicated that it would consider total disbursements of \$10.4 million by 12/31/75 as satisfactory progress in the implementation of prior loans. CDB records show total disbursements of \$7.2 million on loans 001 and 003 at 12/31/75 and \$8.3 million at 2/28/76 (i.e. 33% of the \$22 million total of these two loans). At current disbursement rates it is expected that the target disbursement figure of \$10.4 million will be achieved prior to execution of the loan (See Section IV.D)

4. Commitment of Other Donors

The program outlined in the IRR was to be financed 1/3 by AID and 2/3 from other sources. However, the program as presented herein will be entirely financed by AID with the exception \$1.5 million which the CDB will make available from other resources to finance a regional agricultural supply project now being developed. The CDB currently has adequate uncommitted resources to finance this sub-project. This essentially eliminates the dependence of the AID loan on contributions of other donors.

F. Project Committee

Thomas Stukel, Finance Officer (LA/DR)
Bastiaan Schouten, Agricultural Economist (LA/DR)
James Hawes, Rural Development Officer (LA/DR)
Edward Schaefer, Agricultural Economist (LA/DR)
Benjamin Severn, Economist (LA/DR)
Charles Thompson, Engineer (SER/ENGR)

II. BACKGROUND

A. Project Setting

This project will be executed in the eleven less developed territories (LDCs) of English Speaking Commonwealth Caribbean which are members of the Caribbean Development Bank (CDB). The LDCs consist of one independent state - Grenada; five associated states - St. Vincent, St. Lucia, Dominica, Antigua, and St. Kitts-Nevis-Anguilla; and the British Crown Colonies - Belize, Cayman, Caicos and Turks, The British Virgin Islands and Montserrat. All the LDCs except Belize, which is on the East Coast of the Central American peninsula, are islands located in the Caribbean Sea. Not included in this project are the CDB's so-called more developed countries (MDCs) - Jamaica, Trinidad and Tobago, Guyana, and Barbados, and the Bahamas.

The CDB member countries, though bound by a common British colonial heritage of language, traditions, customs, and tastes, have evolved as separate social, political and economic entities. Their economies are small, extremely fragmented, and open.

The problems of small size, poverty, economic fragmentation, and limited internal markets are especially acute in the LDCs. In 1971, the combined LDC population totalled about 600,000 - ranging from 120,000 in Belize, the largest, to 12,000 in Montserrat, the smallest. Most LDC populations number between 50 and 100 thousand. The combined gross domestic product of the LDCs in 1971 was slightly over a quarter of a billion dollars (\$230 million); the per capita GDP was around \$380 - a figure which places the LDCs among the poorest countries in the hemisphere.

The economies of the LDCs are still characterized by a "colonial" type structure in that they are extremely open (imports exceeding 80% of GDP in some cases), a majority of their export trade is still with the United Kingdom (around 70% in 1969 - 1971), and their intra-regional Caribbean Community (CARICOM) trade constitutes only a very low percentage of their total trade (about 6% of LDC exports going to CARICOM countries in 1970 - 1971). LDC economies thus are much more closely tied to the "metropole" than they are to each other or to other countries inside or outside of the CARICOM Region.

As a part of the British imperial resource deployment, the LDCs specialized in trading roles; they have retained this role throughout their history to the present day. Their size has also contributed to an extreme degree of specialization; the producing, processing and marketing of uncommon commodities such as arrowroot in St. Vincent and nutmeg in Grenada is an example.

Responding to the changing fortunes of differing commodities in the world market, the LDCs have in the past had to shift from one main export product to another given changing world demand patterns.

As can be seen in Tables 1 and 2, although agriculture at present comprises a relatively small and declining share of GDP in most of the LDCs, agricultural exports are still an important component of total exports. Table 2 shows that the LDCs are, in general, suffering from balance of trade problems and that agricultural and food products are an important component of the deficit. Thus, in principle, good opportunities exist for import substitution.

TABLE 1

CARICOM LDCs - GROSS DOMESTIC PRODUCT (GDP), POPULATION, GDP PER CAPITA, AND
AGRICULTURE AND FOREIGN TRADE AS A PERCENTAGE OF GDP, 1971

CARICOM LDCs	GDP Factor Cost (US\$000)	Population (000's)	GDP Per Capita US\$	Agriculture As Per cent of GDP	Exports as a Per cent of GDP	Imports as a Per cent of GDP	Est. 1974 GNP Per Capita US\$
Antigua	28.8	66.6	434	3.1	42.6	76.8	370
Dominica	19.8	71.4	277	29.4	34.0	69.9	280
Grenada	32.8	95.1	346	30.0	29.5	59.7	250
Montserrat	6.3	11.6	538	16.0	19.3	60.2	N.A.
St. Kitts	16.8	45.7	368	24.4	32.4	80.3	350
St. Lucia	38.0	102.5	371	23.2	27.4	75.8	370
St. Vincent	19.5	38.8	220	24.8	23.6	80.2	240
Belize	68.9	123.5	550	15.3	20.0	48.0	N.A.
All LDCs	230.9	605.2	381	19.9	27.8	65.1	N.A.

Source: IBRD

TABLE 2

CARICOM LDCs - AGRICULTURAL GDP AS PERCENTAGE OF TOTAL GDP; AGRICULTURAL EXPORTS AS A PERCENTAGE OF TOTAL EXPORTS; AGRICULTURAL IMPORTS AS A PERCENTAGE OF TOTAL IMPORTS; AGRICULTURAL AND FOOD PRODUCT EXPORTS AND IMPORTS; AGRICULTURAL TRADE SURPLUS (DEFICIT); AND FOREIGN TRADE SURPLUS (DEFICIT), 1965-1972, IN MILLIONS OF ECS

	1965	1966	1967	1968	1969	1970	1971	1972
Agricultural GDP as % of Total GDP								
ECOM	35.8	N.A.	N.A.	26.9	25.9	19.7	N.A.	N.A.
Belize	N.A.	N.A.	N.A.	17.3	16.5	15.2	N.A.	N.A.
Agricultural Exports as % of Total Exports								
ECOM	55.9	50.8	48.3	45.2	49.3	37.7	32.1	N.A.
Belize	N.A.	N.A.	N.A.	87.2	N.A.	78.6	85.5	70.7
Agricultural & Food Imports as % of Total Imports								
ECOM	31.9	30.0	30.1	30.4	30.0	27.5	26.7	N.A.
Belize	N.A.	N.A.	N.A.	37.0	N.A.	40.1	43.1	42.1
Agricultural & Food Exports								
ECOM	44.6	42.1	41.6	43.8	56.8	40.7	37.6	N.A.
Belize	N.A.	N.A.	N.A.	21.8	N.A.	24.6	27.2	29.2
Agricultural & Food Imports								
ECOM	39.0	44.2	44.2	48.0	58.3	66.2	72.8	N.A.
Belize	N.A.	N.A.	N.A.	16.3	N.A.	22.3	25.5	28.1
Agricultural Trade Surplus (Deficit)								
ECOM	5.6	(2.1)	(2.6)	(4.2)	(1.5)	(25.5)	(35.2)	N.A.
Belize	N.A.	N.A.	N.A.	5.5	N.A.	2.3	1.7	1.1
Foreign Trade Surplus (Deficit)								
ECOM	(42.6)	(64.6)	(60.6)	(60.8)	(80.5)	(133.2)	(155.6)	N.A.
Belize	N.A.	N.A.	N.A.	(19.0)	N.A.	(24.3)	(27.3)	(25.5)

The current setting, the constraints, and the program proposed are perhaps better understood in the context of the historical evolution of agriculture in the sub-region. The earliest type of agriculture practiced was that of the large colonial plantations or estates which were foreign owned and operated and relied heavily on slave or indentured labor. The plantations were primarily export oriented, concentrating on a single crop such as sugar, bananas, citrus, etc. The foreign exchange earnings derived from these crops were used to finance the importation of food crops. Small scale farming did not begin to develop significantly until the abolition of slavery when the freed slaves and indentured laborers began to leave the plantations. By this time the plantations, for the most part, held the most productive lands and what remained were the marginal lands often located on steep, rocky hillsides which lacked adequate water control. The high production costs and low output from these lands offered little economic incentive to the small farmer. This fact, when combined with the cultural stigma attached to farming as a result of the colonial past, prompted those that could, to leave the land and seek employment in the urban areas or abroad. Those who remained were those least able to move - the uneducated and the elderly. Adding to this already difficult situation has been the pre-occupation of the emerging independent national governments with industrialization and tourism to the neglect of agriculture and the rural areas in general. Until very recently, agriculture has not been recognized as a necessary base for development, and the LDC governments have not had to address difficult agricultural policy questions. These historical factors have led to an agricultural sector which can best be described in terms of its two major sub-sectors:

1. Plantation or Estate Agriculture

This sub-sector is characterized by large farms usually growing a single crop for the export market. In some parts of the Caribbean, estates are owned by the Government. In some other parts, they are owned by local people, but in most of the Caribbean, estates are owned and operated by foreign companies. These estates are frequently vertically integrated from the production of the primary crop through the processing and marketing of the finished product. Bananas, sugar, citrus, coconuts, limes, and cocoa have historically been grown by estates.

Estates are generally well financed and have well trained research and management staffs - a high proportion of whom are usually expatriates. In addition, estates enjoy the advantage of being able to sell most of their output to one of the major powers at a preferential guaranteed price. In most cases, estates have little linkage with the domestic economy. Most capital equipment and supplies for operating the estates, as well as for any processing that is done locally, is brought in from outside. Most profits made by foreign-owned estates, leave the region for investment abroad, thus lessening potential capital formation.

Estates generally pay a relatively small proportion of their total revenues to the host governments in taxes, land rental, or import duties on supplies. Furthermore, since many of the technicians and management personnel are expatriates, the major contribution of the estates to the economy is the employment of varying quantities of relatively unskilled labor.

2. Peasant Agriculture

Peasant farms are generally small sized and located on marginal lands. In the main, production practices remain primitive and farmers in some areas do not even have or use a simple animal-drawn plow. The conditions combine to produce relatively low yields.

Peasant farmers grow both export crops and food crops for the domestic market. Export crops - especially bananas - are sold to large integrated firms that may produce and market these same crops for their own account as well. This outlet presents the small peasant farmer with a ready market at relatively stable prices that are known well in advance of delivery of the crop.

Food crops, mainly the starchy foods and some vegetables, grown for the domestic market are sold either by the farmer himself at road-side stands, at a farmers' market, or through market vendors (higglers, hucksters). When growing for this sector, the farmer faces an uncertain market situation. There is generally little communication of market information, poor transport conditions, and, because of the small markets, relatively small changes in supply result in wide price fluctuations. Most of the products are sold with little or no grading and there are usually few incentives to improve quality.

The Caribbean agriculture sector has failed to adjust to the changing social and economic forces in recent decades. Production costs in both sub-sectors have not kept in line with those of other producers. Per capita production of food has declined in the last decade and the CARICOM Region has switched from an agricultural surplus to a deficit area, currently importing \$150 million of food products per year. Farm incomes are far below those of other population groups.

The principal reasons for the decline of agriculture in most of the LDCs are related to competition from other higher growth sectors for limited resources. The agricultural sector in most LDCs has had to compete, principally with tourism, for land and labor resources. Tourism has also generated foreign exchange which has permitted the maintenance of exchange rates which are increasingly placing the area's agricultural exports at a competitive disadvantage to other producers.

Because of the LDCs special relations with the United Kingdom, many LDC export crops have, to the present, received special preferences within the U.K. market. This is especially important for bananas which is the leading LDC agricultural foreign exchange earner, as well as being the most important small farmer cash crop in most LDCs. At present, with the entry of the U.K. into the European Common Market, the continuation of U.K./LDC export preferences is in doubt. African and Latin American producers undoubtedly have a comparative advantage over the LDCs in most of the principal LDC export crops. Similarly, most present LDC crops would not be competitive in alternate (e.g. North American) markets. The prospective termination of U.K. preference may well be the death knell for the LDC banana industry and as well as for many other agricultural exports - most of which, like bananas, would not be competitive on world markets.

The medium and long-term prospects, then, are for a realignment and restructuring of the LDC agricultural sector activities. In general terms, what is foreseen is the following:

- As special export preferences end, a further decline will occur in the plantation sub-sector; it is anticipated that many presently underutilized estates will be broken up - many will become available, either through expropriation or land rental, to the small farm sub-sector, others will move into non-agricultural uses.
- Increasingly, land previously dedicated to present export crops will tend to move into import substituting high value food crop and livestock activities.
- In order to stay in production, present export crops will have to have lower production costs.
- New export crops in which an LDC comparative advantage does exist will have to be developed to replace existing inefficient ones.

It is in the context of the foregoing that the present Small Farmer Development Program will be executed - a context which presents both constraints and opportunities.

B. Major Constraints and Opportunities in the Small Farm Sub-sector

The ultimate viability of the economies of the Caribbean Commonwealth LDCs depends in part on the revitalization of the agricultural sector. Because of the predominant role which the small farmers play in this sector, an understanding of the factors which limit the performance of small farmers is essential. Studies of the IBRD, CDB, UWI, and other institutions have identified a comprehensive list of constraints which exist within the region. They encompass the universe of political, social, economic and technical factors which hinder small farmer performance in general. These constraints vary in degree and combination between the Caribbean states, but in general they add up to an agriculture in which the small farmers' contribution to the economies of the countries falls far short of its potential.

The Caribbean Development Bank's Small Farming Study, jointly financed by the CDB, CIDA, and AID and prepared by Weir's Agricultural Consulting Services Ltd., Jamaica (February 1976) provides a description and an analysis of the constraining factors to small farmer development which exist in each of the LDCs studied. These factors vary considerably from country to country, but many are common to most of the countries in the Region. A brief summary of major constraints and an analysis of strategic opportunities to relieve them in eight of the eleven LDCs follows:

1. Belize

a. Constraints

- Institutional weaknesses of research and extension services.
- Lack of credit to small farmers.

- Lack of proper titles to land.
 - Inadequate price policies and marketing arrangements.
 - Dispersed rural population.
- b. Opportunities to Address Constraints
- Provision of institutionalized credit to small farmers.
 - Reorganization of Marketing Board to function more effectively.
 - Re-assessment of pricing policies to assure adequate remuneration to producers and reasonable prices to consumers.
 - Consolidation of rural population via village service units, roads, and communications systems.

2. Grenada

- a. Constraints
- A clear land policy is lacking.
 - There is lack of adequate marketing infrastructure, including a lack of information on market prices.
 - Disincentive prices exist for locally produced products as opposed to imported food.
 - Inputs for livestock sub-sector are lacking.
 - Land resources for crop production is extremely limited (8.6% of total area).
 - No national development plan exists.
 - Heavy dependence on bananas, nutmeg, cacao.
- b. Opportunities
- The "Land for Landless Program" restructured and implemented more effectively.
 - Improvement of private marketing system for food products or establishment of alternative public market institutions and services, including information systems.
 - Revision of price policies of domestically produced food based on cost of production or world market prices.
 - Establishment of mechanisms for sales/distribution of inputs for the livestock sub-sector.
 - Development of a National Plan with provision of diversification

programs for small farmer crop and livestock enterprises.

3. Dominica

a. Constraints

- Inadequate road network.
- Fragmentation of small farmer land holdings.
- Shortage of labor for agriculture.
- Except for bananas, technology levels for crops are low.
- Inputs for livestock sub-sector not available.
- Government policy provides emphasis to export crops with little policy emphasis directed specifically toward small farmers.
- Lack of credit for food crops.
- Lack of price incentives to increase production.
- Lack of efficient marketing.

b. Opportunities

- Program for construction of main and feeder roads.
- Land reform program of mass cooperative farms or land distribution via conventional methods.
- Provision of inputs for livestock sub-sector with emphasis in poultry and eggs.
- Revision of government policy to provide greater incentives to small farmer production.
- Provision of short-term production credit with inputs to small farmer enterprises.
- Radical improvement in marketing, i.e. refrigeration storage within Marketing Board facilities.
- Program of crop diversification from bananas to domestic food production, and alternative export crops.

4. St. Vincent

a. Constraints

- Lack of clear land policy.

- Lack of refrigeration/storage/marketing infrastructure and marketing mechanisms in food crops.
- Emphasis on export crop (bananas).
- Lack of short-term agricultural credit for small farmers.

b. Opportunities

- Use of one agency such as Marketing Board or Agricultural Corporation for providing credit, input and output marketing services and resources for domestic and export products.
- Program of land distribution and land development for small farmers.
- Construction of export marketing infrastructure (refrigerated storage, packing prior to shipping).
- Expansion of agro-industries to process domestic agricultural produce.
- Diversification out of banana mono-crop economy to alternative crops.
- Upgrading of the level of technical and advisory services of Ministry of Agriculture.
- Development of sound government price policies to assure reasonable support prices to producers.
- Improvement in inter-island shipping facilities.

5. St. Lucia

a. Constraints

- Small farmer is disadvantaged in the dichotomous farming system in terms of land, capital, inputs, rural infrastructure and the mono-crop banana economy.
- Information on the small farm sector is non-existent, unavailable, inaccurate or superficial, especially on farm labor organization, management, supply and utilization.
- Clear land policy is lacking.
- Poor marketing arrangements exist.
- Returns to farmers are low in relation to costs.
- Communication gaps and poor relationships with Banana Associations result in feelings of powerlessness by small farmers regarding marketing alternatives.

- Lack of feeder roads in some areas.
- b. Opportunities
 - Revision of policy and institutional disincentives by government.
 - Provision of programs of short term production credit for small farmers.
 - Road construction in selected small farmer production areas.
 - Provision of incentives for diversification from bananas to other crops by small farmers.
 - Establishment of information gathering, compilation and analysis mechanisms for small farmer sector.
 - Restructure land tenure policy through government legislation and implement land tenure program.
 - Provide for improved marketing mechanisms in public and private sectors.

6. Montserrat

- a. Constraints
 - Lack of reliable markets.
 - Lack of reasonable pricing policies.
 - Inadequate facilities for inter-regional freight shipments of agricultural produce.
- b. Opportunities
 - Explore markets for trade expansion and improve markets for domestic production.
 - Provision of increased amounts of credit and inputs at reasonable prices to small farmers through the Development Finance and Marketing Corporation which will also be responsible for public sector buying and selling.
 - Shift in government policies to encourage small scale farming.

7. St. Kitts/Nevis

- a. Constraints
 - Little information available on a small farmer food crop,

- livestock and fisheries enterprises.
- Advanced age of farmers and aversion of young people to farming results in high unemployment rate (20 - 26%) among males of 14 - 24 years.
- Inadequate land resource base and insecure land tenure
- Non-availability of plant material.
- Decline in agricultural production in spite of lack of growth in tourism.
- Poor market mechanisms and prices.
- Inadequate availability of inputs for small farmers.

b Opportunities

- Develop information systems for the small farmer sub-sector.
- Revision of government policy to revive small farm production.
- Conduct specific programs to re-settle farmers to expand domestic food crop production (for example the SIRO¹ Project or similar programs).
- Provision of credit, inputs and market services to small farmers through the Central Market Corporation.
- Promotion of fisheries and livestock activities for small farmers in Nevis.

8. Antigua

a. Constraints

- Land resources not appropriate for major crop production efforts (6.8% of land is appropriate for cropping).
- Average size holdings are very small (1 1/4 acres).
- Competition of the tourism sector for labor has raised labor costs to agriculture and has encouraged part-time farming.
- Poor marketing procedures result in high losses (about 30%) due to spoilage and shrinkage.
- Credit lines formerly available for small farmer production were discontinued.
- Lack of institutional framework for future growth of small farming.

¹Sugar Industry Rescue Operation.

- Limited attempts by governments to encourage domestic agriculture by small farmers.
- b. Opportunities
 - Promotion of pasture animal agriculture which is appropriate for the land and climate resources.
 - Strengthening of the Central Marketing Corporation for marketing and input services to small farmers.
 - Provision of credit for inputs with supervisory technical Assistance.

As illustrated above, the specific mix of constraints and related opportunities varies from country to country in terms of content, number and degree of severity. There are, however, several conditions which are common to the LDCs. In most of the LDCs studied, the policy and institutional disincentives appear to be important factors inhibiting small farmer development. The other factors mentioned repeatedly were lack of inputs, lack of short term production credit, poor marketing, and lack of feeder roads. These factors, while not being constraints to the development of estate type agriculture pose serious limitations to the ability of the small farmers to expand and diversify. With a further expected diminishing of the banana export industry in the Caribbean in future years, small farmer diversification to other export or domestic crops and livestock is necessary. There is strong evidence of a new awareness on the parts of the LDC governments of the need to shift emphasis to small farmer production of domestic foods. New policies, strategies, and programs in this direction are just beginning to emerge.

This shift of emphasis will require institutional reorganization, re-allocation of resources, new mechanisms, increases in services to small farmers, new policies regarding land tenure, minimum guaranteed prices to farmers. Carefully planned programs of production are needed to meet internal consumption needs and to exploit opportunities for export of fresh or processed surplus production to inter-regional or extra-regional markets. In bringing about the above changes, the principal inhibiting factors should be addressed, to the extent possible, in a logical sequence. It is expected that the CDB will have a considerable degree of influence with LDC governments in determining the priority in which limiting factors should be addressed. Priorities will vary from country to country. Availability of inputs, short-term production credit, marketing, and feeder roads have been identified as limiting factors in the LDCs for which AID can assist the CDB in providing needed resources and services. In the area of government policy, institutions, budget resources, and technology, the CDB through the resources of this Project will also have a considerable degree of indirect influence in bringing about reform.

In summary, the rationale for the selection for the four areas of emphasis for AID resources is based on the need to address the principal constraints common to all LDC small farm sub-sectors.

C. Relationship to Other AID Programs

1. CARDI Grant (FY76)

AID grant assistance is being provided to the Caribbean Agriculture Research and Development Institute (CARDI) in FY76, FY77 and FY78 totalling \$425,000. This assistance will enable CARDI to establish 3 research and demonstration centers in Belize, St. Kitts and St. Lucia where work will be performed in promoting agricultural production efforts by small farmers. Research will be conducted on not more than two or three crops to develop technical recommendations, train Ministry of Agriculture personnel and farmers, and to promote production programs in selected crops. This research and development work is considered to be complementary to this Project and especially to sub-projects that will be conducted in Belize, St. Kitts and St. Lucia. LDC governments and the CDB have requested that CARDI conduct cassava research and development work in several locations to prepare for eventual plans to augment wheat flour with 15 or 20% cassava flour. Savings in foreign exchange through use of import substituting products will be substantial for the entire region.

There is no duplication between the current AID supported CARDI project and the planned involvement of CARDI in cassava.

2. U.W.I. Loan (FY76)

AID recently executed an \$8.5 million loan to the University of the West Indies (UWI), approximately 1/3 of which is to assist the University's school of agriculture in the areas of research and extension. To a large extent, the research facilities to be built will be used by CARDI for applied research on the production, processing, and storage of small farmer crops. The UWI's extension program which provides outreach services to the LDC's ministries of agriculture will also be assisted by the AID loan. In addition, the UWI's capacity to train agriculturalists will be enhanced. The proposed CDB program will have only limited direct effect in any of these areas, which are nonetheless serious constraints to the development of the small farm sub-sector in the long-term. Thus, to the extent the UWI's capacity to address these constraints is increased, the UWI Loan complements the proposed CDB project and represents an integral part of AID's strategy for assisting agricultural development in the Caribbean.

3. LAAD/Caribe Loan (FY76)

An AID loan of \$6,000,000 was recently made to the Latin American Agricultural Development Corporation (LAAD). Although the LAAD/Caribe loan may finance agribusiness sub-projects in the LDCs of the Eastern Caribbean Region, little if any, such activity is anticipated in these countries. LAAD/Caribe's major emphasis will be in Colombia, the Dominican Republic, Haiti, Jamaica and Panama. CDB and LAAD officials have, however, discussed the possibility of LAAD providing technical assistance to the CDB in the areas of marketing and agribusiness on a contract basis. It is very likely that the CDB may contract for required assistance for the marketing activities to be financed under the proposed small farmer development program; LAAD is a possible source.

4. Proposed CDB Regional Agribusiness Development Loan (FY77)

The FY77 Congressional Presentation includes a \$5.2 million loan to develop agribusiness in the Eastern Caribbean, based on the increased production and participation of small farmers. That loan would directly complement this Project by helping to ensure larger and more stable markets for small farmer crops. It represents a logical follow-on to this Project. In view of the intimate relationship of agribusiness with the production - marketing systems, it is also appropriate that the two programs overlap and be implemented concurrently so that the greatest mutual benefit may be obtained from the two activities.

III. PROJECT DESCRIPTION

A. Goal Purpose and Strategy

The goal of the Project is to increase the income and standard of living of the small farm sub-sector by stimulating small farmer production and productivity. The purpose of the project is to increase the productive resources and services available to small farmers through national and regional institutions.

Although the entire Caribbean agriculture sector has been in a decline for the past 10 to 15 years, those institutions which have served agriculture during this period have tended to concentrate on the estate system and on the traditional export crops. Much of the research undertaken in the Region during this period, including that of the UWI Regional Research Center (now CARDI) focused on export crops. Little research was done on small farmer crops or cropping systems. The majority of available production credit and inputs which have been provided by commercial banks and growers' associations has been for export crops. The services and policies of governmental institutions have also heavily favored export oriented estate agriculture. Furthermore, although approximately 35% of CDB lending to date is to the agriculture sector, most of the existing Bank programs have not been specifically targeted to the small farm sub-sector. CDB agricultural policy in the LDCs was based on a view that both estate and peasant agricultural sub-sectors were inefficient in their utilization of resources. With this in mind, CDB programs have concentrated on the development, through land settlement schemes, of a new class of middle income farmers which would provide a more efficient mix of human and land resources. Exceptions to this approach are the Bank's feeder road projects and its "Farm Improvement Credit Scheme" which has provided a source of medium to long term credit to small (and large) farmers through national intermediate credit institutions.

The proposed loan and complementary grant assistance are designed to provide financial resources and technical assistance to the CDB in order to increase its capacity to respond to the needs of the existing small farm sub-sector. The project provides for the establishment of a "Small Farmer Development Program" within the CDB. The policies, criteria and methodology by which the Program is defined, would represent an innovative approach to agricultural lending for the CDB. While the CDB will continue to utilize the land settlement approach to agricultural development in view of its potential for improving land utilization in the Region, the AID financed program will enable it to carry out concurrent and complementary activities aimed at existing small farmers.

Furthermore, the technical assistance and training provided through AID financing and by CDB staff and the involvement of intermediary institutions and LDC Governments in the implementation of the program is expected to further develop their capacities for responding to small farmer needs.

B. Operation of the Small Farmer Development Program

The proposed Small Farmer Development Program, funded by \$10 million of AID loan funds and \$1.5 million of CDB resources, would operate within the present structure of the CDB's concessionary operations and would be implemented over a 4 year period. Participating governments will be required to provide at least 10% of sub-project costs as counterpart contribution. Assistance under the Program would be limited to the LDC member countries of the CDB; namely Antigua, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St. Kitts-Nevis-Anguilla, St. Lucia, St. Vincent and the Turks and Caicos Islands. The types of sub-project activities to be financed include:- (1) agricultural production credit, (2) agricultural input distribution, (3) marketing and (4) feeder roads. Overall administration of the Program will be the responsibility of the CDB's Agriculture Division, assisted by other Bank Divisions as appropriate.

Prior to the execution of any sub-loan to an LDC, the Bank will prepare, for AID approval, a "Country Investment Program" (CIP) as outlined in Section 111.C.1, below. The purpose of the CIPs will be to help ensure that the sub-projects selected for financing fit within an overall country strategy and thus result in a rational mix of activities in light of the particular LDC situation. Projects preliminarily identified would be measured against the CIP for appropriateness prior to in-depth analysis. The CDB is expected to play a significant role in stimulating sub-project activities which accord with the CIP.

Identified projects which fit within the CIP will be further developed and appraised in accordance with the criteria and methodology described in Section 111.C.2, below. With respect to feeder roads and marketing, the types of analysis require some modification in existing Bank practices. For instance, the criteria relating to benefit-incidence and environmental impact of sub-projects have been added. All sub-projects which exceed \$500,000 or generate an economic rate of return of less than 15% will be subject to AID approval. (The \$500,000 limit will be reviewed for appropriateness at the first project evaluation).

The "Agricultural Production Credit Scheme" will be implemented through intermediate credit institutions in the LDCs, i.e. agricultural development banks and development finance corporations. The CDB currently provides technical assistance to such institutions in each of the LDCs through CDB Farm Improvement Officers (FIOs). At least one FIO is currently assigned to each LDC. For purposes of the production credit scheme the CDB will assign one additional FIO to each intermediary institution to provide for in-country supervision of the scheme and related technical assistance.

With respect to marketing sub-projects, all project sub-loans in excess of \$100,000 will be made directly by the CDB. Smaller loans will be made through LDC credit institutions, but will be reviewed and approved by the CDB. Both public and private sector institutions will be eligible for marketing sub-project financing. Feeder road sub-project financing will be handled by direct CDB loans to national governments.

The agricultural input distribution element of the Program will be financed both by AID and CDB. The Bank is currently developing a regional private sector project

Involving the bulk purchase of fertilizers and chemicals for distribution in the LDCs (see Section 111.C.2.b, below) which would be financed from non-AID resources. AID funds would be used to finance input distribution activities on a national level. Satisfactory arrangements for the distribution of inputs in each LDC, will be a pre-condition to AID-financed CDB sub-loans for agricultural production credit in the LDCs.

C. Criteria and Methodology for Sub-project Selection

1. Country Investment Plans

In order to help ensure that specific sub-projects to be financed in the 11 LDCs are rationalized in terms of the countries' and Region's development priorities, the CDB will develop for AID approval a "Country Investment Plan" (CIP) for each LDC. This would entail a preliminary programming of the resources to be provided under this Project for each LDC and would be used to make an initial determination of the appropriateness of preliminary identified sub-projects.

Each CIP should contain:

- a statement of overall strategy
- a rationale for the types of sub-project activities to be undertaken in light of other activities planned or underway
- a summary of priority constraints to be addressed by the Program
- an estimated budget by type of sub-project
- a preliminary listing of possible sub-projects which merit further development
- an analysis of policy constraints and disincentives to small farmer agriculture.

The CIP, prepared in consultation with the LDC, would be based on the Small Farmer Study, country development plans if available, LDC listing of priority feeder road sub-projects and such other information on the sector as may be available.

2. Sub-project Appraisals

Sub-projects preliminarily identified as appropriate for financing under the Small Farmer Development Program will be appraised in accordance with the following criteria and methodology:

a. Agricultural Production Credit

The guidelines, criteria and policies governing the production credit element of this project reflect the project's overall purpose in that productive resources will be made available to small farmers in the LDC countries of the CDB through the LDC's Development Finance Corporations (DFCs). These guidelines, criteria and policies will be incorporated into a Production Credit Program (PCP) which will form the basis for agreements between the CDB and the LDCs. The PCPs will stipulate:

- (1) The resources made available by the CDB will be used for short-term production credit (up to 18 months) and medium-term investment credit (18 to 60 months).
- (2) The beneficiaries of the credit program will be small farmers whose land holdings (owned and rented) are less than 25 acres.
- (3) The beneficiaries of the credit program must derive at least one-half of their incomes from agricultural and livestock activities.

- (4) Freehold ownership of land as collateral will not be required. A farmer may be required to show secure tenure for a period equal to the cropping cycle, and for this purpose a written lease or rental agreement will suffice.
- (5) Fishing projects will not be eligible for credit under this program although aquaculture can be considered for financing.
- (6) Because it is anticipated that crops liens will play a major role in securing production credits, the PCPs will indicate that the LDCs, from other resources channelled through the DFCs, will provide adequate field supervisory and collection personnel; these LDC government contributions will form a part of the 10% counterpart contribution normally required by the CDB.
- (7) The PCPs will project production credit needs a year ahead and will be updated on an annual basis.
- (8) The PCP will contain an analysis of the production input availability and timeliness of supply problem, if any. The PCP will spell out in detail what measures will be undertaken by the DFC to assure proper supplies, should availability be a problem. The CDB in its review of PCPs will establish that input availabilities will be adequate to supply credit generated demand.
- (9) The PCP's will be based on the Country Investment Plans (CIPs) mentioned elsewhere in this paper and more specifically will:
 - a. estimate credit requirements in accordance with market possibilities and plans on a crop-by-crop basis,
 - b. give preference to crops which have secured marketing arrangements, and
 - c. give preference to food crops destined for intra-CARICOM trade.
- (10) In reviewing the PCPs, the CDB shall take into account the policy constraints and disincentives identified in CIPs. In no case will the CDB authorize DFC sub-lending where government discrimination against domestic production exists in the form of discriminatory price controls (including those on near substitutes, e.g. canned ham v. fresh ham or whole chickens v. chicken parts) or in the form of subsidization of imports (direct or indirect). Similarly, the CDB analysis prior to approval of PCPs will establish that government price, taxation, and marketing policies do not present clearly inordinate or discriminatory disincentives to increased small farmer agricultural production.
- (11) Because small farmers have not generally been subjects of production credit in the LDCs, the LDCs by means of the DFC or extension services will undertake appropriate production credit education campaigns to teach small farmers about the proper utilization of credit. Similarly appropriate divulgation (publicity) programs will be undertaken by the LDCs to assure widespread knowledge of the existence of the small farmer credit

program and the general conditions of eligibility. Both the education and divulgation campaigns will be borne by the LDC governments and will be counted towards their meeting of the 10% LDC contribution requirement.

- (12) Loans made to farmers will be based on farm plans developed jointly by the farmer and the DFC credit supervisor. These farm plans will form a part of the farmer's loan application. As part of the application, information will be gathered as to the farmers' previous year's agricultural activities in order to establish his eligibility for the program. The application of every fifth farmer chosen in order of application will contain in addition to the farm plan, a questionnaire similar to that used in the Small Farming Study, from which an account of his enterprise could be constructed and his attitudes toward the program assessed. Copies of the applications including the questionnaires will be sent to the CDB which will tabulate them for purposes of program monitoring and evaluation.
- (13) The small farmer production credit sub-loans may be used for the following purposes:
 - (a) Expenditure associated with the production process including land preparation charges, land rent and lease payments, planting, seeds, fertilizers, weed control, pest and disease control, harvesting, bagging, cleaning, grading, irrigation charges, etc.
 - (b) Compensation for hired and family labor.
 - (c) Expenditure for small implements, tools, supplies, and materials related to agricultural or livestock activities.
 - (d) Expenditures for small scale on-farm irrigation schemes, for the establishment of permanent crops, or for the building of on-farm access roads.
- (14) The maximum amortization period for DFC extended sub-loan under this credit element will be five years. The maximum length of grace period on principal will be twelve months. No more than 20% of the value of DFC sub-loans under this credit element will have amortization periods exceeding eighteen months.
- (15) The maximum loan size to any small farmer borrower under this credit element will be initially \$2,500. This limit will be reviewed for appropriateness at the first project evaluation.
- (16) Interest rates on the small farmer credit element will be at least equivalent to the effective commercial bank prime lending rates (at present 11% - 12%) including appropriate risk premium; the risk premium will be placed in a bad debt reserve account.

- (17) To manage the credit element the CDB will establish a new Farm Improvement Officer (FIO) in each DFC participating in the program. The costs of this CDB FIO will be borne by the DFCs or LDC governments. If required, the CDB may make AID loan funds available to the DFCs for meeting FIO costs.
- (18) Production credit from AID funds will not be available for the following crops and purposes:
 - (a) the cultivation of cotton, tobacco, soybeans,
 - (b) the purchase of land, and
 - (c) the purchase of items for which AID funds cannot be used according to existing and future laws and regulations.
- (19) Under this project women must have access to credit on an equal basis with men. The CDB will therefore review lending policies of DFCs and LDCs to assure that no policies, regulations, or practices exist which discriminate against women's equal access to credit.
- (20) In no case will small farmers borrowers be required to employ credit resources for input procurement from a single source of supply.

b. Agricultural Inputs

(1) Types of Activities to be Financed

The sub-projects proposals involving agricultural inputs which are expected to be developed for CDB concessionary financing or other source funding are of two possible types:

- Special Fund sub-projects with public institutions (LDC Governments, Marketing Boards, Development Finance Corporations) and private entities (agricultural co-ops, crop associations).
- Sub-projects with a mixture of SDF and other source funds with Governments, CDB and private enterprise.

Special Fund Sub-Projects:

The CDB anticipates that LDC Governments and/or DFCs will submit proposals for loan funding to initiate, reorganize or strengthen existing or new institutional mechanisms to provide for many types of agricultural enterprises. These mechanisms would provide for cash sales and credit arrangements for purchase of inputs. The inputs include agricultural chemicals, tools, equipment, seed, plant materials, animal agricultural supplies and materials and other miscellaneous items. To extent possible the provision of credit, inputs and credit repayment will be integrated into one organization (such as the Development Finance and Marketing Corporation model which has been initiated in Montserrat).

In countries where more than one institution is involved, formal arrangements of understanding will be developed between these organizations to assure that mechanisms will be in existence to provide for coordination and cooperation of functions that are related and inter-dependent (i.e. credit for inputs and arrangements for making collections). Projects developed and proven feasible by the LDC Governments, DFCs and the CDB might also be of a type to provide assistance to private sector entities such as farmer groups, grower associations and farmer cooperatives.

Mixed Funded Input Projects:

A multitude of possibilities exist for organizational arrangements to provide for CDB, DFC, Government and outside donor financing of input systems to serve small farmers. An example of such an arrangement is the Regional Agricultural Input Supply Project in the Windward Islands (Dominica, St. Lucia, St. Vincent and Grenada). This project will provide facilities and services to purchase, handle, store and distribute fertilizers and other chemicals. The proposed project is expected to establish one limited liability company in each of the participating territories. The Regional Project will be initiated in the Windward Islands and expand to the interested Leeward Islands at a later date. The companies in the territories will be affiliated through a holding company which will provide for centralized operations under expert contract management to determine fertilizer needs of the Region, determine sources and negotiate prices, receive, and store fertilizers and other chemicals. Feasibility of centralized bulk handling, mixing, bagging, and storing will be determined as opposed to a bagged type operation. Governments, the CDB and private sector regional suppliers will be involved in capitalization and promotion of the project. The CDB loan, if approved by its board of Directors, would be for approximately \$1,500,000. Major users of the fertilizers (including small farmers) would be the ultimate owners of the companies. Initially the CDB may hold equity in the enterprise which would eventually be transferred to farmers. The current status of the project is that technical feasibility studies are being planned. Other feasibility studies are also being developed for financial and administrative arrangements of the project including payment procedures, interest rates, interest periods and other factors that affect the economic and financial viability of the project.

(2) Criteria for AID Financing

Plans for the purchase of fertilizers for use by small farmers should consider the type, analysis and quantities by season of the year. These fertilizers should correspond, to the extent possible, to the expressed needs of participating farmers or farmer organizations. These needs should be based upon farmers' plans and/or Ministry of Agriculture plans of annual production which in turn would be based on information of effective domestic demand or possible export markets for produce.

Plans and management procedures should be developed and implemented by project management to assure that small farmers will receive adequate quantities of correct fertilizers in a timely manner. Participation by small farmer organizations should provide opportunities for quantity discounts based on economy of scale savings in sales and distribution.

Plans should be developed and implemented to provide technical advice to farmers or farmers' groups when needed. Short-term production needs for small farmers' crops such as vegetables, fruits, root crops, cereals, pulses and speciality crops which increase food production or income of small farmers should be included. Input items for crops would include such materials as fertilizers, insecticides, fungicides, pest control materials, seeds, plant materials, tools, equipment, and supplies of the types, quantities, size and design appropriate for small farmer operations.

Inputs for animal agricultural enterprises such as medicines, antibiotics, vaccines, baby chicks, starter feed, equipment, tools and other needed materials would be appropriate provided their use is technically, economically, and socially feasible. Quantities, types and availabilities would be determined based upon demand information for these materials and the resulting output products.

Determinations should be made that inputs intended for use under the sub-projects would not be detrimental to the environment, would not constitute human health hazards or would not be deleterious to existing cropping systems and the related eco-system within any of the eight LDCs.

C. Marketing

The purpose of the marketing component of this loan is to assist the CDB in motivating, mobilizing and institutionally strengthening not only their marketing analysis and management capabilities but also those of the participating DFCs and territorial Marketing Boards and to a lesser extent other various public and private agricultural marketing organizations in the lesser developed countries of the English speaking Caribbean.

Benefits to the target farmer and to these organizations are expected to result in more efficient and effective utilization of physical and human resources and increased agricultural incomes as well as the minimizing of spoilage and wastage resulting in increased availabilities for both internal use and for export.

(1) Types of Marketing Activities Anticipated

It is anticipated that the majority of the loan funds under this element will be devoted to improving the range of marketing functions now being provided by each territory's Marketing Board as well as expanding their realm of operations. Annex B Exhibit 1 provides an illustrative example of a Marketing Board project.* The implementation of the various marketing sub-projects will be handled through the Marketing Boards, the Development Finance Corporations (DFCs), and to a lesser degree any other public or private institution which the CDB and the appropriate DFCs determine as playing an important role in small farmer agricultural marketing. Direct CDB loans and loans through DFCs will be made in accordance with the terms and conditions of its concessionary operations.

The types of marketing sub-project activities anticipated for financing include:

- Construction of physical facilities and necessary equipment and infrastructure, such as, dry and cold chill storage facilities, rural buying and selling stations, public wholesale/retail marketing facilities, rural primary assemble centers (washing, grading and packaging facilities) as well as limited on-farm and small community processing and storage facilities;
- Market transportation improvement projects including domestic, intra and extra-regional movement of inputs as well as outputs;
- Market intelligence and divulgation systems;
- Special industrialization of marketing inputs such as packaging materials;

* The example shown is for illustrative purposes only and will not be financed under the proposed program. The project is currently being implemented and financed from non-AID resources of the CDB.

- Assistance to private marketing intermediaries (higglers) both individually and cooperatively, for working capital as well as investment capital;
- Special studies and research projects including price, marketing, and related taxation policies;
- Technical assistance for establishing product grades and standards, regulations, and legislative standards;
- Technical assistance for marketing operations and management and support staff training; and
- Establishing a coordination facility for joint marketing of LDC products through their respective Marketing Boards including promotion activities and product consolidation.

(2) Methodology to be Used for the Analysis of Marketing Activities

In the identification and selection of sub-projects for appraisal, the Bank shall give adequate consideration to the interdependence of related activities and the need for their systematic coordination. The production and distribution of farm inputs, farm production and food distribution should be reviewed as separate, yet interdependent elements in the agricultural production/marketing system. Because of the inter-related nature of the loan sub-project components (credit, input supplies, feeder road networks and agricultural marketing) the Bank will utilize a "systems approach methodology" in carrying out individual marketing activity feasibility studies in which the estimated activity cost will be greater than US\$25,000.

A "systems approach methodology" implies that any marketing activity feasibility studies should consider the following:

- Buying and selling (including contractual arrangements, brokerage vs ownership arrangements, and minimum volume purchases);
- Supply of crop and livestock inputs (import policies should be reviewed);
- Price stabilization, price supports, price controls, and crop insurance;
- Commodity collection, transportation, and storage;
- Product differentiation (grading) and economic utilization of by-products and culls;
- Packing and packing standards for domestic, intra and extra-regional trade;

- Marketing intelligence and divulgation services including gathering, interpretation and dissemination of market information as well as information relating to types of crop varieties which are demanded by various marketing outlet possibilities;
- Cooperation within CARICOM (Caribbean Common Market) in accordance with the Agricultural Marketing Protocol (AMP);
- Extra-regional trade prospects;
- Effective demand constraints and the quality demanded at various income levels;
- Marketing management, training and administration; and
- Education and information networks.

(3) Financial Soundness

Each marketing activity should operate on commercial principles and be self-financing by the end of the project. This criterion would not apply to marketing activities which are solely of a technical assistance nature, or where, under special circumstances, governmental subsidies are deemed absolutely necessary. In the latter instance a special justification will have to be made.

In determining the adequacy of a marketing organization's gross trading margin, the CDB should take into account:

- the effects of overly restrictive buying and selling price policies on the internal operating procedures of the organization and on the viability of the activity being proposed;
- the operational procedures of the organization;
- physical facility limitations;
- proper business management;
- availability of market intelligence information; and
- the application of effective promotional efforts to increase sales.

Assuming no restrictive price controls, a normal agricultural marketing organization in the Caribbean should seek to be self-sufficient at gross margins of between 25 and 30 per cent of sales. As a measure of efficiency, marketing organizations should seek to maintain overhead and operating costs at no more than approximately 10% of total sales and spoilage and theft less than 5%. This model will allow for a net trading margin of between 10%-15%, thus enabling a modest net surplus to build up reserves to meet bad debts and for re-investment. At present many marketing organizations are experiencing losses in excess of 20% for many crops throughout the Caribbean. The marketing activities financed under this loan will seek ways to hold losses at or below the acceptable 5% level.

(4) Operational Procedures

The CDB will determine the adequacy of institutional operating policies and capacities, e.g.:

- a clear definition of the functions of the marketing organization;
- equitable employment, membership and facility use policies;
- institutional capabilities to implement, manage and maintain the proposed activity.

(5) Economic Analysis

In instances where sub-project costs exceed \$100,000 an economic analysis will be performed. Such an analysis will consider the importance of benefits and costs external to the immediate activity. The analysis should identify such external effects, assess their magnitude, and combine them with internal effects. The economic analysis should consider both primary and secondary benefits.

(6) Benefit Incidence

Selected sub-projects should provide for maximum possible distribution of sub-project benefits with particular emphasis on the flow of such benefits to the small farm sub-sector. The following questions may be considered in assessing the incidence of sub-project benefits:

- Who will the marketing sub-project tend to favor? Everyone in the area? Only farmers? Only producer association members? Everyone under a certain income level, etc? What weight should be given to benefits not captured by the target group?

- How much social impact will the project have? (this requires differentiating beneficiaries into at least those represented in the program and those outside, and the identification and quantification of the types and magnitude of the net benefits to them, both economic and non-economic i.e. nutritional improvement).
- Could the social impact be increased by redesigning the project or broadening it? Would loans to private individuals create an environment for increased market competition, initiate and/or employment opportunities i.e. loans to higglers or higher associations? Could the marketing project be modified in favor of less elaborate machinery and more labor utilization economically?
- Can appropriate rural technologies in the marketing context be utilized so that underemployment and unemployment in the rural areas will be minimized? Will local talents and skills be employed in construction and operational phases as much as possible?
- Are contracting procedures protecting the interest of the target group?
- What are the risks that could prevent the target group from receiving the intended benefits and what can be done to minimize those risks?
- Are complementary projects necessary to help insure that marketing infrastructure will be utilized?

D. Feeder Roads

The basis eligibility criteria for selecting individual feeder roads for financing will be a satisfactory technical and economic feasibility study which:

- (1) Demonstrates that the technical alternatives proposed, including variable design standards, are optimal in terms of cost and benefits generated, projected traffic, etc.
- (2) Presents preliminary engineering plans and a reasonably firm estimate of the cost of the road construction (improvements) to be carried out (see Annex B Exhibit 2).
- (3) (a) Demonstrates that the individual feeder road generates an economic rate of return of at least 15%.

(b) If an individual feeder road does not meet the criterion described in 3(a), but the CDB believes that the road should be constructed, it shall request AID approval, and shall provide its justification for overriding the benefit-cost qualifying criterion of 3(a) above.
- (4) Ensures that a feeder road will primarily affect the small farmer (0-25 acres) by considering only those areas for road construction where at least 50% of the cultivable land area within a road's area influence is owned by small farmers.
- (5) Presents evidence that, once the road construction or improvement is completed in a given region, no other major bottleneck or input constraint exists which would prevent the benefit stream projected under item 3(a) above from being realized.
- (6) Ensures that proper maintenance capability is installed for specific application to rural feeder roads.
- (7) Ensures that the road will not have any adverse impact on the environment.

The CDB has developed its own methodology for the feeder roads it is currently financing. CDB Appraisal Reports, while comprehensive, omit some detail that is of special interest to AID and required by AID in its own analysis of projects. The process which the Bank follows in preparing the various feeder road Appraisal Reports is quite similar to that which AID follows in the development of its Project Papers for bilateral road projects. The methodology described below therefore represents modifications and elaborations of a general methodology already employed by the Bank.

The feeder roads currently being constructed in the LDC territories generally serve two separate types of purposes which dictate two slightly different methodologies. This would also apply to any AID-financed feeder roads. On the one hand, the purpose of a given feeder road can be to reduce spoilage, wastage, increase the quality and reduce the transportation cost of existing production, while on the other, the purpose can be to open up new lands to cultivation.

The economic analysis appropriate to the first purpose of a feeder road follows the traditional concepts pertaining to the reduction in the "real" costs of transportation, while the analysis appropriate to the second purpose follows what has come to be called "penetration" analysis. The former assumes that the only incremental costs incurred to obtain incremental benefits from reduced spoilage, etc. are the road improvement costs. The latter assumes that by definition, a penetration road requires an analysis that must include, in addition to the road improvement costs, the additional agricultural input costs and services required to obtain the new output. It is quite possible that a given section of road will serve both "penetration" and "cost-reduction" purposes in which case careful analysis is required to ensure that no double counting occurs or incremental costs are omitted.

Officials of the CDB have reviewed the methodology presented in this section and concur in its appropriateness to the feeder road programs. Prior to execution of any feeder road sub-loan, AID and the CDB shall agree in writing the final form of the economic methodology to be employed and on selected benchmark information critical to the reliability of the analysis.

Following is the general methodology to be applied in the appraisal of individual feeder roads:

(1) Feeder Road List (to be included in the CIP)

(a) The Bank shall estimate the maximum number of roads each territory could build based on:

- an estimate of the time likely to be available within the four year AID disbursement period constraint; and
- each island's experience in feeder road construction.

(b) Given the list of potential feeder roads in the CIP, each should then be analysed separately, then a selection made based upon the criteria outlined above.

(c) The listing of eligible roads should weight equally the following:

- number of small farm families served per mile of road;
- the benefit-cost results.

(d) Then, given the amount of funds available for a given territory and the mileage that could be constructed by the end of the AID disbursement period for that island, the actual roads to be built can be selected from the final priority list.

(2) Analysis required for each road segment

(a) The time horizon of the benefits attributable to an individual road should be projected annually over a 15-year period after completion of the road improvement. The cash flow system of analysis should be adopted.

(b) At the 15th year, a residual value should be assigned to the roads as well as culverts, bridges, etc.

(c) Economic rather than financial concepts are appropriate.

(d) The with and without concepts of project analysis should be utilized.

(e) To collect the "without project" data (baseline data), the evaluation questionnaire - see Evaluation Methodology, section V. H. - shall be used. A sample survey may be conducted whenever the number of farmers within the zone of influence of a given road is large enough to provide statistically significant results. Otherwise a complete enumeration shall be used.

(f) The value of outputs and inputs should be based on current baseline information and kept constant throughout the life of a given road project. This procedure makes the assumption that relative prices for the various road benefits and costs will be constant over the 15-year benefit time horizon. If another procedure is adopted special justification will be required.

(g) Incremental benefits are defined to include:

- the value of the reduction in spoilage, wastage, etc. of crops because of the improvement of the rural feeder road system, (where sugar may be important - the net value of the sugar output related to the increased sucrose content of improved delivery times for moving sugar cane to the sugar factories);
- the value of increased production due to more lands brought under cultivation;
- the value of increased production due to increased productivity on old lands and new lands over the 15-year period;

- the reduction of crop losses incurred by not reaping due to impassable roads during heavy rains; and
- the real value of the reduction in vehicle operating costs in the movement of commodities to and from a specific road area.

(h) Where the reduction in vehicle operating costs is difficult to obtain and not justified by the cost, and where the rate of return would be sufficiently high without its inclusion, and where its exclusion will not affect the ranking of individual road projects, or where the road being constructed is of the penetration type, then inclusion of the reduction in vehicle operating costs need not be included as a benefit. An explanation for its exclusion shall be made.

(i) The projected gross agricultural outputs will be reduced by estimated on-the-farm consumption or local sales to derive the quantities of agricultural commodities to be transported to the market center. The tonnages will be converted to average daily traffic, seasonally adjusted, to ascertain the design standards and preliminary cost estimates for discrete segments of each rural feeder road.

(j) For most road projects, the difference (decrease) in per unit vehicle operating costs to transport commodities attributed to the rural feeder road project will probably be constant over the 15-year project life. The unchanged relationship in this particular unit net benefit is predicted on the assumption that the existing road is capable of handling the projected average daily traffic over the project period without cost increasing congestion problems. When this probability does not take place, vehicle operating costs per unit of transport service will increase over the project period. The with and without analytical project concept, noted above under (2) (d) covers this contingency.

(k) Incremental costs are defined to include:

- the road improvement costs for a specific road, adequate annual maintenance and re-surfacing costs (if applicable);
- agricultural input costs used on new lands and to increase productivity on old and new lands;
- cost of agricultural extension agents, etc;
- cost of production and intermediate credit; and
- cost of new land brought into cultivation (e.g. pre-project rental cost).

(l) Within a given territory the same methodology must be applied to all old roads serving the same identical purpose(s). For example, if reduced transport costs are to be included in the analysis of a road, then all other roads that reduce transport costs should also have it included in their analysis.

(m) Economic costs of construction can be defined to include a shadow-price for unskilled labor utilized in the road improvements and construction. The use of shadow-price for unskilled labor may serve as a proxy for the relatively labor-intensive and employment-generating nature of the road projects.

(n) It should be determined whether shadow-pricing foreign exchange is appropriate.

(o) In addition to the current relatively labor intensive mode of construction that has been adopted under force account, a more capital intensive mode given the equipment availability constraints (especially in the islands) should be considered, and the usual financial and economic comparisons should be made between the two modes to determine which is financially and/or economically less expensive, and which is the more efficient in terms of mileage constructed per year. With this information, the CDB should then decide which mode should be used, given employment and financial considerations, and should include its reasoning in the Appraisal Reports.

(p) Secondary economic benefits (or costs) should be discussed when deemed appropriate. Since these secondary project impacts are unlikely to be quantifiable, the major economic justification will be based on the quantified aspects noted above.

E. Technical Assistance and Training

(a) AID Grant Financed - Up to \$400,000 grant funds will be made available to finance the cost of technical assistance and training related to the Small Farmer Development Program. Two basic categories of grant assistance are envisioned, i.e. assistance related to program and sub-project development and assistance related to the development of institutional capacity of sub-borrowers. Grant funds in the first instance will be utilized by the CDB, to contract, where it lacks appropriate expertise or adequate staffing, for studies, surveys or technical services related to the development of the CIPs, PCPs and AID-financed sub-projects. Examples of the specific types of services likely to be included under this category of grant financed technical assistance are social analyses, environmental impact analyses, prefeasibility studies, transportation surveys, marketing surveys, applied agricultural research and evaluation. The UWI, CARDI and other regional institutions are expected to be major sources for such services.

The second category of grant financed assistance, LDC institution building, would include training of LDC personnel and the services of marketing, credit, and other advisors to assist in developing the capacity of those institutions responsible for the implementation of AID financed sub-projects. Each CDB sub-project appraisal would include recommendations as to the type and extent of such training or technical assistance necessary. Prior AID approval would be required for each individual training or technical assistance activity in excess of \$5,000. The CDB would be responsible for contracting and administering all technical assistance services in accordance with AID contracting guidelines. In determining the eligibility of training or technical assistance for AID grant financing the CDB would apply the following criteria:

1. The training or technical assistance should be directly related to the AID loan financed Small Farmer Development Program.
2. If related to sub-project development, the consultant services should be outside the normal scope of CDB staff functions.
3. Resident advisors to LDC institutions should have assigned counterparts.

A preliminary technical assistance plan is presented in Annex B - Exhibit 5.

(b) AID Loan Financed - Up to \$400,000 of the AID loan amount will be eligible for financing the cost of CDB direct-hire staff responsible for sub-project supervision and technical assistance to LDC institutions. The largest single category of direct-hire personnel to be loan-financed is the FIOs who will have the dual responsibilities of supervising the agricultural production credit scheme and developing the capacities of the participating LDC intermediate credit institutions to administer the scheme. Assuming 8 of the 11 LDCs participate in the scheme, 24 staff years of FIO services will be required at a cost of approximately \$15,000 per staff year, or a total cost of \$360,000. The balance of AID loan funds eligible for technical assistance may be used by the CDB for similar services with respect to marketing and feeder road sub-projects. The costs of all such personnel would be passed on to the recipient institution and would in turn be eligible for financing under the sub-project loan.

IV. PROJECT ANALYSIS

A. Technical Analysis

Based on an analysis of the technical implications of the proposed project activities, it is concluded that the project is technically sound and appropriate for the LDC member countries of the CDB at this time. In addition, based on a review of staff, financial and other resources, it is concluded that the CDB has adequate capacity to effectively identify, analyze and implement the types of activities to be financed under the proposed project, including specifically the development of all necessary engineering, financial and other plans; and furthermore, that AID funds will be disbursed during the period of the project.

1. Agricultural Credit

a. Pattern of Expected Credit Utilization

In the recent Small Farming Study survey conducted by the CDB, partially with AID financing, 288 LDC small farmers in three territories were asked "if adequate and acceptable credit financing were available to you now what aspect of your farm would you be most likely to assist through the use of this financing?" The farmers' replies to this query are presented in Table 3. Major technical feasibility questions therefore revolve around questions of whether mechanisms in fact exist to provide the goods and services to be purchased by means of credit. The availability of these major goods and services is examined below.

b. Fertilizers and Chemicals

Table 3 indicates that the purchase of fertilizers and chemicals would be the major use of additional credit if it were available. The Small Farming Study survey indicated that the availability of fertilizers and chemicals were "the most limiting factors" to increasing output for 35 per cent of the small farmers interviewed, the problem being most acute in Dominica where 40 per cent of the farmers cited availability and least acute in Montserrat where only 8 per cent cited it. In order to address this fertilizer/chemical availability constraint, the CDB is formulating a \$1.5 million project to be financed from non-AID resources that will attempt to deal with this constraint on a regional basis. A possibility exists, however, that the planned project will not be on stream by the time that loan funds could be disbursed for the credit element of this Project. In any case, compliance with the provisions stipulated in credit element criterion No. 8 which is presented in Section III.c.2 of this Paper will be adequate to assure that inputs will in fact be available prior to credit disbursements. AID funds would be eligible for financing input supply activities on a national level.

c. Diversification from Bananas

There appears to be no serious constraint to diversification away from banana production aside from the serious and fundamental problems related to demand and marketing of substitutes. These problems of demand and marketing will be partially dealt with through the marketing component of this project. Moreover, credit program compliance with credit element criteria Nos. 9 and 10, presented in Section III.c.2 will assure that no credit is granted for production for which adequate marketing arrangements do not exist. Other elements required for a diversification from bananas seem to be present. For example, Ministries of Agriculture of the LDCs seem to have adequately operating programs for the

TABLE 3

Major Uses for which Additional Credit Would be Used if Available,
According to CDB LDC Small Farmer Study Survey (in percent of
farmers in size group)

	Percentage of total	Percentage 1 - 5 acres	Percentage 5+ - 10 acres	Percentage 10+ - 25 acres
Number of respondents	288	208	47	33
<u>Uses of Additional Credit</u>				
Fertilizer/Chemicals	50	50	52	38
Diversification from bananas	35	35	38	41
Land clearing and preparation	22	23	19	28
Improved Access Roads	17	13	21	34
Rent additional land	24	25	23	30
Purchase land/expand farm	9	7	13	13
Irrigation	9	9	4	10
Purchase sprayers	8	8	10	13
Fencing	5	4	11	7
Livestock	5	5	4	7
Other	18	19	25	13
Never considered/can't say	2	1	4	3
Would not borrow	7	9	2	3

Source: CDB Small Farmer Study

distribution of good quality planting materials (only 11 per cent of the surveyed farmers cited this as a constraint). In addition, the AID supported CARDI project should begin bearing fruit (and vegetables) during the life of this project.

d. Land Clearing and Preparation

One of the principal inputs into land clearing and preparation is labor. Thirty-three per cent of the farmers surveyed indicated that the shortage of labor was a limiting factor on increasing their output. It is clear, however, that there is only a labor shortage or surplus at a given wage rate. Given the income distribution objectives of this project, a labor shortage can only be considered to be beneficial. The lack of adequate machinery does not appear to be a constraint as this was only cited by 16 per cent of the farmers surveyed.

e. Renting of Additional Land

Although 23 per cent of the surveyed small farmers cited land availability as a limiting factor, an adequately operating land rental market does operate in the LDCs. Although 80 per cent of the small farmers surveyed owned at least one piece of land, 53 per cent cultivate land that was not owned (29 per cent rented and another 11 per cent share-cropped). Ten per cent rented land to other small farmers (10 per cent in the 1-5 acre group as well). Although land renting is much more prominent in some LDCs than in others (e.g. 69 per cent of the farmers in Montserrat rented some land, contrasted to only 24 per cent in St. Vincent) all of the surveyed LDCs have an active land rental market. Charges on land rental in general do not appear to be excessive (averaging \$8/acre according to the survey), in spite of the fact that LDC land policies are far from optimum. An important factor in land rental availability appears to be the decline in estate agriculture which is making more estates and portions of estates available for small farmer rental.

2. Agricultural Inputs

Technology utilization by small farmers in the LDC Caribbean countries varies considerably between countries and between crops, crop mixes and crop/animal agricultural production systems of small farmers. Small farmer activities in Belize, for example, may vary from slash and burn techniques for corn and bean production by "milperos" to sophisticated technology with modern inputs on highly intensified family farms (vegetables, chickens, egg production, etc.) by recent immigrant Mennonite families. In this example, the extremes in technology levels should not be assessed in terms of being "good" or "bad", but rather in terms of whether the technology is appropriate to the social, environmental, resource availability, and economic context existing in the country. The "milperos" are employing a type of technology that is probably most appropriate in Belize at its present stage of development and at this particular time, given farmers' knowledge and resource endowment. The intensive level of technology employed by Mennonite farmers who use tractors, fertilizers, pesticides and crop/animal mixes employing a great deal of skill, management, costly inputs and large amounts of family labor also is appropriate for their circumstances and locations.

In the Eastern Caribbean Islands, technology utilization in the most important export crops is at a high level. The most important export crop, bananas, is grown by all types of farmers. The level of technology is considered to be high in both large estates and by small farmers. This is true principally because of the organizations of farmers into grower associations which provide fertilizers, pesticides, packing materials, and technical assistance to farmers usually at somewhat subsidized costs. The associations also serve a vital role in marketing and finance aspects of banana production. Fertilizer usage on bananas is employed by as many as 64% of the farmers. Fertilizer intended for use on bananas is often diverted to other crops. This indicates that farmers know of the benefits that can be obtained. Sixty-three per cent of the farmers surveyed indicated that they fertilized ground provisions (root crops).

In general, the level of technology by small farmers on crops other than bananas is mixed. This is due largely to the unavailability of inputs, and the lack of resources to buy them. The lack of production credit mechanisms is also a contributing factor. In spite of the foregoing, only 12% of all small farmers surveyed indicated that they did not fertilize within the past twelve months.

The principal characteristics of small farmer agriculture in the Caribbean Region is that it is based on tree crops in mixed stands. Tree crops include bananas, plantain, coconuts, citrus, cacao, coffee, nutmeg, bay, mangoes, avocados, and other tropical fruits. This tree crop technology is recognized by Caribbean farmers as being a sensible one which provides a substantial income with relatively little effort, skill, or costly inputs. This technology is appropriate for use on sloping terrain, rocky or infertile land which is not appropriate for cultivated annual type crops. This tree crop technology is also suited to small animal agriculture. Sheep, goats, swine and chickens are able to browse or graze on the lower canopy of grass or weeds or can be fed cull fruit that might not be able to be marketed.

In the case of annual crops, such as maize, peanuts, vegetables, beans, sweet potatoes, cassava, and other root crops, the level of technology by the small farmer is most often low. There is need for better crop varieties, increased use of fertilizers and pesticides, more exacting cultural practices and better post harvest handling. Because of the need to produce more of these types of products, improvements in the use of appropriate quantities of yield-increasing inputs are highly justified. One of the objectives of the project is to provide alternatives for farmers to diversify from bananas to other more valuable crops.

Since most farmers are knowledgeable regarding the use of fertilizers, the likelihood of use of fertilizer and other inputs to be provided by this Project appears high. This Project will assist in making production inputs available under short term credit arrangements. The level of technology by the average small farmer is not expected to change by quantum leap, but by incremental steps to gain experience and knowledge as diversification from bananas is gradually brought about. Variations in the tree crop technology mixed with increasing areas of more intensified annual food crops is expected to be accomplished over time. The rate of change will be determined by the various constraint factors mentioned throughout other sections of the Paper.

To the extent that technical assistance is needed for problem solving in crop production, marketing technology, input or credit systems, engineering or access road design or construction, the CDB expects to contract with the Caribbean Agriculture Research and Development Institute (CARDI), Latin America Agribusiness Development Corporation (LAAD) or otherwise arrange for assistance from other entities such as the International Fertilizer Development Center (IFDC), the University of the West Indies (UWI), International Agricultural Research Centers (CGIARs), the International Agricultural Development Services (IADS), or others as appropriate. The use of these sources of expertise will assure that unforeseen technical problems will be addressed.

3. Marketing

While there is no standard methodology or technology for successful marketing activities, the marketing sub-project selection criteria presented earlier in this Project Paper, describes in detail the requirements and types of marketing activities that can be considered for financing. The types of activities described earlier can be implemented without any technological breakthroughs as the proposed marketing activities can be undertaken with known equipment and technologies. The level of technology needed by a particular marketing activity can be programmed to the types of commodities to be marketed. In other words, it is possible to implement a marketing activity at either low, medium, or high levels of technology depending upon the type of commodity being grown. This is important to remember especially when looking at the social soundness of a marketing activity. For the purpose of determining the suitability of an existing or proposed marketing technology which may be introduced as a result of a marketing activity, a model of three different levels of technology is described and analyzed below.

a. Low Level of Technology

For crops such as cassava, yams, sweet potatoes, dasheen, tannia, plantains and other carbohydrate food crops, the level of marketing technology demanded can be described as low. These traditional crops are the basic component of most diets and are grown by small farmers for their own consumption needs and for sale to local and territorial markets. The commodities are often handled in bulk form (in large bulk containers or 200-pound sacks after harvest) with virtually no grading.

Storage periods for these crops in the marketing channels are usually short and they are stored under rather primitive conditions. No refrigeration is required for these products, although cool storage is desirable.

In summary, the technology methods in the marketing system for ground provisions might need only minor improvements such as the provision of adequate handling, washing, sorting, transportation, rudimentary storage, and marketing stalls at wholesale or retail marketing locations. Also at the farm level better techniques of harvesting with less product damage are needed.

b. Intermediate Level of Technology

For some crops, more sophisticated methods of post-harvest handling, packaging, transporting, and care are required for some products. For example with cacao, coffee, bay, nutmeg and others, a certain amount of primary processing and special handling is required at the farm or just outside the farm.

Secondary processing is also required in subsequent steps in the system. In the case of rice, peanuts, corn, beans and similar grain crops, proper threshing, cleaning, drying, and bagging are required to prevent losses in the marketing process. For citrus, mangoes, avocados, and similar fruits special handling is required in grading, sorting, packing, and transporting to minimize fruit damage which results in high product losses.

Sub-projects with marketing activities are expected to be funded to provide for primary processing, drying, grading, packing, and transporting these types of crop products. These intermediate type technology innovations, while not new to the Caribbean, will be extended on a wider scale to farmers and farmer groups who are interested in participating in improvement of these phases of marketing. It appears at this stage that the introduction of a variety of intermediate techniques are needed and are appropriate. Adoption of appropriate techniques offer opportunities for improved efficiencies, lower costs, improved grades and increased incomes.

c. High Level Marketing Technology

The employment of more specific and exacting marketing techniques is required for some groups of agricultural products such as highly perishable vegetables, vanilla, meat, dairy products, processed poultry, fish, and similar foods. These techniques include primary and secondary processing, grading, packaging, labelling, and refrigerated storage often at specific temperatures for specific periods of time, sanitation control, and special transport facilities. The marketing technology is specific for each of these products. It will be necessary to assure that sub-projects containing marketing activities involving sophisticated technology are based upon adequate knowledge of marketing procedures. This type of marketing technology is well known and transferable expertise can be obtained from a variety of outside sources, if it cannot be obtained in the specific LDCs where activities will be implemented. In summary, the transfer of high level types of marketing techniques and procedures is feasible. Use of such sophisticated techniques, in fact, are essential to minimize losses of perishable products.

4. Feeder Roads

The CDB is currently financing feeder roads in Belize (110 miles) and in the island territories of Dominica (35 miles), St. Vincent (26 miles), Grenada (30 miles), and St. Lucia (37 miles). The purpose of the Belize feeder roads is to reduce the loss of sugar cane that cannot be delivered to the processing factories due to inadequate roads which become impassable during wet weather, and also to expand cultivation. The purpose of the island roads is essentially the same with the principal crop affected being bananas. Most of the feeder road construction consists of upgrading existing dry weather tracks, though some new construction is contemplated. Based on past experience the CDB estimates that in the islands only a maximum of 13 miles of feeder road could be constructed annually while in Belize the figure is 27 miles per year. The slow pace in the islands is due to the heavy rainfall and rugged terrain. The major technical considerations relating to road construction are:

a. Availability of Equipment

In general the Governments of the LDCs where feeder road construction is contemplated (Belize, Dominica, Grenada, St. Lucia and St. Vincent) have sufficient equipment to undertake the work envisaged; however, there may be cases where certain items of equipment have been damaged or are inoperative due to accidents, floods, or other causes. When this situation prevails, major equipment items rented from the private sector or new procurement may be financed with loan funds when so recommended by the consulting engineering firm engaged to supervise construction and with the approval of the CDB.

b. Phasing of Construction

Feeder road construction financed by the CDB is generally phased for completion over a 3-year period. Loans to date have been for 26 to 35 miles (10 - 12 projects) in each state with construction at the rate of 10 to 12 miles (3 - 5 projects) per year. It is hoped that, under the AID loan, the rate of progress can be stepped up. However, by keeping all projects highly labor-intensive, it is doubted that much improvement can be achieved in this regard.

c. Maintenance Capabilities of LDCs

Funds for the maintenance of all roads (including feeder roads) in the CDB LDCs are channelled through the Department of Public Works which operates under the direction of the Ministry of Communications and Works. Repair and maintenance work is accomplished by direct labor using the department's own forces. Maintenance units are established in every Parish or District under the supervision of road officers. The general pattern is to employ small teams of 6 to 8 laborers which are directed by a foreman. The team also includes 2 or 3 semi-skilled workmen. These units are responsible for cleaning verges, freeing

blocked drains and culverts and patching road surfaces which have become unravelled. Equipment normally available for maintenance in each District or Parish includes:

- 1 - small mobile hot mix plant
- 2 - Dump trucks
- 1 - 3 ton roller
- 2 - Self propelled bitumen sprayers

- Assorted hand tools

A supply of bitumen, sand, gravel, rock chips and sometimes portland cement (for repairing culvert headwalls, bridge floors etc) is stockpiled at strategic locations. The estimated cost of feeder road maintenance on a per mile basis is EC\$8,000 (U.S.\$4,000) per annum.

The maintenance of roads in the LDCs has never been carried out in an orderly manner and hence leaves much to be desired. There is generally no engineering evaluation of the maintenance problem and the use of labor, equipment and material is often haphazard and uncoordinated. Road maintenance is generally considered secondary to new construction and maintenance funds are invariably inadequate to do a satisfactory job. The predictable result of the neglect in establishing a proper system of maintaining existing roads is the rapid deterioration of the road base and surface and the attendant high cost of vehicle maintenance.

In March 1973 the CDB Technical Division, realizing the need for improvements in the present system of road maintenance in the LDCs, prepared an appraisal report setting forth a scheme designed to correct the major deficiencies. That scheme which has now been thoroughly considered by the LDCs, will be presented to the CDB Board this year. It will provide for the following:

- an adequate complement of road maintenance equipment;
- a management organization for proper supervision of maintenance;
- training of Public Works personnel in modern maintenance techniques and in management accounting;
- the necessary materials and labor.

The scheme is programmed for a period of 5 years and the estimated cost is EC\$9,287,000 (US\$4,643,500).

d. Justification for Surfaced Feeder Roads

Agricultural roads in the LDCs except in Belize where the terrain is flat, must generally be paved roads because of the following reasons:

- The topography in the LDCs is extremely difficult. The only flat areas are to be found in the coastal plains which are generally less than a mile in depth, accommodate centers of population, and therefore are not available for agriculture.
- Rainfall is high. Isohytal maps for the Windward Islands (Dominica, St. Lucia, St. Vincent, Grenada) show an average yearly rainfall of 80 inches along the coast to 230 inches in the mountainous backbone which characterizes the topography.
- Route location for the existing arterial roads are along the coast with all agricultural roads in the hinterland where annual average rainfall is 160 inches and on the mountain slopes where average annual rainfall is 230 inches.
- Grades are well in excess of 10% with a maximum of 18-20% not infrequent.
- Grades are much steeper than the crossfall of the roads, precluding the use of unpaved roads, which would be eroded with the first heavy rainfall and become impassable.
- Experience in the Windward Islands dictates that in the construction of roads of any class, paving is required if the useful life of the road is to be more than a few months. Paved roads with proper maintenance could have a useful life of up to 15 years. The useful life of an unpaved road is usually the period between the completion and the advent of the first rainy season regardless of maintenance.
- Soil conditions present a problem in that all sub-grades have a high clay content. Unless roads are paved or receive bituminous sealing applications, water is trapped and pumping through the sub-base results in land slides and destruction of the carriageway.

e. Feeder Road Construction Costs

Due to differences in topography, geology, availability of construction materials, cost of petroleum products, transportation, labor situation etc. the cost of feeder road construction in the LDCs of the CDB is quite variable; however, such costs have increased steadily during recent years. A typical example of the extremely rapid increase in construction costs is found in the case of Grenada feeder road project (30 miles) for which a CDB loan application was filed in July 1972 and a loan in the amount of EC\$1,607,520 (US\$803,760)

was approved in January 1973. By the time the plans and specifications were completed the estimated costs had risen by 77% and it was necessary for the Government of Grenada to apply for an increase in the amount of the loan. In June 1974 the CDB approved an increase in funds to EC\$2,769,000 (US\$1,384,500). Similar problems are being encountered in the other LDCs and the per mile costs of feeder roads may be expected to continue to increase though at a decreasing rate.

Current per mile costs being encountered on feeder road projects in the CDB LDCs where additional construction is contemplated are as follows:

<u>Country</u>	<u>Type of Surface</u>	<u>Average Cost Per Mile (US\$)</u> *
Belize	gravel	30,000
St. Lucia	bitumen	50,000
Grenada	bitumen	57,000
St. Vincent	bitumen	60,000
Dominica	bitumen	68,000

* Design and supervision of construction not included.

A typical CDB cost estimate for LDC feeder road project, showing a breakdown using updated unit prices, is included in the following table:

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u> EC\$	<u>Total Cost</u> EC\$
Clearing and grubbing	8,000	sq.yd.	0.50	4,000
Excavation	3,500	cu.yd.	3.00	10,560
Filling and Compacting	1,500	cu.yd.	3.50	5,250
Grading and Ditches	3,500	sq.yd.	1.00	3,500
Culverts and Paved Gutters			lump sum	10,000
Sub-base (larrish, tuff and river gravel)	2,640	cu.yd.	10.00	26,400
Base (in crushed stone)	980	cu.yd.	22.00	21,560
Pavement	7,040	sq.yd.	3.50	24,640
Surface Dressing	7,040	sq.yd.	1.50	10,560
Verges	3,520	sq.yd.	1.00	<u>3,520</u>
			Construction Cost	119,990
			Contingencies (5%)	6,000
			Design and Supervision of Construction (12%)	<u>14,400</u>
(US\$1.00 = EC\$2.00)			Total Project Cost	EC\$ <u>139,400</u>

f. Conclusion on Technical Soundness of Feeder Roads

The technical soundness of any construction project depends, to a certain degree at least, on the capability and expertise of the professional engineers and technicians who locate the projects, establish the design standards, specify the methods of construction, select the consulting firms which will prepare the detailed plans and specifications, decide on project phasing, prepare preliminary cost estimates and monitor construction progress.

The CDB Technical Division Staff is comprised of eleven individuals, i.e. a division head, 6 engineers, 3 housing officers and a port management consultant. The geographical origin of the staff is as follows: Guyana - 4; Dominica - 2; Colombia - 1; St. Vincent - 1; St. Lucia - 1; Canada - 1 and USA - 1.

Due to the wide variety of projects in which the CDB is involved, i.e. rural electrification, water supply, sewerage, highways, feeder roads, ports, housing, airports, industry, land reclamation and marketing facilities, it has been unable to retain a specialist in each of the several disciplines. Instead it has developed a staff of general engineers most of whom have worked in the area for many years. These men are completely familiar with the physical, meteorological, political, and social constraints of the various islands. Consequently, they have been able to assist in the preparation of comprehensive appraisal reports on projects for which Member Countries are seeking loans. These reports, which are similar to those prepared by the IBRD, from an engineering standpoint are complete in practically every respect and are in sufficient detail to enable a technical project evaluation to be made by professional persons.

The CDB's experienced and highly competent staff which investigates and evaluates proposals from the Member States gives a high degree of assurance that projects approved for construction are technically sound.

5. Environmental Impact

The agricultural activities which will be engaged in as part of this Project, the overall Program and Sub-Projects in the LDCs will have a positive overall impact on the environment in the sense that productive utilization of land and water resources will result. The diversification from bananas to other crops is not expected to change the existing predominating system of mixed tree cropping to any significant extent. The mixed tree cropping system is considered to be a valuable method to minimize soil erosion or leaching of nutrients from the crop root zones of the soil. Tree crops tend to decrease rain water runoff and allow for water penetration into soils, thus adding to the overall water reserves in watersheds, providing for more uniform stream flows throughout the year and making more water available for irrigation, human consumption, and industrial uses.

Cropping systems of cultivated crops such as corn, beans, peanuts, sweet potatoes, cassava will normally take place on slopes of 15° or less or on flat lands. Even when cultivated on somewhat sloping land, the degree of soil erosion should be very small because soils are not normally turned over or plowed by heavy machinery, but rather are left undisturbed except for the spot where seeds or plants are planted. In cases where beds are made for vegetables, the

areas are usually small and are contoured to provide for appropriate water retention and drainage and to minimize erosion. Such areas in vegetables are quite often surrounded by other areas in tree crop mixes which provide wind break and water erosion control to the overall macro area. The existing cropping system and any minor modifications in cropping systems resulting from the Project are conducive to providing adequate environmental protection.

The use of fertilizers at low to moderate levels as anticipated in the crop activities of the Project will not have any detrimental effect upon the environment. The low rates of usage are not expected to provide quantities of chemicals to the soil that would be considered toxic. Even if high rates of chemicals were used, the absorption of these chemical elements by plant roots and transfer of the chemicals to plant tissue is nature's environmental protection mechanism to equalize any imbalance. The deep penetration of tree crop roots provides a unique mechanism of nature to recapture and recycle into above soil portions of plants the chemical nutrients that might otherwise be lost from the soil root zone through the ground water by heavy leaching rains.

The use of pesticides (insecticides and fungicides) do not constitute a threat to the physical environment because rates of usage will be low. Even when "contamination" of soils by organic type insecticides or fungicides might occur through accident or constant, heavy usage, the dangers to the environment are not usually serious or long lasting because of the phenomenon of anaerobic micro organisms in the soil of degrading these toxic materials into non-toxic organic forms.

Adequate technical capabilities exist within the Caribbean Region to assure that the least toxic forms of agricultural chemicals will be employed. This will minimize any dangers that may arise from incidences of improper handling and usage of materials in their concentrated form or usage of containers for these materials. The mechanisms to be established within the Input Distribution portion of the Project are expected to assure that any toxic materials are adequately labelled and packaged and that adequate instructions and warnings are given to users to provide safeguards to health.

One of the criteria for approval of loans for sub-projects is that the Borrower will be obligated to assess the impact that sub-project activities will be incorporated into the Loan Agreement.

Labor intensive construction activities of access roads to farming areas are expected to minimize disturbance of terrain, grade sloped, vegetation and other environmental features in areas adjacent to roads. The design of roads will essentially follow land contours to the maximum extent possible. The design of roads will also provide for contoured lateral drainage with necessary structures to reduce flow rates. Cross drainage will be provided by culverts, bridges and stream foids as appropriate. Soil erosion will thus be minimized.

Market activities will occur principally in metropolitan areas where markets of many types already exist. The Project envisions improvement, expansion or possibly renewal of these markets. These activities will have no deliterious effect upon the metropolitan market area environment, but will actually improve conditions of sanitation, human and vehicular traffic, working conditions and other general aspects of the market area.

B. Economic Justification

1. Production Credit and Inputs

a. Demand for and Supply of Credit

As pointed out in the technical analysis section of this paper, only 7% of the small farmers interviewed in the Small Farming Study survey indicated that they would not borrow if "adequate and acceptable" credit were available to them and 91% stated that they would borrow for the purposes stated in Table 3 (technical analysis section). 37% of the farmers interviewed stated that the lack of available credit was among the most limiting factors affecting their farm's output.

70% of the farmers interviewed stated that the cost of fertilizers and chemicals were among the most limiting factors for increasing their output. What is not clear from this response is whether the costs of these inputs were so high as to not justify their employment or whether the financial cost of these inputs were so high as to be unattainable without credit. Given that 50% of the farmers interviewed indicated that they would borrow for fertilizers and other chemicals if credit were available to them, it must be concluded that many of the 70% were in fact concerned about the "financial costs" of these inputs and would in fact employ them if a source of financing were available to them. Moreover when farmers were asked "is there anything that could be done for the crops you currently grow which you believe would profitably increase their yield," 75% of the farmers interviewed replied "more fertilizer".

If it is assumed that 50% of the small farmers in the LDCs who say that they would borrow (91%) would actually apply for production credit loans if these were available and would be credit worthy under the program's criteria then it is estimated that there exist approximately 25,000 potential production credit borrowers. If it is further assumed that the average loan size under this scheme will be \$600 (discussed below), then total small farmer potential credit demand can be estimated to be approximately \$15.0 million. The estimated credit demand thus exceeds by far the preliminary estimate of funds for this component (around \$4 million) and in fact approximates the size of the whole small farmer program, exceeding total AID resources to be made available by \$5.0 million.

In the Small Farming Study's survey, several questions were asked about the small farmer's credit experience. The responses to these questions are presented in Table 4. Several inferences may be made from Table 4. The first is the notable lack of credit in general and of short-term credit more specifically; only 11% of the surveyed farmers applied for any credit at all in last three years and only 4% for credit with repayment periods of 12 months or less. Secondly, it can be noted that farmers with larger size holdings were much more apt to apply for and receive credit. Finally, it should be noted that 90% of the farmers in the total sample and 96% in 1-5 acre range never applied for credit - one apparent explanation being that they considered the profitability of receiving a loan low relative to the effort involved in attempting to secure one.

It can safely be concluded by Tables 3 and 4 that the demand for credit, especially short-term production credit far exceeds the supply and that at present the banking sector does not adequately supply the small farmers credit needs, especially his short-term needs. A further implication which can be drawn from the two tables is that small farmers are apparently so alienated from the banking system that special promotional efforts will probably be required to assure that loan applications from small farmers will in fact be forthcoming in any program. Accordingly, provisions will be included in the CDB's lending criteria to provide for such promotional programs - probably by radio as the Small Farming Study survey indicates that this is the most widespread communication media information source available to small farmers and is apparently the least scale - biased source when compared to such other information sources such as print and demonstrations.

TABLE 4

RECENT SMALL FARMER CREDIT EXPERIENCE. LOAN APPLICATION SOURCES, REPAYMENT PERIODS AND OCCURRENCE OF LOAN REJECTIONS FOR THE LAST THREE YEAR PERIOD. (SMALL FARMER STUDY SURVEY).

	<u>Total</u>	<u>1+ - 5 Acres</u>	<u>5+ - 10 Acres</u>	<u>10+ - 25 Acres</u>
No. in Sample	288	208	47	33
% Applying for Loans, Total	11	1	24	39
% Commercial Banks	5	+	12	23
% Subsidized Banks	6	1	12	16
Repayment Periods, Loans Applied for				
% 0 - 12 months	4	1	6	6
% 1 - 3 years	3	+	4	13
% 3 - 5 years	2	-	8	6
% 5+ years	2	-	6	14
Occurrence of Loan Rejection				
% Rejected	4	2	4	10
% Never Rejected	7	2	12	26
% Never Applied	90	96	82	62

Source: CDB-AID Small Farmer Study Survey

Note: Slight errors exist due to rounding

b. Returns to Credit and Average Loan Size

The critical question which should be addressed here is the degree to which small farmer production credit components can be expected to achieve increased small farmer incomes and production and with what efficiency. Unfortunately, given the data available, it is possible to address the above concerns only in an indirect manner. There is a paucity of farm level data on costs and returns for individual crops raised by the target group. The CDB/AID Small Farmer Study survey which in most regards is extremely useful, did not adequately address itself to these questions. Given the costs and returns data that are available it is extremely difficult to distinguish with any degree of precision between different technology levels to permit estimates of returns to increased levels of inputs purchased with additional credit. The lack of small farmer oriented production data is a serious constraint to analysis. Most production technology data is oriented towards larger farms (estates or plantations) and irrigated land; thus useful comparative costs and returns information is not available even from experimental data (reflecting in part the low priority which the peasant sub-sector has received).

The CDB Small Farming Study survey does permit the making of a rough estimate of returns to input use. The following Table indicates that farmers utilizing fertilizers or chemicals had a new cash income per acre 27% higher than those who use neither.

Returns to Input Use, Per Farmer and Per Acre
(Net Cash Income, Fertilizer/Chemical Use v. Non-Use)
(EC\$, 2:1)

	Net Cash Income	Net Cash Income Per Acre
Use of Fertilizer or Other Chemicals	584	168
Use No Fertilizer or Other Chemicals	302	132

Source: Estimated from CDB Small Farming Study survey preliminary supplementary tabulation

Although these figures indicate that in general a favourable return to input use can be expected, lacking more definitive information on degrees of profitability by crop and on other factors besides availability which may govern credit use, the conclusions which can be drawn are at best tentative. For example, it could well be that farmers utilizing credit and higher technology levels are producing for limited external markets and that given problems of demand indivisibilities and market constraints, increased production by even a small number of farmers would produce gluts leading to decreased prices and profitability. Given such possibilities, the importance of the specific territory by territory analyses to be performed in the Country Investment Programs (CIP) and the Production Credit Program (PCP) can be seen as these will have to analyze specifically such factors as marketing arrangements and demand for anticipated increased output.

Perhaps the strongest arguments which can be made in favor of the profitability of increased production credit is that the farmers themselves appear to be anxious to borrow. This is true in spite of the fact that they have apparently little, if any, credit experience.

Table 5 indicates that the average cash costs of production per target group farmer was approximately US \$446. Preliminary estimates based on special tabulations of the Small Farming Study Survey data indicate that for users of inputs the average cash cost of production is at least 33% higher. Information on credit user cash input costs from the survey is not available, but given that farmers are at present under-financed, it is to be expected their cash input costs would be higher still. Thus assuming that relatively complete but not 100 per cent financing of cash production costs is desirable (among other reasons to keep credit program participants away from more informal credit channels, which may have more efficient collection techniques), a \$600 average sub-loan size would seem to be a reasonable estimate.

Table 5 also shows that the average present production cost cash outlay per acre is approximately \$158. Again, on basis that the average outlay of an input using farmer is at least 33% higher than the average, and keeping in mind the present situation of under-financing, an average financing estimate of \$210/acre appears reasonable. Given that the maximum size holding of eligible farmers is 25 acres, it can easily be seen that the \$2,500 upper level loan limit in fact imposes an additional constraint on the credit program to help insure broad-based small farmer participation. On the basis of improved data and experience that will be available at the time of the Project's first evaluation, the \$2,500 limit may be revised.

TABLE 5

SALES OF FARM PRODUCE, COSTS OF PRODUCTION (CASH OUTLAY),
NET CASH INCOME FROM FARM, NON-FARM CASH INCOME PER FARMER
AND PER ACRE, IN EC\$ 2:1 ESTIMATES FROM SMALL FARM STUDY SURVEY

	<u>EC\$/Farmer</u>	<u>EC/Acre</u>
Sales of Farm Produce	1257	445.7
Cost of Production (Cash outlays)		
Land Rental	4	1.4
Fertilizer	279	98.9
Chemicals	65	23.0
Tractor Services	12	4.3
Hired Labor		
Soil Preparation	155	55.0
Planting	109	38.7
Fertilizer Application	37	13.1
Harvesting	105	37.2
Weeding	114	40.4
Other	12	4.3
(Total Hired Labor)	(532)	(188.7)
Total Cost of Production(Cash outlays)	892	316.3
Net Cash Income from Farm	365	129.4
Other Cash Income	127	-
Total Cash Income	492	-

Source: Estimates based on CDB/AID Small Farmer Study Survey

Note: In kind consumption is excluded

2. Marketing

The Small Farming Study in the Less Developed Member Territories of the Caribbean Development Bank, carried out in preparation for this loan, indicated that food marketing, national, regional and extra-regional, is one of the most critical constraints to growth in the agricultural sector.

The latest data on export volumes show that sugar, bananas and citrus exports continued to decline below the 1967-69 levels. The domestic agricultural sector is also in poor condition; evidence of this is the large and growing volume of imported food, especially grains, meat, and dairy products which are destined both for domestic and tourist consumption. Recently, foodstuff imports have reached US\$155 million (US\$86 million crop and crop products and US\$69 million livestock products). Except for wheat and flour all these commodities are widely produced in the Caribbean. Between 1965 and 1972 agricultural export rose from US\$202 million to US\$253.5 million, or at an annual growth rate of 3.3%, while agricultural imports increased from US\$164 million to US\$304.5 million, or at an annual growth of 9.2%. During the period the region as a whole switched from an agricultural surplus to a deficit area.

The problem of low productivity and ineffective market coordination is an extremely important element tending to depress food production in the Caribbean. Assembly costs are relatively high. Few assemblers have improved their systems or to reduced costs. Conditions are accepted as they are and few efforts are made to improve their own marketing practices or those of their suppliers and customers. Farmers are not encouraged to specialize in production, or to improve product quality, through on-farm grading, improved packaging or better handling methods. Shipments leaving the farm often include over-ripe and damaged produce as well as stalks, stems, rocks and foreign materials.

During the past decade, government-operated marketing organizations have tried to improve the antiquated marketing situations which exist in many territories but have been constrained by inadequate facilities, poor management, and by the narrow range of commodities handled. Livestock and many fresh fruit and vegetable food crops are frequently excluded from the limited systems of grading, pricing and storage.

Aggressive promotional efforts by either the private or public sector in the Region to increase both quantity and quality of food products have not materialized. In order for imports to be reduced, the marketing system has to change drastically and aggressively. It must respond to: the extremely broad range of the purchasing power structure; the tourism industry demanding high quality, standardized produce; upper income residents demanding a variety of convenience foods; and the majority of the population seemingly willing to accept lesser quality, at somewhat lower prices.

The matching of supply and demand calls for considerable coordination at both territorial and regional levels and a degree of discipline and control of production (not yet achievable) to avoid disastrous market gluts of extremely "thin" local and territorial markets especially for fresh produce. Two other factors are crucial; production of the quality of crops acceptable in the market and expedited transport from areas of production to the ultimate market. Quality has not received enough attention; for example, Caribbean grown carrots are often of such low quality that carrots imported from Canada, priced at 2 to 3 times the level for local carrots are preferred by buyers. Intra and inter-island transport of fresh fruits and vegetables, and distribution to the ultimate markets are at present seriously deficient.

Except for the traditional export crops, there is a lack of territorial specialization in the production of individual commodities, which is further aggravated by the vast geographic fragmentation characteristic of the Caribbean. Consequently, production of a given product may be scattered over a wide geographic area. The effects of this geographical dispersion are several. First the farmer may not be specialized in the production of those crops best adapted to his soil and climate; second, the problem of assembling the marketable surplus is more difficult, time-consuming, and costly. Third, the marketable surplus in any territory may be so small or seasonal that it would preclude a marketing intermediary from providing specialized marketing services. This point is reaffirmed by the fact that 30% of the small farmers interviewed by the recent Small Farmer Study survey indicated that lack of a market demand was one of the principle constraining factors to their farming operations. Fourth, since the small market volumes in many areas can support few market intermediaries, either public or private, the structure of a local or territorial market may be monopsonistic or at best oligopsonistic. In relation to the foregoing, the small farmer survey indicated that 37% of the small farmers did not expand production because of the low selling price for their produce. Also according to the survey, productivity is seriously inhibited by the lack of an aggressive supply system. Private importers and distributors of agricultural supplies and inputs have not tried to seek out lower cost suppliers nor to engage in large handlings of these commodities because of low profit margins. At the same time, it is not in the interest of agricultural development and regional self-sufficiency to allow further rapid escalation of farm inputs prices. This has caused a few territorial governments through their marketing boards to take over some of the functions of supplying inputs.

Because of the existing nature of the marketing channels, individual farmers and "higglers" have found it difficult to establish stable and routine sales and supply channels. It appears that this has been perpetuated because of a lack of attention to the basic domestic crops and livestock products which has led to preservation of traditional management practices. Innovations such as grading, handling, and packaging improvements could improve overall efficiencies by minimizing wastage (shrinkage) and spoilage, but has basically gone unadopted. Losses as high as 20% - 30% within the marketing channels are not uncommon throughout the Region. According to Michigan State University's Latin American Marketing Program, case studies suggest that such innovations are adopted where product market channels are favored with a financially strong, innovative institution that can provide strong leadership. Under existing marketing structures and practices, transaction costs are high. Lack of standard packaging weights, measures and grades inhibit the flow of meaningful information, forcing higglers and traders to personally inspect each lot no matter how small. Thus physical handling costs are high as a result of the necessity to individually negotiate, handle and transport small quantities of product throughout the marketing system.

High handling costs have also been attributed to inefficient work methods, poor transportation scheduling, inefficient inventory management, improperly designed and poorly managed physical market facilities, inadequate and inefficient product

handling and packaging, and high levels of product theft, wastage, shrinkage and spoilage. These indicate serious managerial short-comings.

Perhaps one of the most critical constraining elements in the entire production/marketing system has been inadequate quantities of both short and long term credit for financing domestic marketing functions. The traditional ordering of credit priorities which tends to leave domestic marketing activities near the bottom of the list is not defensible if the food system in the Caribbean is to function as a transformation process where land, labor, management and capital resources are combined to satisfy the form, time, place and possession utility demands of all the people in the Region.

The marketing sub-project appraisal criteria and methodology (see Section III.C.2.c.above) presented, are designed to bias the selection of marketing sub-projects such that the most critical marketing constraints will be addressed.

An illustrative example of a typical marketing sub-project activity, financial/economic analysis, for a public sector marketing board is presented in Annex C Exhibit 1. (The example shown is illustrative only. The project is currently being implemented and financed by the CDB from non-AID resources and will not be part of the proposed program).

3. Feeder Roads

a. Purpose of Feeder Roads

The purpose of feeder roads is to provide the small farmer with easier and safer access to the market for his produce, to stimulate increases in land cultivated by him, to increase productivity, and to help the small farmer diversify his cropping patter. The Project contemplates the construction of all weather minimum standard feeder roads that range from one-quarter mile to five miles in length and which connect with already existing all-weather roads that provide the link to markets.

b. Small Farmer Target Group

Though the CDB does not place as much emphasis on the small farmer as does AID, the 5 feeder road projects primarily affect the small farmer. Though precise information is not extractable from the Appraisal Reports prepared by the CDB, in Belize the average farm size affected by the feeder roads is 11 acres while the average for the island territories appears to be between 5 - 10 acres. Since these feeder roads by the very nature of their location in more marginal lands appear to impact mainly upon the small farmer, it is safe to assume that the small farmer will continue to be the focal point of feeder roads considered by the CDB.

c. Rates of Return on Current Projects

Though the Appraisal Reports neither provide benefit-cost analysis of the individual roads nor of the roads in the aggregate for a given territorial "list", it is possible to make a rough estimate of the aggregate rate of return with the information given. Using St. Lucia as the typical example of the 5 feeder road projects currently being financed by the Bank, and applying the customary cash flow analysis as outlined in Section III.C.2.d, we obtained an internal rate of return of 16% (see Annex C, Exhibit 2). *With all the usual caveats, it appears that with the rather large demand for feeder roads, it should be possible to identify a significant number of feeder road projects that will provide at least a 15% internal rate of return (see following section for details).

d. Potential Demand for Feeder Roads

Though the CDB does not have specific roads enumerated at this time, as it does with the current feeder roads being financed, it is now in the process of obtaining from each territory a new list of the feeder roads each is planning to improve or construct in the next few years.

At this time the CDB estimates that it would use the AID loan funds to finance additional feeder roads in precisely the same countries currently building feeder roads with other CDB funds, discussed above, i.e. Grenada, Dominica, St. Vincent, St. Lucia and Belize.

The IBRD Caribbean Regional Study estimates that the four island territories identified by the CDB as likely recipients of AID loan funds for feeder road construction plan to spend approximately \$4.5 million for the two-year period 1977-1978, while Belize plans to spend \$11 million over the same period. Without considering probable governmental projections beyond 1978, a \$15.5 million demand for feeder roads by these LDCs would seem to provide ample assurance that there will be more than adequate demand for AID loan funds.

In addition, the Small Farmer Study survey reveals that when the farmers were queried about the effect of poor access roads on their productivity, approximately 50% replied that it was a major limiting factor.

e. Amount of Roads that Might be Built

To illustrate the total mileage that a given amount of loan funds could construct, we assume that \$4 million are available, that the average per mile construction cost for feeder roads in the island territories is \$60,000, and \$30,000 in Belize, the average overall cost being \$50,000/mile. Given these assumptions, it is likely that approximately 80 miles of feeder roads will be built under the Small Farmer Development Program.

* The example shown is for illustrative purposes only to demonstrate the type of analysis to be applied to AID-financed sub-projects. The illustrative project is currently being implemented and financed by the CDB from non-AID resources.

C. Government Policy Analysis

The CDB study of the eight LDC country situations covered the subject of government policies which affect the agricultural sector in general and the small farm sub-sector, more specifically. The general conclusion of the policy portion of the study is that there are variations from country-to-country in the seriousness of policy disincentives to agriculture. However, serious policy disincentives do exist in all of the LDCs in forms which jeopardize normal sectoral growth processes.

Most government policies have done little to improve the existing image of agricultural employment, i.e., hard work, poverty, and little opportunity for reasonable profit and self advancement. At the risk of over-generalizing or over-simplifying this problem area, the following policy disincentive categories are briefly described and analysed, indicating some examples of both positive and negative policies and their effects upon the agricultural sector of the LDCs.

1. Discriminatory government policies which protect non-agricultural sectors and do not protect agricultural endeavours; government policies which encourage - through estate type export crops at the expense of the small farmer food crop sub-sector. In St. Lucia, for example, there is no stated government agricultural policy. In St. Kitts, the thrust of government policy has been to strengthen the monoculture crop - sugar, which was largely in the hands of a few large farm families. In Antigua only limited attempts have been made to encourage domestic agriculture and small farming. The domestic food production sector has been neglected in favor of tourism. There is no agriculture development plan in Antigua. In Dominica, the thrust in agriculture is in tree crop development of a type that is not suitable or appropriate for small farmers. On the other hand, in Montserrat agricultural development is at the forefront of government policy with emphasis being provided to programs of land distribution and services to small farmers. Belize has recently developed a National Plan which provides many positive policies and programs to assist small farmers.
2. Discriminatory price policies which tend to favor consumers rather than providing incentives for increasing production; price control policies which discourage domestic production by pegging maximum prices of some domestic products below equivalent imported commodities. In St. Lucia, "Price Control Orders" have been used to control prices of food to consumers but no minimum price guarantees have been provided for producers. The use of controlled prices is not necessarily negative under some conditions - for example, where prices become inordinately high during brief periods of unstable supplies, this is not always the case, however. The CDB study on the LDC country situations provided examples in several LDCs where prices of imported foods (chicken parts, canned ham, and others) were allowed to rise and stay above the controlled price of identical, comparable or highly substitutable domestic products. Such policies are clear disincentives to domestic production.

3. Discriminatory tax policies on agricultural export products; imposing of import duties on agricultural equipment. In St. Lucia taxes have been imposed on copra and banana exports which are considered by growers to be a burden. In St. Kitts in the recent past, duties have been placed on farm vehicles and irrigation equipment. The Government has recently changed this negative policy by providing for a reduction of duties on farm vehicles and waiving duties on irrigation equipment.

4. Lack of adequate land tax and land utilization policies which tend to foster land speculation and under-utilization; inadequate land tenure policies or lack of political will to make necessary reforms. It is an accepted generalization in the Caribbean that policies of low taxes on land have allowed many estates to remain intact and operating at a marginal level of efficiency or in a state of slow decline. In Grenada, for example, only 65 - 75 per cent of estate land is in productive use while 90 per cent of small farm holdings are under cultivation. Where opportunities exist for non-agricultural development of estate land, these opportunities are exploited. Some of Grenada's best land has been used for housing or for recreation rather than remaining in agricultural production.

There is evidence that better land utilization policies are beginning to emerge in some LDCs. In Belize, for example, policies and programs have been started to provide as much as 100 acres to small farmers. Land distribution programs (in some cases estate land) have begun on a small scale in Montserrat, St. Kitts, Grenada, Dominica and St. Vincent.

5. Low percentage of public sector budgets allocated to the agricultural sector. In St. Lucia only 4.3% of the estimated public sector capital expenditures and only 5.6% of public sector current expenditures went to agriculture. In comparison, communications and works is allocated 79 per cent of capital expenditures. Although national budget allocations for agriculture are also low in Antigua, in recent years they have been increasing rapidly, i.e. 3 per cent in 1971; 4.1 per cent in 1973; 6.2 per cent in 1974 and 8.1 per cent in 1975. In many LDCs, allocations are low because of meager resources which are a result of fiscal and tax policies and a general decline in the agricultural sector's contribution to the economy. A turn-around is beginning to take place in some LDCs as a result of policy decisions and political will.

6. Credit policies that discriminated against small farmers. In most LDCs, government policies, programs or mechanisms to provide short term production credit to high risk small farmers do not exist. While each LDC has a DFC, such institutions extend credit for medium and long term farm development to farmers who have collateral (land titles usually). The minimum size for this type credit is so high that small farmers probably would not wish to invest in long term farm improvement without security of land tenure. The various grower associations (banana, lime, citrus, nutmeg, coconut, etc.) provide short term credit to farmers for these crops, but within the monopsony export market system so common to the Caribbean. The net effects of these marketing arrangements are often negative and harmful to the farmers in some respects.

In summary, although policy is perhaps the most important factor affecting agricultural development under government control, in the LDCs it is an under-utilized or mis-used tool. In the absence of government policy which makes development sense, the impact of AID resources provided under this project could only be minimal. Therefore, conditions have been established in the criteria and methodology for sub-loan approvals by CDB to assure that clearly disincentive policies, when and where they exist, are addressed and minimized. In cases where government policies are such as to cause serious negative impact, non-approval of sub-projects would be necessary. These criteria are described in other parts of the Project Paper.

D. Financial Analysis

1. Financial Analysis of CDB

a. Introduction

The CDB Charter requires a separate accounting of its Ordinary Capital Resources (OCR) and its general concessionary funds and prohibits commingling of these funds (although a single sub-project may be jointly financed by separate ordinary and concessionary loans). The two funds are required to be self-supporting, with the income generated by each window sufficient to cover the administrative and technical assistance costs related to its operation; e.g. OCR cannot be used to subsidize the operating costs of a concessionary fund. The loan terms and conditions for ordinary and concessionary lending are shown in Annex C Exhibit 3. As of 12/31/75, resources available to the Bank totalled \$146.1 million, comprised of \$34.3 million in ordinary capital, \$25.0 million in a Trust Fund contributed by Venezuela (to be loaned at commercial rates) and \$86.8 million in concessionary funds (see Annex C Exhibit 4). A total of \$90.7 million of these resources were committed under 170 approved sub-projects and \$29.3 million were disbursed. A review of the Bank's operations for the 1970-1974 period reveals a conservative capital structure and steadily increasing income from operations (see Annex C Exhibit 5).

b. Ordinary Capital Resources

The financial statements for 1975 indicate that OCR activities are currently operated at a profit (see Annex C Exhibit 6). As of 12/31/75 the Bank had no long term debt in its ordinary resources operation, however, the Board of Directors has recently approved a \$20 million loan from the IBRD and a \$7 million loan from the Japanese Export-Import Bank. The long term debt/equity ratio, after inclusion of these two loans, would be .76/1 reflecting a conservative capital structure for the OCR operation.

The OCR loan portfolio consisted of 43 loans totalling \$24.2 million of which \$9.9 million was disbursed. The dollar value of the OCR portfolio is heavily weighted in favor of the MDCs with 60% of the OCR dollar value of loans going to MDC public and private sector institutions, 32% to LDC public and private sector institutions, and 8% represented by one regional loan to the West Indies Shipping Corporation. The portfolio is reasonably diversified with 56% of the dollar value invested in agriculture, 31% in public infrastructure and 13% in tourism and industry loans. Broken down by type of borrower 61% of the loans are to ICIs, 31% to the governments and 8% to the private sector.

As of 12/31/75 one loan for \$407,000, i.e. 1.4% of the OCR portfolio, was \$39,787 in arrears with respect to principal and interest and loans totalling \$1.4 million, i.e. 1.4% of the OCR portfolio, were \$57,165 in arrears with respect to interest (these loans are still in the grace period). Full payment of the overdue amount was made within 3 months with respect to .5 million of the delinquent loans. Two loans have been made from the Venezuelan Trust Fund in the amount of \$6,360,000, however, they have not yet been disbursed.

c. Concessionary Lending Activities

Concessionary operations encompass 5 separate "sub-funds". Table 6 below provides a brief characterization of the activity and position of each at 12/31/75.

TABLE 6
(In \$'000)

	Available Resources	Commitments (signed agreements)	Disbursements	No. of Loans
Special Development Fund (SDF)	61,938	47,646	15,748	69
Agricultural Fund (Canada)	8,506	4,164	2,289	15
U.S. Housing Fund	10,300	3,040	654	7
Trinidad & Tobago Counterpart Fund	4,200	1,949	486	8
Commercial Livestock Production Fund (Canada)	2,297	-0-	-0-	-
	87,241	56,799	19,177	99

In view of the size of the SDF relative to total concessionary resources and activity (SDF represents 70% of total concessionary resources, 80% of commitments and 82% disbursements) the financial analysis of concessionary operations was limited to the SDF. Table 7 below reflects the current position and performance of the SDF "sub-fund" from inception to 12/31/75, by year, by donor and by sector:

TABLE 7
(in \$'000)

Year	Contributions		Commitments		Executed Agreements		Disbursements	
		%		%		%		%
1971	19,311	31	2,429	5	-	-	-	-
1972	-		8,373	17	6,456	14	- 7	-
1973	21,202	34	7,609	15	9,845	21	508	3
1974	10,000	16	20,677	41	6,321	13	1,882	12
1975	11,425	19	11,412	23	25,024	52	13,351	85
Total	61,938	100	50,500	100	47,646	100	15,748	100
<u>Donor</u>								
USAID	22,000	36	20,406	40	19,878	41	7,214	46
Canada	10,000	16	9,846	19	9,846	21	2,872	18
United Kingdom	8,513	14	8,338	17	8,256	17	3,051	19
Venezuela	10,000	16	9,378	19	9,378	20	2,500	16
Federal Republic of Germany	6,425	10	1,911	4	-	-	-	-
Colombia	5,000	8	621	1	287	1	111	1
TOTAL	61,938	100	50,500	100	47,645	100	15,748	100
<u>Sector</u>								
Agriculture			5,080	10			610	4
Industry			3,150	6			1,120	7
Infrastructure			41,230	82			13,770	87
Student Loans			1,040	2			240	2
TOTAL			50,500	100			15,740	100

The SDF is currently operating at a profit (see Annex C Exhibit 7). Net income for 1975 was approximately 2.6% of average total assets. However, 83% of its income was generated by short term investments which yielded approximately 10% on average investment as opposed to the 4% yield on its loan portfolio. Thus, as the mix of short term investments versus concessionary loans gradually becomes more heavily weighted in favor of the latter, the return on assets will likely decline.

In terms of loan disbursements, the performance of the SDF improved considerably in 1975. SDF disbursements during 1975 were more than 5 times the cumulative total of all prior years.

The SDF loan portfolio consisted of 69 executed loans totalling \$47.6 million of which \$15.7 million was disbursed.

Eighty-two per cent of the SDF portfolio is invested in infrastructure projects such as ports, electricity distribution, feeder roads, and water supplies; 10% is invested in agricultural projects such as marketing, agri-business, and land settlement schemes; 6% is invested in industrial projects such as industrial estates, small industry credit schemes, transport and tourism; the balance, 2%, is in student loans. Broken down by types of borrower, approximately 72% of the SDF loans were direct to LDC Governments, 15% were to ICIs and 13% was for one regional project (i.e. Leeward Islands Aid Transport). Annex C Exhibit 8 provides a more detailed analysis of the SDF portfolio.

As of 2/31/75 8 SDF loans totalling \$4.2 million were \$31,000 in arrears with respect to interest. All but one of the loans were less than 7 months in arrears and payment of the overdue amount was made within 2 months on 3 of these loans totalling \$2.1 million. None of the delinquent loans were considered uncollectible.

d. CDB Ability to Service Proposed AID Loan

The ability of the CDB to repay the proposed AID loan is, of course, directly related to the quality and management of its portfolio. As indicated above, both the ordinary and concessionary operations are operating at a profit. All of the concessionary loans are either direct to governments or, if to public sector intermediaries, carry government guarantees. Loans made to the private sector from the OCR are secured by mortgages or other forms of security. The OCR and SDF portfolios are reasonably diversified, and, for the most part, the sub-projects financed by CDB loans, both to the public and private sectors, are self-liquidating. In some instances, the CDB sub-loan agreements call for the establishment of funded reserves to be used for debt service on the loan. Repayment performance to date on CDB sub-loans appears to be satisfactory and no loans have been written off. The conclusion, based on these factors, is that the prospect of repayment of the proposed AID loan is good.

e. Need for Additional Concessionary Resources

As an ICI the CDB requires uncommitted funds in order to undertake new lending activities. As already noted, available SDF resources are now 82% committed against approved loans and 77% are covered by executed loan agreements. The Bank currently projects new commitments through 1977 of \$49.9 million (see Annex C Exhibit 9) which, after considering the current uncommitted balance and projected loan repayments, will require \$40.1 million of new SDF resources:

	<u>Projected Commitments</u>
1976	25.5
1977	24.4
	<u>49.9</u>
 <u>Sources of Funds</u>	
Uncommitted Balances of Existing Contributions at December 1975	11.4
Projected Repayments to Fund up to December 1977	0.4
	<u>11.8</u>
<u>Less</u> Portion of Colombian Contribution Payable after December 1977	2.0*
	<u>9.8</u>
Funds available to CDB	9.8
Projected Gap	40.1
	<u>49.9</u>

* The Colombian Contribution, for which the Agreement was signed in November 1975 amounts to US\$5 million. However, only US\$3 million will have been paid in by December 1977.

The prior AID loans to the SDF (538-L-001 and 538-L-003) are now 93% committed and 33% disbursed. As with the rest of the SDF portfolio, the disbursement rate on the AID-financed sub-projects improved significantly in 1975. Current projections of disbursements of AID-financed CDB sub-loans indicates that they will be fully disbursed by the terminal disbursement date of the AID loans, i.e. 12/31/77 on loan 001 and 12/31/78 on loan 003. In view of this, and in light of the technical and economic analysis which demonstrates the demand for the type of activities included under the small farmer development program, the proposed loan is considered to be justified at this time.

2. Analysis of Interest Spread

a. Direct Loans

The CDB financial policy establishes the interest rate for SDF lending at 4%. The costs of administering the SDF amounted to 12.3% of average loan balance in 1974 and 8.7% in 1975. Since a large part of the administrative costs are fixed, this decline is expected to continue as the size of the portfolio increases. Nevertheless, it may still be necessary to increase the SDF lending rate at some point to ensure its long term viability. The CDB management has in fact already requested Board of Directors' consideration of a 1% increase in the rate, however, this has not been approved to date. The 2% spread offered by the proposed AID loan will thus likely be inadequate to cover the related administrative costs and will therefore have to be supplemented by CDB funds from other sources. The CDB will be assisted in this respect by permitting a portion of the AID loan (up to \$500,000) to be used for project administration and by the provision of complementary grant financing for sub-project development costs.

b. Loans to Intermediaries

The agricultural credit component of the program and possibly some of the marketing activities (private sector) will be financed through public sector intermediate credit institutions in the LDCs. The CDB lends to these institutions at 4% and they in turn lend to final borrowers at rates ranging from 5% in Grenada to 8% in Montserrat and St. Lucia. Commercial lending rates in the Region are approximately 11%-12%.

In order to avoid a major decapitalization of the AID-financed agricultural credit scheme, it will be necessary to increase rates to the final borrower at least to the level of commercial lending and preferably higher in consideration of the higher risk and administrative costs related to such credit. This was discussed with the CDB during intensive review and it was agreed that the minimum effective interest rate for AID-financed agricultural production credit would be the effective local commercial rate. Several alternatives for increasing rates were explored (e.g. prepaid interest, risk premiums). Accordingly, a condition of the AID loan will be that the CDB, in its sub-loans to intermediaries for agricultural credit, establish a minimum effective rate to final borrowers at least equal to that of the effective local commercial rates.

3. Financial Plan

TABLE 8
Source of Funds - (\$000)

	<u>AID Grant</u>	<u>AID Loan</u>	<u>CDB</u>	<u>Other</u>	<u>Total</u>
Small Farmer Development Program		10,000*	1,500		11,500
LDC Counterpart Funds				1,000	1,000
Technical Assistance	400				400
	400	10,000	1,500	1,000	12,900

* Up to \$400,000 of the AID Loan may be used for technical assistance as defined in Section III. C. above.

TABLE 9
Preliminary Resource Allocation of Program Funds
(\$000)

	<u>AID*</u>	<u>CDB</u>	<u>Total</u>
Agricultural Production Credit	4,000		4,000
Agricultural Input Distribution	1,000	1,500	2,500
Marketing	2,000		2,000
Feeder Roads	3,000		3,000
	10,000	1,500	11,500

* The Agricultural Production Credit Component will be entirely disbursed in local currency and the remaining categories of sub-projects will involve a majority of local currency expenditures. It is therefore estimated that local currency disbursements will account for 80 per cent of the total AID loan.

The preliminary resource allocation of AID funds is intended to be illustrative only and is not based on actual projections of sub-projects. The allocations shown are based on a qualitative estimate of what would represent an appropriate mix of activities based on the result of small farmer survey and the analyses contained in other portions of this paper. The actual allocations by type of activity will be based on approved sub-projects identified and selected for AID financing on the basis of the criteria set forth in Section III above. The total AID commitment to the project would not exceed \$10,000 in loan funds plus \$400,000 in grant funds.

E. SOCIAL ANALYSIS

1. Beneficiaries - Target Group Profile Peasant v. Estate Sub-Sectors

As discussed earlier in this Paper, the LDC agricultural sector for purposes of social analysis can be divided into two sub-sectors - the plantation or estate sector and the peasant sector. Accurately distinguishing between the two sub-sectors on the basis of objective criteria is difficult, nevertheless what follows is an attempt at a typology:

	<u>Peasant Sub-Sector</u>	<u>Estate Sub-Sector</u>
Size	Usually smaller than 25 acres	Usually larger than 25 acres
Ownership	Usually owned by nationals, individual or family	Usually owned by foreign corporation or national governments
Cropping pattern	Normally multi- or inter-cropped(see Annex C Exhibit 10)	Normally mono-cropped
Market	Usually produced for export, domestic and self-consumption	Usually produced for export, often vertically integrated
Input use and yields	Low	High
Labor Absorption	High	Low
Food Production	High	Low
Risk	High	Low

The above typology is neither precise nor exhaustive. Increasingly it is also inaccurate. Increasingly plantations are dropping their production activities and concentrating on the marketing internationally of peasant produced products. Traditional plantation agriculture, for four hundred years the economic backbone of the English speaking Caribbean, is passing into history. The reasons for this is beyond the scope of this Paper, here it is sufficient to say that in the main the future of the LDC agriculture sector lies in the peasant or small farmer sub-sector with some room existing for medium size farms (25-100 acres) as well.

Primary and Secondary Target Groups

The primary target group for the activities to be undertaken under this Project is the small farmer sub-sector. These are the LDCs' rural people whose agricultural exploitations are under twenty five acres in size. It is on them, their productivity and welfare, that this project will focus its benefits. Prior to passing on to a detailed characterization of this group, however, two secondary target groups should also be defined. They are the rural landless or almost landless poor whose principal source of income is the selling of their labor and the urban poor who spent a major portion of their small incomes on food. The latter two groups are classed as secondary target groups because even though their welfare is not of primary consideration in this project they are nevertheless

expected to benefit significantly from the Project's effects. It is expected that they will benefit from more ample and hopefully, in the long-run at least, cheaper food supplies. They as well as the primary target group, will also benefit from the increased real demand for labor that will result from this Project. In spite of the foregoing, it should be pointed out that the welfare of the Project's secondary target groups will not be a predominant criterion in the development and appraisal of sub-projects. The impacts of sub-projects on the welfare of the secondary target groups will be a consideration however.

Characterization of LDC Small Farmers

The CDB/AID Small Farmer Study Survey is the primary basis for the following characterization.

LDC small farmers are on the average quite old. Their mean age is 52. This mean age does not vary significantly among small farmer size sub-groupings, i.e., the average age of small farmers whose exploitations fall into the 1-5 acre, 5+ - 10 acre, and 10+ - 25 acre grouping is the same. The sample shows, however, that considerable variation exists in the mean age from island to island. The average small farmer age in Montserrat is 57.5; in St. Vincent 53.5; and in Dominica 50.9. These high mean ages among a relatively much younger labor force are the result of the large out-migrations from agriculture in recent years.

In spite of their relatively advanced age, there is little if any evidence to support the stereotypical point of view that these farmers are backward, unskilled and lack innovative abilities. On the contrary, studies performed on small farmer technology adoption indicate that LDCs' small farmers are quite quick to pick up improved techniques and cultural practices that are truly advantageous. Similarly, in the conclusion to the Small Farmer Study, the analyst referring to St. Lucia stated that "Available evidence does not support that alleged traditionalism, non-innovativeness, nor apathy have much explanatory power....".

One possible explanation for the LDC small farmers apparent lack of traditionalism, in spite of his relatively advanced average age, may be that his average level of educational attainment is relatively high in relation to his cohorts in other developing countries. Table 10 below indicates that in all size groupings the overwhelming majority of farmers at least attended primary school.

TABLE 10
RELATIONSHIP BETWEEN SCHOOL ATTENDANCE AND FARM SIZE IN PERCENT
OF FARMERS SURVEYED

<u>School Last Attended</u>	<u>Total</u>	<u>1-5 acres</u>	<u>5+ - 10 acres</u>	<u>10+ - 25 acres</u>
Primary	95	99	94	89
Secondary	1	+	2	7
Higher	3	1	4	3
TOTAL	99	100	100	99

Source: CDB/AID Small Farming Study Survey

Small Farmer Organizations

Two of the three LDCs surveyed had farmers' organizations to which many farmers belonged; Montserrat does not have farmer organizations. Table 11 summarizes data available from the Small Farming Study survey. It can be seen from Table 11 that 35 per cent of the farmers interviewed belong to a farmer organization. Generally speaking, these organizations are commodity crop associations, e.g. the banana producers' association and the lime producers' association. These associations are founded by law and all producers of a given crop are automatically members. Perhaps for this reason, 31 per cent of the farmers who say that they are members do not consider the organizations beneficial. Generally speaking, the commodity crop associations is an export crop monopsonist dealing with a monopsonist foreign buyer who sells in International and especially U.K. markets, e.g. Geest and Company for bananas and The Rose Company for lime juice. In addition to performing marketing functions the commodity crop associations provide services to farmers such as in-kind input credit, subsidized fertilizers, airplane crop spraying, etc. Little is known about the extent to which the small farmer members actually control the commodity crop association or about the nature of the influence in the associations by the foreign monopsonist firms.

It can be seen from Table 11 that within the target group, larger farmers have a much higher propensity to belong to such groups than smaller farmers, even though the latter are undoubtedly preponderant in numbers as association members. Similarly the percentage of farmers (members) who consider membership beneficial tends to increase with farm size.

Small farmer organizations in areas other than for export production are almost non-existent; this lack could act as a constraint on the organization of the marketing of food crops. The fact that present organizations are on a very narrow crop-line basis when in fact most farmer-members are not so specialised could act to inhibit broader based organization. Under this Project, preference will be given to financing of necessary capital investment by small farmer groups. Similarly in the credit element preference will be given to organized small farmer groups wherever such an approach is feasible.

TABLE 11

SMALL FARMER MEMBERSHIP IN FARMER ORGANIZATIONS AND THEIR
SUBJECTIVE OPINIONS ON WHETHER MEMBERSHIP IS BENEFICIAL AND
REASONS FOR NON-MEMBERSHIP - PERCENTAGES OF FARMS SURVEYED

	<u>Total</u>	<u>1-5 acres</u>	<u>5+ - 10 acres</u>	<u>10+ - 25 acres</u>
No. of observations	288	208	47	33
Members of Farmer Organization	35	38	47	74
Consider Beneficial	24	17	33	68
Consider not Beneficial	11	11	14	6
Reasons for not being member				
Not available	22	22	22	21
Not interested/inconvenient	11	14	4	7
Not beneficial	1	1	2	3
Disorganized	4	4	7	-
Other	9	8	11	+

Source: CDB/AID Small Farmer Study Survey

Justification of Target Group Definition

The primary target group of this Project are LDC small farmers whose farm exploitations are less than 25 acres in size. Table 12 below presents estimates of cash net farm income and other cash income per farmer and per capita by farm size group.

TABLE 12

Cash Net Income and Other Cash Income Per Farmer and Per Capita by Farm Size Group, in EC\$2:1

	<u>Total</u>	<u>1 - 5 acres</u>	<u>5+ - 10 acres</u>	<u>10+ - 25 acres</u>
Cash Net Farm Income	365	294	286	1047
Other Cash Income	127	85	65	103
Total Cash Income	492	397	351	1150
Persons per Family	6.5	6.1	6.7	6.0
Cash Income Per Capita	76	62	52	192

Source: CDB/AID Small Farmer Study Survey

Unfortunately, these estimates do not include the value of in-kind consumption which could be considerable. Nevertheless, the estimate for the cash income per capita is only US\$96 per capita even for the 10+ - 25 acre size grouping. If it is assumed that total per capita income is twice the cash per capita income, then the resulting US\$192 per capita is still considerably below the average LDC per capita GDP of approximately US\$380. It may be concluded then, that even the farmers in the 10+ - 25 acre grouping form a part of the LDC poor majority.

2. ROLE OF WOMEN

To the knowledge of the Project Committee there exist no special studies on the role of women in the LDC agricultural sector. In this respect the Small Farming Study survey is also of only limited use because its design was essentially a sex neutral one. In spite of this lack of specialized studies on the matter, from the fragmentary evidence that it was possible to assemble, as well as from first-hand observation, it is evident that women play a very important role in the agricultural economy.

In the LDC countries, women traditionally represent a major force in economic and social affairs. The society of the region is strongly matriarchial with women often being the effective heads of family units. Women often serve as bread-winners and financial managers, as well as child-raisers. In the agricultural sector more specifically, women play important roles in the production and marketing of food crops especially.

The fragmentary data from the small farmer survey permits the conclusion that women in the 15 - 64 age group in the rural area outnumber men by approximately 50 per cent. Although little is known about the labor force participation rates of rural women, data on the agricultural labor force sex distribution is available from the 1974 Agricultural Census of St. Lucia. This distribution is presented in Table 13, and indicates that women constitute approximately 42 per cent of the persons employed in agricultural work. Women are even more apt to be farm operators as they constitute over 44 per cent of St. Lucia's farm operators.

It is not known to what extent these St. Lucia figures are typical of all the LDCs. However, if these figures are at all indicative, the role of women in the production portion of the agricultural sector is indeed an important one. Although the Project Committee knows of no information on the role of women in the marketing portion of the agricultural sector, it is thought that the role of women in agricultural marketing, especially for domestic food crops, is even more important than their role in agricultural production. It is thought that the overwhelming majority of LDC agricultural "middlemen" are in fact women (who are called "vendors", "higglers", or "hucksters").

Given the importance of women in the productive activity of the rural sector, the special non-sex discrimination criteria for CDB sub-project appraisal are of special importance. (See Section III.C.2.a.(19) on page 25).

TABLE 13.

PERSONS EMPLOYED IN AGRICULTURAL WORK, BY TYPE OF
WORK AND SIZE OF FARM, ST. LUCIA, 1974

	0-5 acres	5+ - 25 acres	25+ - 200 acres	200+ acres	Total	Total 0-25 acres
<u>Employment in Agriculture</u>						
<u>Total Employed</u>	23,781	5,797	1,592	1,842	33,012	29,578
Males	13,635	3,511	1,120	909	19,175	17,146
Females	10,146	2,286	472	933	13,837	12,432
<u>Paid Workers</u>	1,549	1,291	765	1,797	5,402	2,840
Males	1,223	899	526	877	3,525	2,122
Females	326	392	239	920	1,877	718
<u>Unpaid Workers</u>	1,746	499	94	-	2,339	2,245
Males	1,120	348	73	-	1,541	1,468
Females	626	151	21	-	798	777
<u>Farm Operators</u>	20,486	4,007	733	45	25,271	24,493
Males	11,292	2,264	521	32	14,109	13,556
Females	9,194	1,743	212	13	11,162	10,937

Source: Derived from 1974 St. Lucia Agricultural Census.

V. IMPLEMENTATION ARRANGEMENTS

A. Caribbean Development Bank (CDB)

1. Responsibilities

The CDB, as borrower and administering agency, will have primary responsibility for overall administration and coordination of the small farmer development program in accordance with the criteria set forth in Section III.C. The CDB will have final responsibility for preparation of the Country Investment Program, the review and approval of the LDC production credit programs, and other sub-project activities. The CDB will coordinate the efforts of other local and regional institutions in the implementation of individual sub-projects. In addition the Bank will be responsible for assessing the technical assistance needs of sub-borrowers and making arrangements for implementing such assistance.

2. CDB Background

The CDB, which is recognised as an associate institution of CARICOM, was established in 1970 by 16 regional member countries and the U.K. and Canada (see Annex D Exhibit 1). The United States is not a member of the Bank but has contributed a total of US\$32.3 million to the CDB in the form of concessionary loans, the earliest of which was for US\$10 million in 1971. Venezuela and Colombia became members of the Bank 1973 and 1974, respectively. The Bank's charter states that the main objective of the Bank is to contribute to the economic growth and development of its member countries in the Caribbean and to promote economic cooperation and integration within the Region. The Charter places emphasis on the Bank's role in meeting needs of its LDC member countries.

3. Organization and Staffing (see Annex D Exhibit 2)

The Board of Governors is the highest policy-making body of CDB and is constituted of representatives from each member country (except for Montserrat, British Virgin Islands, Cayman Islands and Turks and Caicos Islands who collectively elect one governor). The Board of Governors meets annually. Voting power is roughly proportionate to shares subscribed with a slight weighting in favor of the LDCs.

The Board of Governors is composed of 10 members appointed for renewable two-year periods. The non-regional members are represented by two of the 10 directors. The Board of Directors meets at least every two months and is responsible for general policy and the direction of Bank operations, approval of the Bank administrative budget, and submission of financial statements for Board of Governors' approval. All loans, guarantees and other long-term investments by the CDB require Board of Directors' approval.

The current President of the Bank is Mr. William Demas, formerly the Secretary General of Both CARIFTA and CARICOM. As of March 1, 1975 the Bank staff totalled 115 of which 59 were professionals. Of the professionals, 8 were recruited under a UNDP financed scheme implemented through the IBRD. AID has provided two technical assistance advisers (housing) and Canada, two. The Bank has an on-going program for the training of its professional staff through attachments to the World Bank, the Inter-American Development Bank, and other relevant institutions.

The CDB is organized under three project and four support divisions all of which report directly to the President. The largest project division in terms of staff and lending volume is the Agriculture Division which presently has ten professionals located at the Bank and eight Farm Improvement Officers permanently assigned to LDC institutions. The two other divisions are the Industry and Tourism Division with a staff of 5 professionals and the Technical Division with a staff of ten. The latter is responsible for infrastructure, transportation, and housing projects and also assists the other divisions in technical matters.

The project divisions are complemented by four support divisions: Economics and Project Analysis; Finance, Administrative and Legal. The Economic and Project Analysis Division, with a staff of 8, is responsible for the economic appraisal of projects. In addition, a plan has recently been formulated whereby the Project Analysis Division will undertake detailed analyses of the economies of its member countries, sector studies and identification of regional integration projects with the objective of formulating a more effective lending strategy.

4. Project Development and Implementation

The development and analysis of projects is performed by ad hoc multi-disciplinary teams with an appropriate mix of expertise appointed by the President. A loan committee, composed of the President and Division Heads meets bi-weekly to monitor the progress of new project development and to approve projects for presentation to the Board of Directors. CDB appraisal techniques include analysis of the technical, financial and economic feasibility of a project, its organization and management, services that can be provided by supporting organizations, soundness of relevant marketing and legal arrangements and rate of return as compared with alternative projects.

Project implementation is the responsibility of a project manager within the appropriate technical division assisted by the various support divisions and other technical divisions as needed. For example, the General Counsel attends to projects until all conditions precedent are satisfied and the Treasurer disburses acting in consultation with the project divisions.

The CDB recently established a new unit, the Loan Supervision Unit, to advise and assist the project divisions in expediting project implementation. Project implementation reports are prepared on a quarterly basis and are reviewed by an Investment Committee comprised of the President and the Division Directors.

Based on the above assessment, and AID's prior experience in reviewing CDB projects it is concluded that the CDB has the necessary expertise and capability to administer the proposed program. This would include, where appropriate, the ability to contract for and administer services of consultants to perform specialized analyses or to provide technical assistance to sub-borrowers which the Bank may not be equipped to undertake; i.e. social analyses, environmental impact, and long term marketing assistance.

5. Implications of Proposed Program for Bank Staffing

The major increase in Bank staffing required as a result of the proposed program will be the addition of Farm Improvement Offices (FIOs) to supervise and provide technical assistance for the production credit schemes in the LDCs. The costs of the FIOs related to this program (the Bank already has one FIO in each territory) will be eligible for AID loan financing, however, such costs will

be passed on to the LDCs or the intermediary institutions either in the form of an increase in the CDB lending rate or as a direct charge. If a direct charge, the FIO costs may in turn be financed by the CDB in its sub-loan to the intermediary.

B. Sub-Borrowers

The basic institutional structures necessary for the implementation of the program are currently in place in the LDCs. The capacities of these institutions, in terms of management, staffing, and financial and physical resources vary considerably between the LDCs. In general, however, they currently lack adequate capacity for effective program planning and project identification, design and management. The CDB has played a significant role in this regard by providing technical assistance designed to improve LDC capabilities in these areas. It is estimated that 15% - 20% of CDB staff time is spent advising governments on development matters. Several examples of such assistance are:

- Belize - preparation of long-term policies for agricultural marketing, rural electrification, and Urban Working Class Housing.
- St. Kitts-Nevis-Anguilla - establishment of a long-term public agricultural plan and on Port Development.
- St. Lucia - formulation of a rural development program and on rural electrification.

In addition, the CDB was instrumental in the establishment and strengthening of the DFCs in most of the LDCs.

CDB project appraisals, as a normal practice, include an assessment of the borrower's capacity to implement the project. On this basis determinations are made as to the need for training, technical assistance, increased staffing, or institutional reform and such requirements are integrated into the project design. Indeed most of the Bank's loan agreements carry conditions and covenants related to the improvement of the borrowers' project management capabilities.

In the implementation of the proposed program, the Bank will apply the same criteria and methods for ensuring sub-borrower capacity to implement and manage AID financed sub-projects. In addition, AID grant funds will be available to finance training and technical assistance for sub-borrowers which is outside the scope of the CDB normal activities.

C. AID

Because of the ICI nature of the project, AID's role in the administration of the project will primarily involve the approval of plans, programs, certain sub-projects, and the evaluation of the overall program. In the early stages of implementation a minimum amount of consultation with the Bank will be required to install the small farm budget system and to design the questionnaire referred to in the evaluation plan. This will be accomplished by AID/W personnel.

A two-person AID office, located in Bridgetown, is currently being planned. When established, the Bridgetown office will assist in the day-to-day monitoring of the program and assist in resolution of any implementation problems which may arise. However, in view of the limited staffing of the Bridgetown office, the analysis and approval of program plans and sub-projects will be made in AID/W. Annual joint CDB/AID evaluations will be performed by AID/W personnel in conjunction with the staff of the Bridgetown office.

D. Procurement

Goods and services financed under the loan will have their source and origin in countries included in Code 941 of the AID Geographic Code Book or in the country in which the sub-project activity is located. Procurements in the country in which the sub-project is located shall be defined as local procurement.

As with prior AID loans to the CDB, AID will seek to negotiate mutual untying agreements with other donors for current replenishments to the CDB.

E. Disbursement Procedures

Disbursement procedures will be handled in the same manner as prior loans to the CDB:

1. Local Currency - Disbursement for local currency expenditures will be made under direct reimbursement authorizations (DRA). A DRA will be established for each type of sub-project i.e. feeder roads, marketing and production credit and technical assistance. The CDB will submit requests for reimbursement with supporting documentation to be prescribed in implementation letters on at least a quarterly basis. Under each of the DRAs the CDB may request an advance of funds based on the estimated disbursement for a three-month period.
2. Foreign Exchange - Disbursements for foreign exchange expenditures will be made under the letter of commitment/letter of credit procedure for all individual procurements of goods or services which exceed US\$15,000. Disbursements for individual off-shore procurements for less than this amount may be made through the DRA procedure described above.

F. Implementation Plan

The major implementation actions, responsible parties and method of implementation are as follows:

<u>Action</u>	<u>Responsible Party</u>	<u>Method of Implementation</u>
1. Loan Authorization	AID	
2. Loan Execution	AID and CDB	Loan signed in Bridgetown.
3. Preparation of Country Investment Programs (CIP).	CDB	CIP will be based on Small Farmer Study, LDC listing of priority feeder road projects, further analysis of constraints, discussions with LDC governments. CDB staff will be assisted by AID grant-financed consultants in preparation of CIP. AID approves CIP.

<u>Action</u>	<u>Responsible Party</u>	<u>Method of Implementation</u>
4. CDB Board approval of production credit terms including a revision of minimum loan size and increased interest rates to final borrowers.	CDB	
5. Preparation of Production Credit Programs (PCPs).	LDC Intermediate Credit Institution	PCP will be based on survey of production credit needs and market potential for crops included in credit schemes. Credit institution will be assisted by CDB FIOs in preparing PCP.
6. Design of evaluation questionnaire	CDB, AID	AID/W TDY personnel will develop questionnaire in conjunction with CDB and to extent possible with participation of LDC credit institution.
7. Sub-project Identification	CDB and LDC Governments	LDC loan applications, CDB project identification teams.
8. Sub-project development and appraisal	CDB	Where specialized expertise is required, CDB will be assisted by consultants (e.g. LAAD) or other regional institutions such as CARDI or the UWI, the cost of which will be grant-financed by AID.
9. Installation of small farm budget system in CDB	AID and CDB	AID/W TDY personnel will install system and train CDB personnel.

G. Conditions and Covenants

1. Terms of lending to Final Borrowers under Production Credit Scheme - CDB regulations currently prohibit intermediate credit institutions from using SDF funds for loans of less than 5 years repayment period or more than 8% interest. These terms conflict with those proposed for the agricultural production credit scheme, i.e. at least commercial rates (currently 11% - 12%) and including risk premium and no lower limit on repayment periods.

This was discussed during intensive review with CDB management who agreed to seek Board of Directors approval for revision of these terms. Formal Board approval would be required as a condition precedent to disbursements of AID funds for agricultural production credit.

2. Country Investment Programs (CIPs)- As a condition precedent to disbursement of AID loan funds in any LDC, the CDB shall prepare and submit for AID approval Country Investment Programs as outlined in Section 111.C.1.

3. Sub-project Criteria and Methodology - As a condition precedent to disbursements for any specific category of sub-project (i.e., credit, inputs, marketing, feeder roads) the CDB shall submit for AID approval the criteria and methodology to be applied in the selection of sub-projects under the respective category for AID financing.

4. Input Distribution - The CDB shall covenant to ensure that appropriate measures are taken for increasing the availability of agricultural inputs in those LDCs where AID loan funds are to be utilized for agricultural production credit. This may be accomplished by the implementation of the CDB's proposed regional agricultural input distribution scheme and/or by the development of national schemes. CDB resources of up to \$1.5 million would be made available for this purpose.

5. AID Approval of Sub-projects - The CDB shall covenant to submit for AID approval any sub-projects that exceed \$500,000 or which has an internal rate of return of less than 15% and which is to be wholly or partially financed with AID funds. (The \$500,000 limit will be reviewed for appropriateness at the first project evaluation).

H. Evaluation Plan

1. Principal Evaluation Questions

Among the most important questions to be answered in the course of the Project's evaluation are:

- (1) Is the project's definition of the primary target group an appropriate one? If not, how should it be reformulated?
- (2) Is a significant share of the project's resources reaching poorer members of the target group?
- (3) Are the project's resources contributing to a better utilization of family labor, hired labor, land and other resources?

For evaluating credit sub-projects the following questions should be addressed:

- (1) Is more food being produced by credit recipients than formerly?
- (2) Are small farmer borrowers utilizing credit in a productive manner (i.e. are their net incomes being favorably affected by credit)?
- (3) What relationship, if any, exists between credit users' income and/or wealth and their loan repayment records; are farmers who are able to offer collateral other than crop liens better risks?
- (4) What relationship, if any, exists between the differing production technologies employed and the recipients' income; does the degree of credit supervision have a bearing on borrower success or repayment?

For evaluating the impact of the marketing and feeder road sub-projects, the following questions seem appropriate:

- (1) Have improvements been achieved in gross marketing margins?
- (2) Are such subsidies as being paid to participating marketing organizations beneficial and well conceived? What is the impact of such subsidies on the welfare of the primary small farmer target group and on food production?
- (3) Have improvements been achieved in the operating efficiency of marketing organizations? Could further improvements be achieved?
- (4) Does a greater concern exist in participating marketing organizations about the handling of small farmer produce?
- (5) Are marketing organizations operating in a larger number of product lines?
- (6) Has marketing intelligence been improved?
- (7) Has spoilage, wastage, and shrinkage been reduced?
- (8) Have improvements been brought about in the appropriateness, availability, and timeliness of input supply?
- (9) Has coordination and cooperation between LDC marketing bodies improved?
- (10) Has progress been made in the areas of weights and standards?
- (11) Have attempts been undertaken to improve "middleman" (higgler) efficiency?
- (12) Have sub-projects contributed to the formulation of better price policies?
- (13) Are sub-project roads and other physical facilities being used efficiently?
- (14) Have sub-projects resulted in a decrease of intra-territorial and inter-territorial transportation costs? To whom have these benefits accrued?
- (15) Has improved transportation resulted in improved product quality?
- (16) Have sub-project feeder roads led to an increase in net marketable surplus? Have changes in cropping patterns been induced; has small farmer income increased; what has been the effect on land rental value?
- (17) Have sub-projects contributed to improved maintenance of roads and other physical facilities?

2. Evaluation Methodology

For the credit sub-projects a questionnaire will be developed that will form a part of the loan application of every fifth small farmer borrower. This questionnaire will be developed by the CDB and approved by AID. AID will make available to the CDB short term assistance for developing the questionnaire.

The CDB sub-project appraisals will form the basis for evaluating project activities in the areas of feeder roads and marketing. As a part of CDB feeder road sub-project appraisal, a variation of the questionnaire mentioned above will be administered to a representative sample of farmers in the proposed road's area of influence. The data gathered in this manner will serve as baseline data for later evaluation. Prior to the final evaluation, areas of influence of roads that have been completed for over a year will be re-interviewed to ascertain whether the projected benefits are in fact coming about.

3. Evaluation Schedule

The first joint AID/CDB evaluation will take place within 21 months of loan authorization. The primary purpose of this evaluation will be to appraise the reasonableness and appropriateness of the AID lending criteria and to make recommendations for their modification if necessary. Further joint evaluations of the Project will take place on a year basis thereafter with a final evaluation scheduled for 9/30/80.

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D. C. 20523



ALLIANCE FOR PROGRESS

2/19/75

Mr. William Demas
President
Caribbean Development Bank
P. O. Box 408 - Treasury Building
Bridgetown, Barbados, W. I.

Dear Mr. Demas:

On January 30, 1975, the Latin America Bureau Development Assistance Executive Committee (DAEC) met to review the CDB request for AID loan assistance. The purpose of this review was to determine whether the Bank's request for assistance is consistent with criteria established in recent U.S. Foreign Assistance legislation and therefore warrants further development. This legislation gives priority in the allocation of AID resources to improving the lives of the poorest segment of the population by increasing their capacity to participate in the development process. Both the agriculture and rural sectors are specifically cited as areas in which AID can assist in alleviating critical problems which relate to the majority of the people.

The DAEC concluded that provision of assistance to the CDB for small farmer agricultural development is consistent with our legislative mandate, but serious questions and reservations were expressed as to the Bank's program as currently proposed. Specifically, it was our concern that the program has a relatively narrow focus and appears to concentrate a high proportion of resources on a relatively small number of farmers. We would hope that it would be possible to develop a program that would benefit the substantial number of existing small farmers who may leave the land unless they receive increased incentives and support. Given the severity of existing unemployment in the area and the importance of agriculture as a source of employment, we would like to explore with you further the options available for affecting a larger segment of the agricultural population.

In this regard we would be prepared to consider such things as a program directed at improvement of regional marketing facilities. We understand that one of the more serious constraints to increasing food production and farm incomes in the region is the disincentive created by low and unstable market prices for farm output. These market prices are generally the result of governmental pricing

Mr. William Demas

-2-

policies and/or seasonal and geographic gluts caused by the lack of adequate marketing facilities. This might be an area in which the Bank could have a significant impact by providing the needed technical and financial resources to individual territories to assist them in establishing marketing corporations. This is but one example of the type of program which AID would regard as within its current development priorities. The Bank may wish to propose other alternatives which could be considered for AID financing. In this regard, the forthcoming IBRD study of the Caribbean agricultural sector may identify other serious constraints and prove to be a useful tool in developing an agricultural lending program for the region.

We would hope that further consultations with the CDB could lead to a joint program which would have wider impact on small scale farming in the region, especially within the less developed countries. To this end AID would consider providing both the grant technical assistance as well as the financial resources necessary to assist the Bank in the development and implementation of an alternative program. We would be happy to explore this approach with you further at your convenience. In anticipation that a mutually agreeable strategy can be developed we are programming funds for a CDB agricultural program for fiscal year 1976 starting July 1975.

We are also concerned by the current status of disbursements of existing AID loans to the SDF. As of December 31, 1974, only some nine percent (9%) of these loans were disbursed. We would consider the disbursements of \$10.4 million which you have projected for CY 1975 as satisfactory progress in the implementation of these loans. In any event, it may be necessary to establish some reasonable disbursement level under existing AID loans as a precondition to the execution of any new loan.

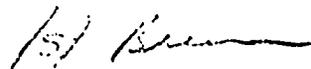
Several other issues were raised during the review. They included the commitment of other donors to the program, the territorial distribution of proposed activities, and the capacity of the CDB staff and member governments to plan and implement a large scale agricultural program over the next several years. We hope to consider with you and your staff these issues in more detail as they relate to possible alternative development strategies.

Mr. William Deans

-3-

We would appreciate your initial reactions to this letter and would hope to plan a visit to the bank for further on-site discussion at the earliest opportunity.

Sincerely yours,



John R. Breen
Director
Office of Development Resources
Bureau for Latin America

CC: Mr. E. Featherstone
% American Embassy, Bridgetown

Drafted by: LA/DR: [Signature] / REV: [Signature] / Date: 2/18/75

Clearances: LA/DR: [Signature] / AS/LA: [Signature] /
EBrewer _____
LA/GC: LLundy _____
LA/DR: JHanes _____
LA/CAR: RHedderston (draft) _____
Wheeler (draft) _____
LA/DP: DErbe _____
PPC: LOfell (in.c) _____

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CARIBBEAN DEVELOPMENT BANK

P.O. Box 408 Wilbey
St. Michael Barbados W.I.
Telephone: 61152 Cable Address: "Caribank," Telex WB28

March 13, 1976

Mr. Donor Lion
US Agency for International
Development
Washington D.C. 20523
U.S.A.

Dear Mr. Lion:

Pursuant to discussions held to date between the Caribbean Development Bank (CDB) and the Agency for International Development (AID), the CDB has formulated a programme for increasing the productive resources and services available to small farmers in the less developed member countries (LDCs) - Antigua, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St. Kitts/Nevis/Anguilla, St. Lucia, St. Vincent, Turks and Caicos Islands - of the CDB.

2. In order to finance this programme we are requesting a US\$10,000,000 loan at the most concessional terms available and a US\$400,000 grant from the Government of the United States of America which will be supplemented by resources of the CDB.

3. The programme proposed for financing would operate within the structure of the Bank's special operations as a special fund within the meaning of Article 8, paragraph 2 of the Bank's Charter. The programme is designed to fill a gap in the credit facilities which are provided at present to small farmers from another of the Bank's special funds - The Agricultural Fund - the resources of which are concentrated on the provision of medium and long term credits to farmers whose net worth does not exceed the equivalent of EC\$150,000 by means of loans of not less than EC\$3,000 in any one case.

4. The programme would encompass several types of complementary small farmer development activities, such as -

- (a) Agricultural production credit;
- (b) Distribution of agricultural production inputs;
- (c) Improvement of marketing facilities;
- (d) Feeder road construction.

Mr. Donor Lion

March 13, 1976

5. The CDB would be responsible for the development and appraisal of programme and project activities to be financed by the Bank. The projects would be implemented by the LDC Governments and institutions.

6. It is understood that a condition precedent to disbursement of AID funds for the programme would be CDB's agreement to:

- (a) make such revisions in CDB lending policy as might be necessary to achieve the programme's objectives;
- (b) prepare for AID approval criteria and methodology for the selection of projects to be financed under the programme; and
- (c) prepare for AID approval Country Investment Plans for each participating country.

7. It is also understood that in the implementation of the programme the CDB would be required to covenant to:

- (a) ensure that appropriate measures are taken for increasing the availability of agricultural inputs in those countries where AID loan funds are to be utilised for agricultural production credit. The CDB would make adequate funds from its other resources available for this purpose; and
- (b) submit for AID approval all sub-projects which exceed such amount as may be agreed between AID and CDB as well as justification of those with economic rates of return of less than 15%.

8. With regard to (b) of paragraph 7 above CDB hereby requests AID to consider an increase in the present free limit of \$500,000 in view of inflation which has taken place since 1970 when the limit was first established.

I am grateful to you and your staff for all the effort they have put into the formulation of this fourth loan and look forward to the continuation of such cooperation in the future.

Yours sincerely,

William G. Demas
William G. Demas
President

LOAN AUTHORIZATION

Provided from: FAA Section 103 Funds (Food and Nutrition)

REGIONAL: Caribbean Development Bank (Integrated
Agricultural Development)

Pursuant to the authority vested in the Administrator of the Agency for International Development ("A.I.D.") by the Foreign Assistance Act of 1961, as amended ("the Act"), and the delegations of authority issued thereunder, I hereby authorize the establishment of a loan ("Loan"), pursuant to Section 103 of the Act, and in furtherance of the Alliance for Progress, to the Caribbean Development Bank ("Borrower") of not to exceed ten million United States dollars (\$10,000,000) to assist in financing the United States dollar and local currency costs of Borrower's Agricultural Development Lending Program. The Loan shall be subject to the following terms and conditions:

I. Interest and Terms of Repayment.

Borrower shall repay the Agency for International Development ("A.I.D.") in United States dollars within forty (40) years from the first disbursement under the Loan, including a grace period of not to exceed ten (10) years. The Borrower shall pay to A.I.D. in United States dollars on the disbursed balance of the Loan interest of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

- 2 -

II. Source and Origin.

Except for ocean shipping, goods, services and marine insurance financed under the Loan shall have their source and origin in any country included in A.I.D. Geographic Code 941, Canada, the United Kingdom, or any member country of the Borrower located in the Western Hemisphere. Marine insurance may be financed under the Loan only after it is obtained on a competitive basis, and any claims thereunder are payable in freely convertible currencies. Ocean shipping financed under the Loan shall be procured in any country included in A.I.D. Geographic Code 941, Canada, the United Kingdom, or any member country of the Borrower located in the Western Hemisphere, except those States or Territories of the site of the related subloan.

III. Local Currency Costs.

United States dollars utilized under the Loan to finance local currency costs shall be made available pursuant to procedures satisfactory to A.I.D.

IV. Conditions Precedent.

- A. Prior to any disbursement or to the issuance of any commitment document under the Loan for the purpose of financing any project in a particular Less Developed Country ("LDC"), the Borrower shall furnish to A.I.D. for A.I.D.'s approval, in form and substance satisfactory to A.I.D., a Country Investment Program for such LDC.

- 3 -

B. Prior to the first disbursement or to the issuance of any commitment document under the Loan for the purpose of financing any specific subproject, the Borrower shall submit for A.I.D. approval the criteria and methodology to be applied in the selection of eligible subprojects.

V. Covenants.

Borrower will covenant and agree:

- A. to insure that appropriate measures are taken for increasing the availability of agricultural inputs in those LDCs where A.I.D. loan funds are to be utilized for agricultural production credit; and
- B. to obtain A.I.D.'s concurrence prior to authorizing any subloan financed with five hundred thousand (\$500,000) or more of funds made available under the Loan or except as A.I.D. may otherwise agree in writing.

VI. Other Terms and Conditions.

The Loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Administrator

Date

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

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

Life of Project:
From FY 1976 to FY 1980
Total U.S. Funding \$10,400,000
Date Prepared: March 1, 1976

Project Title & Number: Integrated Agricultural Development

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>Increase income and standard of living of the small farm sub-sector in the Lesser Developed Countries of the English-speaking Caribbean.</p> <p><u>Subgoal:</u></p> <p>Increase production, productivity and crop diversification of small farm sub-sector.</p>	<p>Measures of Goal Achievement: (A-2)</p> <ol style="list-style-type: none"> 1. Reduction in rate of growth of agricultural imports. 2. Increased food production for internal consumption. 3. Decrease in traditional export crops as percentage of total small farmer production. 	<p>(A-3)</p> <ul style="list-style-type: none"> - CARICOM trade reports. - National production statistics. - End of project, small farmer survey. 	<p>Assumptions linking purpose and goal.</p> <ul style="list-style-type: none"> - Significant progress will be made towards eliminating or minimizing policy and institutional constraints which limit small farmer agricultural development. - Other donors will continue to provide financial and technical assistance to the agricultural sector. - Intra-regional barriers to agricultural trade significantly reduced.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 1976 to FY 1980
Total U.S. Funding \$10,400,000
Date Prepared: March 1, 1976

Project Title & Number: Integrated Agricultural Development

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>Increase productive resources and services available to small farmers.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>-Small farmer development projects designed and implemented in eight LDCs by 1980 as follows:</p> <p>(a) Agricultural production credit -estimated at \$4.0 million -utilized in accordance with criteria established in Section III, C.2.a.</p> <p>(b) Agricultural inputs - estimated at \$2.5 million:</p> <ul style="list-style-type: none"> - subprojects designed to satisfy input demands for non-traditional crops, e.g., root crops, vegetables, fruit crops (for full list see Section III, C.2.b.(2). - substantial portion of input sales to target farmers. <p>(c) Marketing -estimated at \$3.0 million -designed and implemented in accordance with criteria and methodology established in Section III,C.2.c.</p> <p>(d) Feeder Roads -estimated at \$3.0 million -designed and implemented in accordance with criteria and methodology established in Section III,C.2.d.</p>	<p>(B-3)</p> <ul style="list-style-type: none"> - Comparison of actual performance to baseline data contained in CDB sub-prpject appraisal reports. - CDB quarterly project reports to AID. - Annual AID project evaluation. - Credit questionnaire. - Review of implementing institutions. - AID review of CDB sub-project appraisals. 	<p>Assumptions linking output and purpose</p> <ul style="list-style-type: none"> - Adequate interest rates on agricultural production credit will be adopted by credit institutions. - CDB and national institutions allocate sufficient staff and financial resources. - Necessary national institutional reform will be undertaken.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 1976 to FY 1980
Total U.S. Funding \$10,400,000
Date Prepared: March 1, 1976

Project Title & Number: Integrated Agricultural Development

PAGE 3

NARRATIVE SUMMARY	SPECIFIC MEASURABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Outputs (C-1):</p> <p>Develop the capacity of the CDB and LDC member country institutions to design and finance small farmer development sub-projects.</p>	<p>Measurability of Outputs (C-2)</p> <ul style="list-style-type: none"> - LDC Small Farmer Development programs established within CDB. - Establishment of criteria, regulations and policies governing programme. - Country Investment Programmes for each LDC. - Production Credit sub-project Criteria. - Input sub-project Criteria. - Feeder Road sub-project Criteria. - Marketing sub-project Criteria. 	<p>(C-3)</p> <ul style="list-style-type: none"> - AID review of CDB sub-project appraisals. 	<p>Assumptions linking input and output.</p> <ul style="list-style-type: none"> - CDB and national institutions allocate sufficient staff and financial resources.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1976 to FY 1980
Total U.S. Funding \$10,400,000
Date Prepared: March 1, 1976

Project Title & Number: Integrated Agricultural Development

PAGE 4

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)	(D-3)	
<u>AID</u>			
1. Loan Funds.	\$10.0 million	- AID and CDB and LDC Budgets	
2. Grant Funds.	\$400,000		
<u>CDB</u>			
1. Administrative Staff.			
2. Technical Assistance Staff.			
3. Funds for input marketing system.	\$1.5 million		
<u>LDC Governments</u>			
1. Counterpart Funds.	\$1.0 million		

PRELIMINARY TECHNICAL ASSISTANCE PLAN

AND

ILLUSTATIVE BUDGET

Until such a time as the CDB formulates detailed Country Investment Plans and performs sub-project appraisals it will be difficult to specify precisely either the nature and type of technical assistance needed by the Borrower and Sub-borrowers to help implement the Project. Thus, the following budget for grant-financed assistance should only be considered as illustrative:

Illustrative Budget - Grant-financed Component

	<u>000 US\$</u>
1. Marketing Advisor (18 mos.)	75
2. Credit Advisor (18 mos.)	75
3. Short-term Advisors in marketing, credit, public administration land reform, project evaluation, systems analysis, etc.	100
4. Training programs for LDC, DFC and Marketing Board participants	50
5. Data-gathering, processing and analysis for sub-project appraisals and Project evaluation.	100

TOTAL	<u>\$400</u>

Other Resources

Loan Terms and Conditions
(as of June 30, 1975)

<u>Interest Rates</u> 1/	<u>Ordinary Resources</u>	<u>Soft Resources</u>
Government (Infrastructural & Public Utilities)	8 1/2%	4%
Government financial intermediaries	7 1/2%	4%
Productive enterprises (Industry & Hotels)	10%	-
Productive enterprises (Agricultural)	9%	-
<u>Upper Loan Limits</u>		
LDC governments	80% of project cost	90% of project cost
MDI governments	70% of project cost	90% of project cost
Private borrowers	60% of projects costing up to US\$375,000 40% of projects costing over US\$375,000	
<u>Lower Loan Limits</u>		
	US\$100,000	US\$100,000
<u>Commitment Fee</u>		
	3/4 of 1% p.a. on undisbursed balance from a date 60 days after signature of Loan Agreement	
<u>Term and Grace Period</u>		
Government:		
grace period	Normally 2 years	Up to 5 years
term after grace period	10-15 years	15-20 years
Private Borrowers:		
grace period	Up to 5 years	-
term after grace period	5-10 years	-
<u>Security Requirements</u>		
Governments	Negative pledge clause	Negative pledge clause
Government Agencies	Government Guarantee	Government Guarantee
Private Borrowers	Adequate security in form of first legal mortgage or other form acceptable to Bank.	
<u>Exchange Risk</u>		
	Borne by borrower or guarantor	Borne by borrower or guarantor

1/ Includes 1/4 p.a. commission.

CARIBBEAN DEVELOPMENT BANK

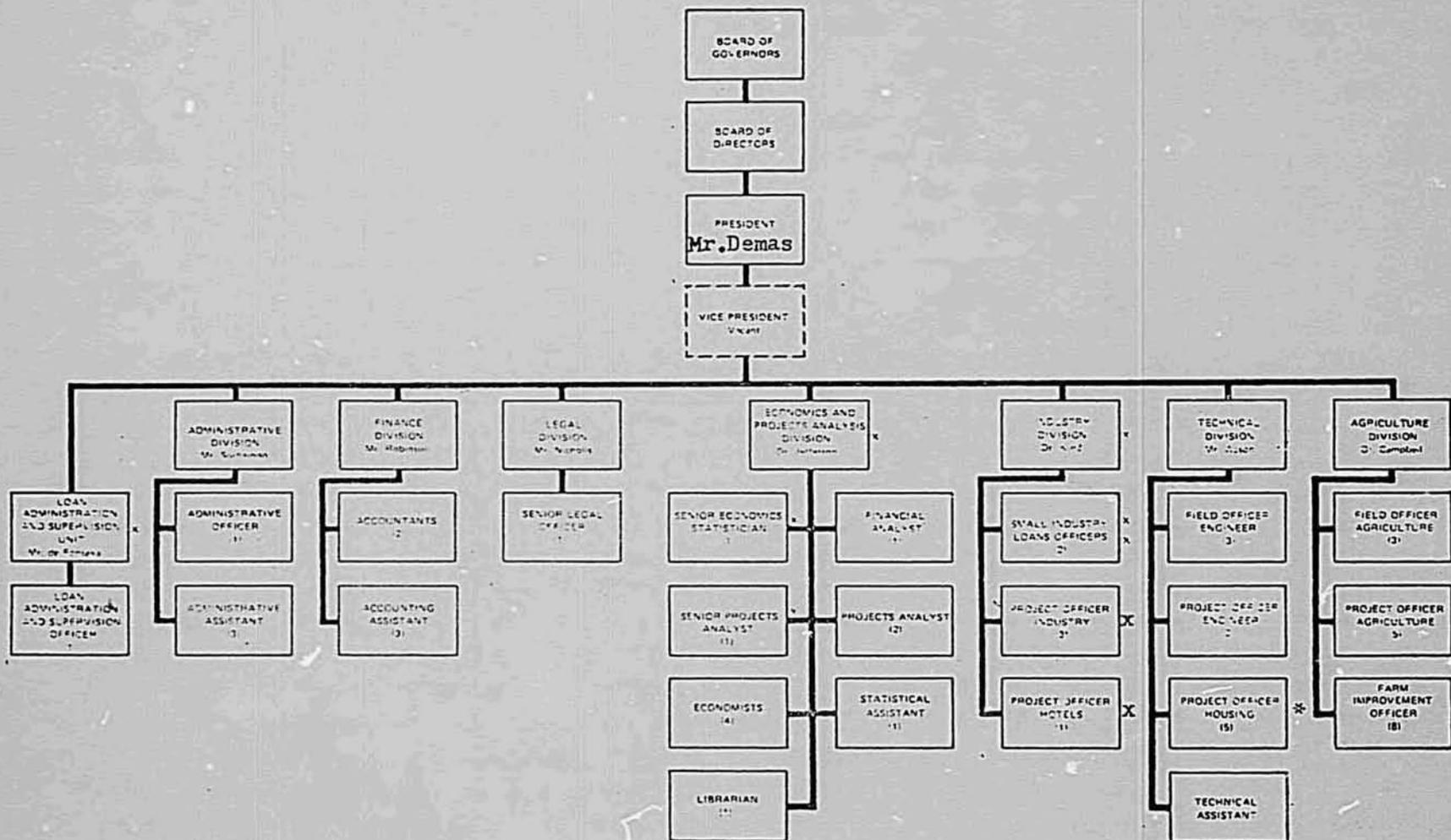
ANNEX C
Exhibit 5
Page 1 of 1

Summarized

Balance Sheet and Profit and Loss Statements

(Year-end)	<u>Balance Sheet - (millions of US\$)</u>				
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
<u>Ordinary Operations</u>					
Cash & investments	4.5	6.3	9.4	11.2	14.5
Capital subs. notes	0.9	3.0	5.3	9.8	9.8
Loans disbursed	-	-	0.4	1.6	3.4
Other	0.1	0.7	0.5	0.5	1.0
Total Assets	<u>5.5</u>	<u>10.0</u>	<u>15.6</u>	<u>22.2</u>	<u>28.7</u>
Borrowings	-	-	-	-	-
Capital & reserves	<u>5.5</u>	<u>10.0</u>	<u>15.6</u>	<u>22.2</u>	<u>28.7</u>
Total Liab. & Capital	<u>5.5</u>	<u>10.0</u>	<u>15.6</u>	<u>22.2</u>	<u>28.7</u>
 <u>SDF Operations</u>					
Cash & investments		1.0	1.2	3.2	11.5
Loans disbursed		-	-	0.5	1.4
Other		-	-	-	0.2
Total Assets		<u>1.0</u>	<u>1.2</u>	<u>3.7</u>	<u>14.1</u>
Contributions		1.0	1.2	3.1	10.9
Borrowings		-	-	0.4	1.7
Reserves		-	-	0.2	0.5
Total Liab. & Contrib.		<u>1.0</u>	<u>1.2</u>	<u>3.7</u>	<u>14.1</u>
	<u>Consolidated Profit & Loss - (millions of US\$)</u>				
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Interest on investments	<u>0.2</u>	<u>0.5</u>	<u>0.7</u>	<u>1.0</u>	<u>2.0</u>
Interest & fees on loans disbursed	<u>-</u>	<u>-</u>	<u>-</u>	<u>0.1</u>	<u>0.3</u>
Total	<u>0.2</u>	<u>0.5</u>	<u>0.7</u>	<u>1.1</u>	<u>2.3</u>
Interest expense	-	-	-	-	-
Administrative Expenses:					
CDB	0.2	0.4	0.4	0.6	0.9
UNDP	<u>-</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>
	<u>0.2</u>	<u>0.6</u>	<u>0.7</u>	<u>1.0</u>	<u>1.3</u>
Net operating income	-	(0.1)	-	0.1	1.0
Add back: UNDP	<u>-</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>
Net income	<u>-</u>	<u>0.1</u>	<u>0.3</u>	<u>0.5</u>	<u>1.4</u>

FIRST CARIBBEAN DEVELOPMENT BANK LOAN
 CARIBBEAN DEVELOPMENT BANK
 ORGANIZATION CHART¹



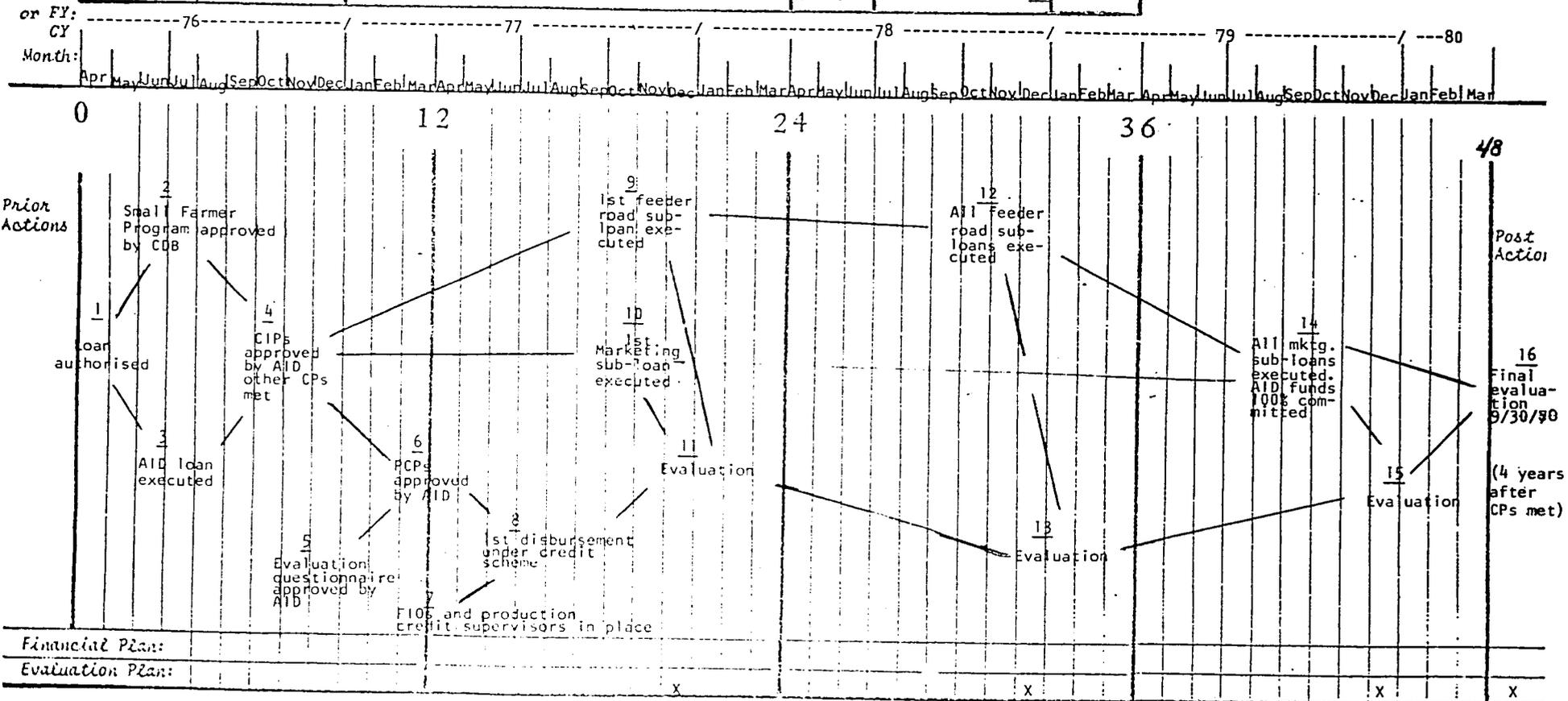
¹ Figures in brackets denote number of staff members performing similar functions.

² Position may be eliminated.

X Denotes staff members under UNDP Project

* Denotes staff members under USAID Project

Country: Caribbean Regional	Project No: 538-T-006	Project Title: Integrated Regional Development	Date: 3/4/76	/ ✓ / Original / / Revision #	PPT appd
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PROJECT PERFORMANCE NETWORK

PPT FORM

Country: Caribbean Regional	Project No: 538-T-006	Project Title: Integrated Regional Development	Date: 3/4/76	/ / Original / / Revision #	Apprvd:
<u>CPI DESCRIPTION</u> 1. 3/31/76 Loan authorized 2. 6/30/76 Small Farmer Development Program approved by CDB Board of Directors 3. 6/30/76 AID Loan executed 4. 10/30/76 Country Investment Program (CIP) for 8 LDCs approved by AID and other CPs met 5. 11/30/76 Evaluation questionnaire approved by AID 6. 3/30/77 Production Credit Programs (PCP) approved by CDB Board of Directors and Credit sub-loans executed 7. 3/30/77 New FIOs and Production Credit supervisors in place 8. 6/30/77 First disbursements under credit program 9. 10/30/77 First sub-loans executed for feeder road project 10. 10/30/77 First sub-loans executed for marketing project 11. 12/30/77 Evaluation 12. 10/30/78 All feeder road sub-projects approved by CDB Board of Directors and sub-loans executed 13. 12/30/78 Evaluation 14. 9/30/79 All marketing sub-projects approved by Board of Directors and sub-loans executed. AID funds 100% committed 15. 12/30/79 Evaluation			16. 9/30/80 Final Evaluation		

APPENDIX

TO

CARIBBEAN REGIONAL: INTEGRATED AGRICULTURAL DEVELOPMENT

TABLE OF CONTENTS

Supplementary Annexes referenced in the Project Paper but not published within the main body:

ANNEX A:

Exhibit:

1. Statutory Checklist..... 19 pages

ANNEX B:

Exhibit:

1. Marketing Board Sub-project - Illustrative Example..... 2 pages
2. Feeder Road Engineering Plans and Specifications..... 3 "
3. Prototypical Feeder Road Benefit Data..... 1 "

ANNEX C:

Exhibit:

1. Marketing Sub-project - Illustrative Example... 11 pages
2. Feeder Road Sub-project - Illustrative Example. 3 "
4. CDB Total Available Resources..... 1 "
6. CDB Ordinary Resource Operations Financial Statements..... 2 "
7. CDB Special Development Fund Financial Statements..... 2 "
8. Analysis of CDB Portfolio..... 1 "
9. Projection of SDF Commitments..... 1 "
10. Small Farm Crops..... 1 "

ANNEX D:

Exhibit:

1. CDB Member Countries and Board of Governors... 2 pages

The documents listed above will be maintained in the official files of the Project.

①

AID 1240-2 (5-74)

ANNEX A
Exhibit 1
Page 1 of 19

CHECKLIST OF STATUTORY CRITERIA

(Alliance for Progress)

In the right-hand margin, for each item, write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended.

FAA, 1973 - Foreign Assistance Act of 1973.

App. - Foreign Assistance and Related Programs Appropriation Act, 1974.

MMA - Merchant Marine Act of 1936, as amended.

BASIC AUTHORITY

1. FAA § 103; § 104; § 105;
§ 106; § 107. *Is loan being made*

This loan is being made to assist the Caribbean Region in the areas of agriculture and rural development.

a. for agriculture, rural development or nutrition;

b. for population planning or health;

c. for education, public administration; or human resources development;

d. to solve economic and social development problems in fields such as transportation, power, industry, urban development, and export development;

AID 1240-2 (5-74)

e. in support of the general economy of the recipient country or for development programs conducted by private or international organizations.

COUNTRY PERFORMANCE

Progress Towards Country Goals

8. FAA § 208; §.251(b).

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

A number of Caribbean regional institutions (e.g. the University of the West Indies, the Caribbean Development Bank, and the Caribbean Agricultural Research and Development Institute), as well as the National Governments in the Region are carrying out programs aimed at increasing food production and improving facilities for food storage and distribution in the Region.

In general, while governments in the Region are currently seeking greater control over their own natural resources, the climate for foreign and domestic private enterprise and investment in the Region is favourable.

(3) Increasing the public's role in the developmental process.

Development programs in the Region, on both the national and regional levels are generally aimed at increasing the public' role in the developmental process.

(4) (a) Allocating available budgetary resources to development.

The territories in the Caribbean Region have been allocating considerable available budgetary resources to both national and regional development.

(b) Diverting such resources for unnecessary military expenditure (See also Item No. 20) and intervention in affairs of other free and independent nations.) (See also Item No. 11)

Military expenditures by the National Governments in the Region are minimal.

(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.

Caribbean territories are making progress toward respect for the rule of law, freedom of expression and of the press, and recognition of the importance of individual freedom, initiative and private enterprise as evidenced by the absence of press and other censorship and the encouragement of initiating and private enterprise in agriculture, industry and housing. Some progress is being made in political reforms such as tax collection improvements and land tenure arrangements.

(6) Adhering to the principles of the Act of Bogota and Charter of Punta del Este.

Not applicable

AID 1240-2 (5-74)

(7) *Attempting to repatriate capital invested in other countries by its own citizens* Repatriation of capital invested abroad is generally not a problem in the territories of the Region.

(8) *Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.* The current efforts being made by the Caribbean territories towards economic co-operation and integration are indicative of its determination to take effective self-help measures.

B. Are above factors taken into account in the furnishing of the subject assistance? Yes

Treatment of U.S. Citizens by Recipient Country

3. FAA § 620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government? There is no evidence of any such debt owed to a U.S. citizen by a Caribbean government.

4. FAA § 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? There is no evidence that any such action has been taken by Caribbean governments.

AID 1240-2 (5/74)

5. FAA § 620(c); Fishermen's Protective Act. § 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters, Not applicable

a. has any deduction required by Fishermen's Protective Act been made?

b. has complete denial of assistance been considered by A.I.D. Administrator?

Relations with U.S. Government and Other Nations

6. FAA § 620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba? No Caribbean territory provides assistance to Cuba nor do flag carriers of these territories carry Cuban cargoes.

AID 1240-2 (5-74)

7. FAA § 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?
- The Secretary of State has determined that none of the contributing Caribbean territories are controlled by the international communist movement.
8. FAA § 620(d). If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan?
- Not applicable
9. FAA § 620(f). Is recipient country a Communist country?
- No contributing Caribbean territory has a communist government.
10. FAA § 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?
- No contributing Caribbean territory is involved in such activities.
11. FAA § 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?
- Damage or destruction of U.S. property by mob action has not occurred in any of the Caribbean territories.

AID 1240-2 (5-74)

13. FAA § 620(l). *If the country has failed to institute the investment guaranty program for the specific risks of expropriation, in convertibility or confiscation, has the A.I.D. administration within the past year considered denying assistance to such government for this reason?* N/A
13. FAA § 620(n). *Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam?* No contributing Caribbean territory furnishes goods or permits ships or aircraft under its flag to carry goods to North Vietnam.
14. FAA § 620(q). *Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?* The CDB is not in default on interest or principal of any AID loan.
15. FAA § 620(t). *Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?* No contributing Caribbean territory has taken such action.
16. FAA § 620(u). *What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?* N/A

AID 1240-2 (5-74)

17. FAA § 481. Has the government of recipient country failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?
- The Caribbean territories have taken adequate steps to prevent such activities.
18. FAA, 1973 § 29. If (a) military base is located in recipient country, and was constructed or is being maintained or operated with funds furnished by U.S., and (b) U.S. personnel carry out military operations from such base, has the President determined that the government of recipient country has authorized regular access to U.S. correspondents to such base?
- Not applicable

Military Expenditures

19. FAA § 620(a). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)
- Not applicable

AID 1240-2 (5-74)

CONDITIONS OF THE LOAN

General Soundness

20. FAA § 201(d). *Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.*
- The terms of the loan are reasonable and legal under the Charter of the CDB and the laws of the United States.
21. FAA § 251(b)(2); § 251(e).
- Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?*
- The proposed project is considered to be economically and technically sound, and there are assurances that funds will be used in an economically and technically sound manner. The CDB has submitted an application for the loan.
22. FAA § 251(b). *Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.*
- Based on a review of the CDB's operations and its financial position it is concluded that the prospects for repayment of the AID loan are good.
23. FAA § 251(b). *Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.*
- No other free-world financing appears to be available for this project.

AID 1240-2 (5-74)

24. FAA § 611(a)(1). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?

The CDB has adequate capacity to develop the financial and engineering plans necessary to carry out the subprojects to be financed by AID.

25. FAA § 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of loan?

No further legislative action will be required within the Caribbean territories for accomplishment of the loan purposes.

26. FAA § 611(c). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

This is a Regional Project for which there is no responsible Mission Director. However, AID concludes that the CDB is capable of effectively utilizing and administering the project.

Loan's Relationship to Achievement of Country and Regional Goals

27. FAA § 207; § 251(a); § 113. Extent to which assistance reflects appropriate emphasis on: (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs;

This project will have a direct impact on improving the capacities of institutions which serve the agriculture sector in the Region and will contribute to the Region's ability to meet its food needs.

AID 1240-2 (6-74)

(e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or
(f) integrating women into the recipient country's national economy.

28. FAA § 209. Is project susceptible of execution as part of regional project? If so why is project not so executed? Project is regional in nature and will be executed on a regional basis.
29. FAA § 251(b)(3). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives. The activity is consistent and complementary to other development activities in the Region and will contribute to the long-range development of the Region.
30. FAA § 251(b)(7). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth. The project will directly contribute to the achievement of self-sustaining growth of the Region.
31. FAA § 209; § 251(b)(8). Information and conclusion whether assistance will encourage regional development programs, and contribute to the economic and political integration of Latin America. The CDB is one of the strongest Regional institutions in the Caribbean and is making significant contributions to the integration of the Caribbean.

AID 2240-2 (574)

32. FAA § 251(a); § 111. Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America. Not applicable
33. FAA § 251(h). Information and conclusion on whether the activity is consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress in its annual review of national development activities. The activity is consistent with the recommendation of CEPCLIES.
34. FAA § 281(a). Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions. The loan will increase the productive resources and services available to the small farmers in the Region and thereby contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the Region.
35. FAA § 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government. The project recognizes and is designed to accommodate the particular needs, desires and capabilities of the people of the Region.

AID 1240-2 (6-74)

36. FAA § 601(a). Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.
- The project, by stimulating an increase in production and productivity of food crops, will contribute directly to improving the technical efficiency of industry, agriculture and commerce and should indirectly contribute to increasing the flow of international trade and the fostering of private initiative and competition.

37. FAA § 619. If assistance is for newly independent country; is it furnished through multilateral organizations or plans to the maximum extent appropriate?
- Not applicable

Loan's Effect on U.S. and A.I.D. Program

38. FAA § 251(b)(4); § 202. Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.
- The proposed loan will not have an adverse effect on the U.S. economy or areas of labor surplus. The loan will not adversely effect the U.S. balance of payments position.
39. FAA § 252(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.
- Approximately \$5,000,000 of loan funds will be used to procure goods and services from private enterprise.

AID 1240-2 (E-74)

40. FAA § 601(b). *Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).* Private U.S. firms will be invited to bid on the engineering and construction services contracts to be financed under the loan.
41. FAA § 601(d). *If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?* Any engineering or professional services financed under the loan may be provided by U.S. firms or their affiliates.
42. FAA § 602. *Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and services financed by the loan.* U.S. small business will be ensured the opportunity to participate in the furnishing of goods and services under the loan.
43. FAA § 620(h). *Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?* No.
44. FAA § 621. *If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on* Such technical assistance as may be provided under the loan will be contracted from private enterprise or from universities.

whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

Loan's Compliance with Specific Requirements

- | | | |
|-----|--|--|
| 45. | <u>FAA § 110(a); § 208(e).</u> Has the recipient country provided assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the Loan is to be made? | Yes . |
| 46. | <u>FAA § 112.</u> Will loan be used to finance police training or related program in recipient country? | No. |
| 47. | <u>FAA § 114.</u> Will loan be used to pay for performance of abortions or to motivate or coerce persons to practice abortions? | No. |
| 48. | <u>FAA § 201(d).</u> Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter? | Yes. |
| 49. | <u>FAA § 604(a).</u> Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President? | Yes . |
| 50. | <u>FAA § 604(b).</u> What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price? | Procurement under the loan will be by competitive bidding. |

51. FAA § 604(d). *If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?* Marine insurance will be procured in the U.S. where available.
52. FAA § 604(e). *If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?* No agricultural commodity or product is being financed under the loan.
53. FAA § 604(f). *If loan finances a commodity import program, will arrangements be made for supplier certification to A.I.D. and A.I.D. approval of commodity as eligible and suitable?* Not applicable
54. FAA § 608(a). *Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.* The loan agreement will so provide.
55. FAA § 611(b); App. § 101. *If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?* Not applicable

AID 1240-2 (6-74)

56. FAA § 611(c). *If contracts for construction are to be financed, what provision will be made that they be let on a competitive basis to maximum extent practicable?* The loan agreement will require that contracts for construction be let on a competition basis to the maximum extent practical.
57. FAA § 612(b); § 636(h). *Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services.* The CDB will contribute up to \$1.5 million to the project and participating governments will be required to provide 10% counterpart contributions to AID-financed sub-projects. No U.S.-owned foreign currency is available for the project.
58. App. § 113. *Will any of loan funds be used to acquire currency of recipient country from non-U.S. Treasury sources when excess currency of that country is on deposit in U.S. Treasury?* No.
59. FAA § 612(i). *Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?* No.
60. FAA § 612(a). *What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?* Not applicable. Loan is not to a government.

AID 1240-2 (5-74)

61. FAA § 620(k). If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed \$100 million? Not applicable
62. FAA § 638(i). Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States, or any guaranty of such a transaction? No.
63. App. § 103. Will any loan funds be used to pay pensions, etc., for military personnel? No.
64. App. § 105. If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms? Yes.
65. App. § 107. Will any loan funds be used to pay UN assessments? No.
66. App. § 109. Compliance with regulations on employment of U.S. and local personnel. (A.I.D. Regulation 7). These regulations will be complied with.

67. App. § 110. Will any of loan funds be used to carry out provisions of FAA §§ 209(d) and 251(h)?

No.

68. App. § 114. Describe how the Committee on Appropriations of the Senate and House have been or will be notified concerning the activity, program, project, country, or other operation to be financed by the Loan.

The proposed loan was included in the Congressional Presentation for FY 1976.

69. App. § 601. Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by the Congress?

No.

70. MMA § 901.b; FAA § 640C.

(a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

The loan agreement will require maximum usage of U.S. flag vessels to the extent that such vessels are available.

(b) Will grant be made to loan recipient to pay all or any portion of such differential as may exist between U.S. and foreign-flag vessel rates?

No.

Illustrative Example: Marketing sub-project Functions and Operation of the Belize Marketing Board

(NOTE: This example is one which is currently being implemented and financed by the CDB from non-AID resources. The sub-project is used for illustrative purposes only and will not constitute part of the AID-financed program).

The Marketing Board of Belize is a semi-autonomous governmental organisation which was established under the Marketing Board Ordinance of 1948 and amended in 1968. Its specific functions are as follows:

- 1) to buy and re-sell produce;
- 2) to process agricultural produce;
- 3) to assist producers (in particular cooperatives) in cultivation, production, preparation, manufacture and market the produce of Belize;
- 4) to trade in agricultural inputs, to facilitate farm operations;
- 5) to establish depots and agencies for purchase, sale and delivery of farm products and agricultural inputs which facilitate the operations of farmers;
- 6) to enter into contract for the purpose of purchase, sale and transport of products and agricultural equipment and farm commodities upon such terms and conditions as the Board thinks fit;
- 7) to act as commission agents for the disposal of products of any producer or cooperative for the purchase of supplies of any producer or cooperative;
- 8) to invest any monies forming part of the reserve fund;
- 9) to insure property against insurable risk;
- 10) to maintain and improve the assets (land, building, etc.) to the Board;
- 11) to provide credit for producers;
- 12) to pay dividends on the basis of produce purchased by and services rendered to the Board by producers, cooperatives, individuals and other bodies; and

- 13) where it is necessary for maintaining supplies to deal in commodities other than the products of Belize (importation).

Basically because of limited capital, facilities and staff the main activities of the Belize Marketing Board have been limited to the following:

- 1) The buying of three staple foods, paddy rice, corn and red kidney beans from farmers and selling on the wholesale and retail markets;
- 2) The importation of rice, corn and red kidney beans when shortages exist; sugar and certified seed;
- 3) Renting of threshers to farmers in the Toledo District, buying the paddy rice, drying, storing, bagging at Punta Gorda and barging to Belize City;
- 4) Rice milling on the Marketing Board facility in Belize City and subsequent distribution;
- 5) Trading in small items such as local spices; and
- 6) Some non-statutory functions like handling hurricane relief and other emergency supplies.

ENGINEERING PLANS AND SPECIFICATIONS

(1) Program Preparation of Plans and Specifications

Since detailed topographic maps of the area in which the feeder roads are to be constructed are not available, it will be necessary to engage private consulting firms to perform the necessary surveying and other engineering work as well. Such work will include the following:

- a. Engineering surveys.
- b. Preparation of topographic maps.
- c. Plotting of profiles and preparation of planimetric layouts.
- d. Detailed designs of roadway and drainage.
- e. Preparation of detailed plans and specifications.
- f. Supervision of construction.
- g. Issuance of payment certificates.
- h. Preparation of "as built" drawings.

The engineering consultants will be selected by the standard procedures which are normally used by the Technical Division of the CDB. These include:

- a. Public notice of the intended work in newspapers and technical journals.
- b. Preparation of a short list of prequalified firms.
- c. Evaluation of proposals.
- d. Selection of the most highly qualified firms.
- e. Negotiation of a contract with the firm selected.

Fees for the required engineering services will range between 12% and 15% of the estimated construction cost.

The approximate time required for the selection of a consulting firm, including advertizing, is 4 months and the time required for preparation of plans and specifications is about 6 months.

(2) Design Standards

As explained above, the detailed plans and specifications will be the responsibility of the consulting engineering firm engaged for the project, however, the following design standards will be generally applied:

Excavated Width	-	24ft.
Base Material Width	-	15ft.
Paving Width	-	12ft.
Shoulder Width	-	3ft.
Side Ditch Width	-	3ft.
Horizontal Curvature	-	50ft. min.
Gradients	-	15% max.
Bridge Deck Width	-	11ft.
Passing Places	-	500ft.

Since there is considerable variation among the states in topography, soil types, geology, availability of materials and construction practices, different designs are required in different areas (See Figs. 1-3). Figure 1 shows the cross-section of bitumen surfaced feeder roads which have been found to be satisfactory in Grenada. Figure 2 shows a similar cross-section modified to satisfy the special conditions encountered in Dominica, St. Lucia and St. Vincent. Figure 3 shows the cross-section of a lower type road (gravel) which has been successfully used in Belize where the gradients are flatter and the rainfall is less intense.

(3) Acquisition of Rights-of-Way

It is intended that, insofar as possible, feeder roads constructed under this program follow existing tracks thus requiring a minimum amount of acquisition for rights-of-way. However, in order to provide access for the development of new lands, a certain amount of land acquisition will be necessary. In any case, the cost of the land acquired for rights-of-way will be borne by the landowners benefitted and/or by the parish and state governments. AID loan funds will not be used for land acquisition.

(4) Method of Construction

When the CDB received the first applications for feeder road loans from three member states in July 1972 it was intended that all construction work be carried out by private contracting firms. Selection was to be made on the basis of open competitive bidding using standard CDB procurement regulations. However, prior to project implementation, the CDB received requests from the governments of Dominica and St. Lucia seeking to revise the condition of the loan agreements to permit the construction of all feeder road projects by direct labor under the management of the Ministry of Communications and Works of the respective states.

In October 1974, the CDB approved the requests of the two states for elimination of project implementation by private contractors from the loan agreements and since that time a majority of CDB financed feeder road construction has been carried out by direct labor (force account) under the supervision of the state governments.

Construction by direct labor, under state government supervision, has the following advantages over work accomplished under private contract:

- a. Lower cost.
- b. Greater opportunity to utilize labor intensive methods.
- c. No likelihood of default.
- d. No possibility of contractor claims.
- e. Duty free import of petroleum products and equipment used on project.

The Development of the Prototypical Farm and
the Kinds of Data required for obtaining the
Net Incremental Benefits resulting from a
Feeder Road

The following discussion pertains to both the "without" and "with" - project calculations:

1. The results of the evaluation questionnaire for those farmers within the area of influence of a given road shall be used to develop a farm account for the prototypical farm within the area of influence that road.
2. The information for the farm account shall be tabulated to give the costs of production, output, and value of output data on a per crop/acre basis.
3. To obtain the total production available by crop for sale at the farm gate, the prototypical farm shall include at least the following details:
 - a. land use in acres;
 - b. yields/acre;
 - c. crop losses/acre;
 - d. on-farm consumption by crop;
 - e. stock or inventory increases (decreases).
4. To obtain the value of sales at the farmgate, the production figures resulting from para. 3 above shall be multiplied by their respective farmgate prices and then summed.
5. The cost of production data shall be reduced to such detail to show the per acre cost of each input employed in the production of each crop. From this basic data, the total cost of each input used can be obtained.

MARKETING PROJECT ILLUSTRATIVE EXAMPLE,
MARKETING BOARD PROJECT IN ST. VINCENT

(NOTE: This example is one which is currently being implemented and financed by the CDB from non-AID resources. The sub-project is used for illustrative purposes only and will not constitute part of the AID-financed program).

This Annex is a synopsis of a more detailed project prepared by the CDB which appraises an application for a loan to assist with the establishment of new facilities for the St. Vincent Marketing Board (SVMB). The project provides for buildings and equipment on a new site to meet the needs of the SVMB in marketing which is planned to increase the quantities of locally produced agricultural products in local export outlets. (The CDB also has similar loan proposals for the Marketing Boards of St. Kitts/Nevis/Anguilla and St. Lucia). The St. Vincent Marketing proposal requests a CDB loan to cover equipment costs, with the Government of St. Vincent providing the site and the British Development Division providing grant funds for the buildings.

The SVMB, organised in 1959, has expanded its operations so much that it needs the larger facilities contemplated by this proposal. The introduction of mechanical handling equipment is required for the increasing tonnage of produce needed to reduce damage and loss to products, as well as to better meet marketing requirements.

The total net capital cost of the project is \$1,088,000 of which \$200,000 has been requested as a loan from the Caribbean Development Bank. The DCF internal rate of return on the capital employed is approximately 10%.

Market Prospects

Prospects appear good in regional and ex-Caribbean markets for most of the commodities handled by the St. Vincent Marketing Board.

Sweet potatoes continue to be the most important commodity handled by the Board, with Trinidad the dominant market outlet. However, under the AMP allocations, the SVMB could ship 5 million lbs. annually to Trinidad, or double its present exports to this market.

NOTE: All figures are in EC\$ US\$1.00 = EC\$2.00

The Caribbean region is in a deficit position with respect to fresh vegetables (not including starchy root crops), and it is estimated that imports from outside CARIFTA total some 6 million lbs. annually. The SVMB has already started to expand exports of carrots and tomatoes, and expects to increase peanut exports for which large regional markets are reported. Markets for certain orchard crops, such as avocados and mangoes, are not yet fully exploited in the Caribbean as well as in the U.K. and North America.

MARKETING BOARD OPERATIONS

Scope of Operations

Organised in 1959 as a statutory body, the St. Vincent Marketing Board (SVMB) is the country's main exporter of agricultural products other than bananas and arrowroot, and is responsible for supervising the import and export of all commodities covered by the Carifta Agricultural Marketing Protocol. The Board also imports all the country's sugar and rice for distribution at the wholesale level. It operates a small produce retail outlet, handles vegetable seeds and operates the wholesale fish market.

Over 20 different horticultural crops are exported by the Board. Handling operations vary by commodity but include receiving, inspecting, sorting, short-term storage, weighing, packaging and transporting packed products alongside ships. The Board recently began a processing operation for bottled hot peppers and pepper sauce for export under contract with a U.K. importer.

Sweet potatoes are the most important product exported, both in terms of quantity and value. This item, plus coconuts, yams and similar root crops, accounted for about 79% of the Board's physical volume and 58% of sales in 1972. Commodities showing very rapid increases during the past few years include carrots, ginger, citrus, plantain, tomatoes and fresh and bottled hot peppers.

Under present conditions it is estimated that losses from damage and waste range as high as 40% between the farm and the consumer. In the case of sweet potatoes, problems with damaged products has led to the use of an automatic discount of 5% on the sales price paid by buyers.

THE PROJECT

The project involves the provision of new and expanded building space, plus mechanical produce handling equipment, for the St. Vincent Marketing Board at a new site in the Kingstown harbor area.

The new site of 1.4 acres is on the waterfront at the southerly end of the harbor. There is ready access on the landward side, as well as to piers for schooners and ocean-going vessels.

Two buildings will be constructed on the site: a main operations building of about 27,000 square feet and a retail outlet of about 1,000 square feet. The main building will be of steel frame construction and will provide space for receiving, processing, storing and shipping produce. In addition, it will have a refrigerated storage area, over which will be placed the Board's offices and staff facilities. The retail outlet will be attached to the northern end of the main building, and will have vehicle parking space just opposite it.

Equipment will be provided to handle, treat, grade and package produce, and include a sweet potato line, a general vegetable line, a peanut grader, a fork lift truck and several tow-motors and trolleys. Other major items will include refrigerated storage units, retail outlet equipment and an automatic accounting machine.

The cost of the building is estimated to total \$680,000, as follows:

<u>Construction Element</u>	<u>Units</u>	<u>Units required</u>	<u>Estimated Total Cost (EC\$)</u>
1. Main building, including electricity and plumbing	sq. ft.	27,000	567,000
2. Retail outlet	sq. ft.	1,000	18,000
3. Paving, exterior areas	sq. yd.	4,000	32,000
4. Perimeter security fencing	yd.	300	3,000
5. Removal of existing structure and general site preparation	-	-	30,000
6. Contingencies	-	-	30,000
Total estimated construction cost			680,000

US\$1.00 = EC\$2.00

Equipment

Equipment will be provided to mechanically handle most of the produce exported by the Board, as well as the import items (sugar and rice). Refrigerated storage space will be provided through two self-contained chill room units, and the retail outlet will be fitted out with supermarket shelves, cabinets and check-outs. An automatic accounting machine will be installed in Board's offices.

The items of equipment, and their costs, are as follows:

<u>Item</u>	<u>EC\$</u>
1. Sweet potato line (including dump tank, washer, sorter, dip tank for treating and waxing, packing bins and conveyors) ..	20,000
2. General vegetable line (including sorting, crating and bagging conveyors) ..	10,000
3. Peanut line (including in-shell grader and bagger) ..	5,000
4. Fork lift truck ..	20,000
5. Tow-Motors (4 at \$3,500) and trolleys (12 at \$500) ..	20,000
6. Retail outlet equipment (including gondolas, chill cabinets, check-outs and cash registers) ..	20,000
7. Chill rooms (2 units 24' x 10' x 9'; 35 to 50°F) ..	70,000
8. Automatic accounting machine ..	18,000
9. Boxes (including field boxes holding boxes and box washing equipment) ..	10,000
10. Plantain wash tank and treatment sprayer tank ..	1,500
11. Other (including fumigation room fan and ducts; produce quick tare dial scales; bagging and stitching equipment; hand trucks) ..	5,500
Total:	200,000

US\$1.00 = EC\$2.00

Fixed Capital Costs

Total capital costs for the project are estimated at \$1,000,000, composed of the following major cost elements:

			<u>EC\$</u>
1.	Land	..	200,000
2.	Buildings	..	680,000
3.	Equipment	..	200,000
			<hr/>
	Total:		1,000,000
			<hr/>

Cost Schedule

Operating costs are estimated at \$2.38 million in the first year of the project, rising to \$3.44 million by Year 15.

These costs are composed of fixed costs of \$113,000 per year, and variable costs of \$14.16 per 100 lb. of product marketed.

These costs are based on the operating experience of the Board in 1971, with the following adjustments to reflect the introduction of new facilities and equipment:

- (a) Maintenance and repairs. These costs are estimated at \$42,500, or 5% of the initial capital cost of the buildings and equipment provided for the project.
- (b) Wages. The cost of wages is the same level as in the 1971 operations. However, this item is classified as a fixed cost in order to reflect increased labor efficiency resulting from the introduction of mechanical handling equipment.

FINANCIAL AND ECONOMIC ANALYSIS

Financial Analysis

The DCF internal rate of return on capital employed in the project is approximately 10%. This return is based on a project period extending over the estimated life of the buildings, i.e., 25 years.

The DCF calculations are summarized in Table 1 and have as their basis the following assumptions:

- (a) That costs and revenues are as previously described;
- (b) That equipment is replaced as follows
boxes, fork lift truck and tow-motors every
5 years; office rooms and accounting machine
every 7 years; and all other equipment every
15 years;
- (c) That the residual value of the project in
Year 25 is \$320,000, comprised as shown below:

<u>Item</u>	<u>Value (\$)</u>
Land	200,000
Buildings	-
Equipment	120,000
Total:	320,000

It is expected that the project will require the provision of \$1,080,000 for fixed capital, all in Year 1. Taking into account interest on borrowed capital and operating surpluses, the net investment in the project is \$1,088,000 as shown in Table 2.

Table 1. Financial (DCF) Evaluation, SVM (SEC'000)

Year	Financial value of output	Residual Value	Investment Cost <u>1/</u>	Operating Cost	Net Balance
1	-	-	1,080	-	(1,080)
2	2,400	-	-	2,379	21
3	2,546	-	-	2,447	99
4	2,622	-	-	2,517	105
5	2,701	-	-	2,589	112
6	2,782	-	44	2,663	75
7	2,866	-	-	2,739	127
8	2,952	-	88	2,818	46
9	3,040	-	-	2,899	141
10	3,131	-	-	2,983	148
11	3,225	-	44	3,069	112
12	3,322	-	-	3,158	164
13	3,421	-	-	3,249	172
14	3,524	-	-	3,343	181
15	3,629	-	-	3,440	189
16	3,629	-	200	2,440	(11)
17-24	3,629	-	-	3,440	189
25	3,629	320	-	3,440	509

1/ Includes replacement costs in Years 6, 8, 11 and 16

Internal rate of return = 10% approximately.

Table 2. Net Investment and Financing, SVM0

Item	Year 1
<u>Net Investment</u>	
	EC\$
Land	200,000
Buildings	680,000
Equipment	200,000
Interest	8,000
Total:	\$1,088,000
<u>Financing</u>	
Borrower:	
Land	\$ 200,000
Buildings <u>1/</u>	680,000
Cash	0,000
Sub-total	888,000
CDB loan	200,000
Total:	\$1,088,000

1/ BDD grant funds

Cash flow projections for a 13-year period are shown in Table 3. These projections are based on the assumptions mentioned previously, as well as the following:

- (a) That the interest on the CDB loan will be charged at 4% per annum; and
- (b) That the loan repayment will begin after a one-year moratorium and will be composed of forty (40) equal quarterly instalments (including interest at 4% per annum).

Economic Analysis

Specialized facilities and equipment will strengthen the competitive position of the Board's products in both local and export markets by permitting better presentation of products, through lower per unit marketing costs and by supplying products graded and packaged in line with demands of consumers with varying incomes and preferences. This improved position of the Board will encourage further expansion and diversification of agricultural production in the country. The new facilities will also release the present working space to the Customs Department and commercial firms. Quantification of these economic benefits would provide a social rate of return higher than that shown in the financial analysis. Detailed calculations were not carried out as the 10% financial rate is considered satisfactory.

Table 3 Cash Flow Projections, SVMB ('000)

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13
SOURCES:													
Gross Revenue	-	2,400	2,546	2,622	2,701	2,782	2,866	2,952	3,040	3,131	3,225	3,322	3,421
CDB Loan	200	-	-	-	-	-	-	-	-	-	-	-	-
Borrower's Cont.	888	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL SOURCES	1,088	2,400	2,546	2,622	2,701	2,782	2,866	2,952	3,040	3,131	3,225	3,322	3,421
APPLICATION OF SOURCES:													
Operating Costs	-	2,379	2,447	2,517	2,589	2,663	2,739	2,818	2,899	2,983	3,069	3,158	3,249
Investment Costs	1,080	-	-	-	-	-	-	-	-	-	-	-	-
Replacement Costs	-	-	-	-	-	44	-	88	-	-	44	-	-
Interest on CDB	8	8	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPLICATION	1,088	2,387	2,447	2,517	2,589	2,707	2,739	2,906	2,899	2,983	3,113	3,158	3,249
Cash surplus before Amortization	-	13	99	105	112	75	127	46	141	148	112	164	172
Loan Amortization +	-	-	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	-
Cash balance after debt service	-	13.0	74.4	80.4	87.4	50.4	102.4	21.4	116.4	123.4	87.4	139.4	172
Cumulative cash surplus	-	13.0	87.4	167.8	255.2	305.6	408.0	429.4	545.8	669.2	756.6	896.0	1,068

+ After year 2, amortization includes interest at 4% p.a.

ESTIMATED AGGREGATE INTERNAL RATE OF RETURN FOR
THE ST. LUCIA FEEDER ROADS PROJECT (US\$)

Year	(1)	(2)	(3)	(4)	Net Benefits Col. (1) - Col. (4)	D.F. 15%	Present Value 15%	D.F. 20%	Present Value 20%
	Net Incremental Benefits	Costs							
		Road Capital	Road Maintenance	Total Costs					
		\$		\$	\$		\$		\$
1	-	2,405,000	-	2,405,000	-2,405,000	.870	- 2,092,350	.833	- 2,003,365
2	490,000	-	4,000	4,000	486,000	.756	367,416	.694	337,284
3	490,000	-	4,000	4,000	486,000	.658	319,788	.579	281,394
4	490,000	-	4,000	4,000	486,000	.572	277,992	.482	234,252
5	490,000	-	4,000	4,000	486,000	.497	241,542	.402	195,372
6	490,000	-	4,000	4,000	486,000	.432	209,952	.335	162,810
7	490,000	-	4,000	4,000	486,000	.376	182,736	.279	135,594
8	490,000	-	4,000	4,000	486,000	.327	158,922	.233	113,238
9	490,000	-	4,000	4,000	486,000	.284	138,024	.194	94,284
10	490,000	-	4,000	4,000	486,000	.247	120,042	.162	78,732
11	730,000	-	4,000	4,000	726,000	.215	156,090	.135	98,010
							\$ 80,154	\$ - 272,395	

Internal Rate of Return:

$$15 + \frac{5(80,154)}{352,549} = 15 + 1.13 = 16\%$$

EXPLANATORY NOTES

1. Net Incremental Benefits (EC\$):

	Existing Production	New Production	Total
With Project	736,025	1,910,800	2,646,825
Without Project	408,925		408,925
Incremental Benefit		...	2,238,100
Less: Incremental Cost			1,258,100
Net Incremental Benefit		...	980,000
In U.S. Dollars		...	\$490,000

2. Road Capital Cost (US\$)

Per Mile Average Cost of Road, including Engineering	...	\$ 65,000
Number of Miles	...	37
Road Capital Cost	...	\$2,405,000

For simplicity, we assume that all 37 miles are built the first year rather than spread over three years as anticipated. The effect is to overstate costs.

3. Road Maintenance Costs (US\$)

We assume that after first year it will take \$4,000 of maintenance work per year.

4. Note that in the 11th Year net incremental benefits are \$240,000 higher than other years. This is due to assuming a salvage value of 10% of the original cost of the road.

5. The with project production figures were derived from yields which were one-half the value of what the CDB considered a reasonable potential.

6. The cost values are those currently being experienced in St. Lucia.
7. Normally, we assume that a given farmer takes several years to reach the "reasonable potential" yields. For simplicity we assumed that it was reached in the first year after the road was built which overstates benefits. However, this probably is neutralized by the conservative estimate for increased yields (5 above).
8. Finally, had we carried the analysis out to fifteen years, the return would have been higher than 16%.
9. It would appear then that the 16% figure is a reasonable estimate of the aggregate returns for all the roads.

TOTAL CDB RESOURCES AVAILABLE 12/31/75

As at December 31, 1975, the sum available to the Bank for use in its Ordinary and Special Operations amounted to \$146,126,574 an increase of \$48,397,639 over the previous year. Total resources for 1975 and 1974 are made up as follows:

	1975	1974
	\$	\$
I. Ordinary Operations	<u>34,321,666</u>	<u>27,651,444</u>
*Paid-up Capital and Ordinary Reserves	34,321,666	27,651,444
II. Special Operations - Soft Funds	<u>86,804,908</u>	<u>70,077,491</u>
(a) Special Development Fund	<u>61,501,918</u>	<u>51,954,346</u>
(i) Canadian Contribution	9,931,182	10,081,250
(ii) U.K. Contribution	8,293,401	9,873,096
(iii) U.S. Loan	22,000,000	22,000,000
(iv) Venezuelan Contribution	10,000,000	10,000,000
(v) Colombian Contribution	5,000,000	-
(vi) Loan from Federal Republic of Germany	<u>6,277,335</u>	<u>-</u>
(b) Agricultural Fund		
Canadian Contribution	<u>8,506,260</u>	<u>2,520,665</u>
(c) U.S. Loan for Housing Funds	<u>10,300,000</u>	<u>10,300,000</u>
(i) Primary Market	6,000,000	6,000,000
(ii) Secondary Mortgage Market	4,000,000	4,000,000
(iii) Technical Assistance	300,000	300,000
(d) Counterpart Contribution Fund (Loan from Trinidad & Tobago)	<u>4,200,000</u>	<u>5,000,000</u>
(e) Commercial Livestock Production Fund (Canada)	<u>2,296,730</u>	<u>302,480</u>
III. Special Operations - Hard Funds		
Venezuela Trust Fund	<u>25,000,000</u>	-
TOTAL RESOURCES	<u>146,126,574</u>	<u>97,728,935</u>

*See note on Page 53

CARIBBEAN DEVELOPMENT BANK
ORDINARY CAPITAL RESOURCES
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED DECEMBER 31, 1975
EXPRESSED IN UNITED STATES DOLLARS (NOTE A)

RE		1975	1974
From Investments		1,233,819	1,317,683
From Loans Operations			
Interest		437,091	200,657
Commission & Guarantee Fees		61,203	28,944
From Interest-bearing Demand Notes		14,871	19,624
From Exchange of Currencies		-	54,860
Less Commissions and Guarantee Fees Appropriated to Special Reserve (Note E)		<u>1,746,984</u>	<u>1,627,695</u>
		61,203	28,944
		<u>1,688,781</u>	<u>1,592,751</u>
EXPENDITURE			
Administrative Expenses			
Board of Governors	17,536		23,215
Board of Directors	<u>29,095</u>		<u>22,715</u>
		46,631	45,930
Staff			
Salaries	472,031		317,536
Benefits	98,960		44,858
Allowances	98,213		49,837
Travel	220,138		89,165
Gratuities	<u>9,106</u>		-
		898,511	501,406
Other administrative expenses		291,735	286,557
Exchange of currencies		<u>87,780</u>	-
TOTAL ADMINISTRATIVE EXPENSES		<u>1,324,657</u>	<u>833,903</u>
LESS TECHNICAL ASSISTANCE CONTRIBUTIONS	113,976		45,197
Allocation of expenses to Special Funds	577,789		<u>172,224</u>
		<u>691,765</u>	<u>217,411</u>
		632,893	<u>616,492</u>
NET INCOME		<u>\$ 1,052,888</u>	<u>\$ 976,262</u>

BEST AVAILABLE COPY

CARIBBEAN DEVELOPMENT BANK
ORDINARY CAPITAL RESOURCES
BALANCE SHEET DECEMBER 31, 1975

EXPRESSED IN UNITED STATES DOLLARS (NOTE A)

ASSETS	1975	1974	LIABILITIES, RESERVES AND CAPITAL	1975	1974
CASH IN BANKS AND OTHER DEPOSITORIES	806,107	<u>105,222</u>	LIABILITIES		
INVESTMENTS			Bank Loans	55,000	-
Government securities, at cost			Accounts payable and accruals	41,254	<u>17,054</u>
Maturing within one year	250	335,151	SPECIAL RESERVE (Note E)	112,020	<u>53,515</u>
(Face value 3273)			CAPITAL		
Maturing over one year	1,325,052	1,545,002	Capital stock (Note F)		
(Face value 51,410,066)	20,545	37,712	Authorized - 38,400 shares of		
Accrued interest		<u>1,223,051</u>	\$5,000 par value each \$192,000,000		
Time deposits	1,346,577	12,023,526	Subscribed capital		
Maturing within one year	10,211,109	-	(Appendix IV A-5)		
Maturing over one year	6,075	250,337	30512 shares (1974 - 11,200 shares)	153,210,000	56,000,000
Accrued interest	214,505	2	Less 25042 callable shares		
Shareholding	2	2	(1974 - 5,500 shares)	<u>125,210,000</u>	<u>25,000,000</u>
LOANS	11,775,571	<u>10,253,565</u>	Paid-up shares	28,000,000	25,000,000
Approved by the Board of Directors	25,000,000	10,000,000	Less subscription instalments not due	<u>1,450,000</u>	<u>6,150,000</u>
Commitments (Appendix IV A-5)	21,200,000	10,000,000	Subscription instalments due	26,320,000	27,840,000
Less undisbursed portion	14,310,000	2,550,000	Additional subscription instalment due (Note G)	<u>640,000</u>	<u>420,000</u>
Disbursed portion	9,887,347	7,450,000	Amount required to maintain value of currencies (Note H)	24,980,000	22,250,000
Less capital repayments	16,884	-	Ordinary reserve (Note I)	1,774,397	795,137
Interest accrued and due	129,520	80,406	Net income for the year (to be allocated by the Board of Governors)	1,052,855	977,252
Deferred interest	-	150,555			
ALLOCATION TO SECONDARY MORTGAGE SCHEME (Note B)	3,000,000	3,000,000			
Less undisbursed portion	<u>2,930,550</u>	<u>2,000,000</u>			
DUE FROM MEMBERS (Appendix IV A-5)	69,420	-			
Non-negotiable demand notes (Note C)					
Interest bearing notes	170,570	311,330			
Non-interest bearing	10,741,510	9,541,455			
Accrued interest	9,113	21,200			
Amount due from members in respect of maintenance of value of currency holdings	10,921,193	<u>9,573,255</u>			
DEBTORS AND PREPAYMENTS	1,820,791	2,055,575			
LAND AND BUILDINGS	154,335	115,323			
	110,534	120,254			
	<u>5,350,125</u>	<u>525,700,000</u>			
				<u>\$35,125,554</u>	<u>25,427,706</u>

CARIBBEAN DEVELOPMENT BANK
SPECIAL FUND RESOURCES
SPECIAL DEVELOPMENT FUND
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED DECEMBER 31, 1975
EXPRESSED IN UNITED STATES DOLLARS (NOTE A)

		1975	1974
INCOME			
From Investments		1,266,389	542,584
From Loans		266,989	49,282
From Exchange of Currencies		-----	3,328
		1,533,378	595,194
EXPENDITURE			
Administrative expenses	577,785		151,751
Interest on loans	131,725		75,621
Other expenses	9,885		9,840
Exchange of currencies	<u>87,310</u>		-----
		806,705	187,212
		728,652	109,621
Transfer from reserve			89,022
Transfer to Fund		8,728,462	8,499,055

BEST AVAILABLE COPY

CREDIT AND FINANCIAL STATEMENTS
 SPECIAL INVESTMENT RESOURCES
 SPECIAL DEVELOPMENT FUND
 BALANCE SHEET DECEMBER 31, 1975
 EXPRESSED IN UNITED STATES DOLLARS (NOTE A)

ASSETS	1975	1974	LIABILITIES, RESERVES AND FUNDS	1975	1974
CASH IN BANKS AND OTHER DEPOSITORIES	-	<u>887,500</u>	LIABILITIES		
INVESTMENTS			Accounts payable and accrued charges	69,659	<u>1,055</u>
Time deposits maturing within one year	18,367,185	13,640,692	FUND (NOTE 5)		
Accrued interest	<u>494,552</u>	<u>225,922</u>	Loans	25,277,335	22,000,000
	18,861,743	<u>13,866,614</u>	Less: amounts not yet made available	<u>12,411,755</u>	<u>10,321,356</u>
LOANS			Amounts made available	14,865,570	2,678,644
Approved by the Board of Directors	<u>45,125,230</u>		Contributions	32,224,583	29,954,346
Commitments (Appendix IV B-5)	42,834,281	27,434,474	Less: amounts not yet made available	<u>9,261,061</u>	<u>10,015,575</u>
Less undisbursed portion	<u>27,922,239</u>	<u>25,017,421</u>	Amounts made available	23,963,522	10,937,471
Disbursed	18,712,712	2,767,241	Transfers to Fund	1,253,365	<u>524,715</u>
Accrued interest	<u>1,822,624</u>	<u>217,227</u>			<u>14,142,837</u>
	18,535,336	2,984,468			
RESOURCES AVAILABLE FROM CONTRIBUTORS (NOTE 5)					
Amounts made available	27,520,392	23,010,145			
Less amounts utilized	<u>2,222,227</u>	<u>1,010,145</u>			
	25,298,165	22,000,000			
	<u>27,172,116</u>	<u>24,115,752</u>		<u>540,152,116</u>	<u>514,145,752</u>

DISTRIBUTION OF LOANS APPROVED
AS AT DECEMBER 31, 1975

	Ordinary Capital Resources	Special Development Fund	Other Special Funds	Total
	US\$	US\$	US\$	US\$
<u>NATIONAL LENDING INSTITUTIONS</u>				
Agricultural Credit	5,792,973	378,000	6,453,565	12,624,538
Industrial Credit	3,690,594	-	4,600,540	8,291,134
Small Industry Credit	-	2,895,617	154,720	3,050,337
Industrial Estates	1,624,000	2,586,047	10,920	4,220,967
Housing	5,644,780	-	3,108,025	8,752,805
Student Loans	-	895,872	-	895,872
TOTAL	16,752,347	6,755,536	14,327,770	37,835,653
<u>DIRECT LENDING</u>				
<u>Agriculture</u>				
Livestock	368,657	272,740	-	641,397
Estate and Farm Development	387,562	935,327	-	1,322,889
Banana Development	3,992,826	1,264,166	-	5,256,992
Processing	513,060	490,627	169,500	1,173,187
Other	327,024	1,225,318(1)	-	1,552,342
TOTAL	5,589,129	4,188,178	169,500	9,946,807
<u>Tourism</u>				
Hotels	1,662,253	-	-	1,662,253
TOTAL	1,662,253	-	-	1,662,253
<u>Infrastructure</u>				
Ports	1,353,705	17,690,933	1,263,805	20,308,443
Electricity	-	2,520,480	-	2,520,480
Faeder Roads	-	4,951,829	554,962	5,506,791
Other Roads & Bridges	1,102,100	708,733	133,194	1,944,027
Water Supplies	328,307	1,737,994	30,940	2,097,241
Airports	207,106	235,678	-	442,784
Sea Transport	1,942,857(2)	71,400	-	2,014,257
Air Transport	-	5,842,678(2)	-	5,842,678
Other	-	621,900	-	621,900
TOTAL	4,934,075	34,381,625	1,982,901	41,298,601
GRAND TOTAL	28,937,804	45,325,339	16,480,171	90,743,341

(1) Includes \$1,074,118 - Corn/Soya Bean Production - Regional Project

(2) Regional Projects.

CARIBBEAN DEVELOPMENT BANK

SPECIAL DEVELOPMENT FUND

Projected Commitments - 1976-1979

(Millions of US Dollars)

<u>Sector</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Total</u>
<u>AGRICULTURE</u>					
Land Reform and Development of Small Farms (LDCs)	2.40	1.00	2.75	1.25	7.40
Land Reform and Development of Small Farms (MDCs)	-	1.50	-	1.50	3.00
Land Reclamation and Development (LDCs)	1.00	1.00	1.55	1.50	5.05
Agricultural Feeder Roads (LDCs)	2.50	2.00	2.00	1.50	8.00
Marketing Facilities and Agro-Industries (LDCs)	1.75	2.50	1.00	0.75	6.00
Marketing Facilities and Agro-Industries (MDCs)	0.70	0.50	1.50	-	2.70
Agricultural Credit (MDCs)	2.50	2.50	2.75	2.75	10.50
Regional Projects	3.40	1.50	1.50	2.00	8.40
	<u>14.25</u>	<u>12.50</u>	<u>13.05</u>	<u>11.25</u>	<u>51.05</u>
<u>INDUSTRY</u>					
<u>Financial Intermediaries</u>					
Small Industry Credit (LDCs)	0.75	1.40	1.15	1.20	4.50
Small Industry Credit (MDCs)	1.00	1.00	1.50	2.00	5.50
CIC (Equity - LDCs)	1.50	-	-	1.50	3.00
<u>Direct Investment</u>					
Equity (MDCs)	0.31	0.17	0.23	0.24	1.00
Equity (Regional)	0.75	0.20	0.50	0.25	1.70
Total Industry	<u>4.31</u>	<u>2.77</u>	<u>3.43</u>	<u>5.19</u>	<u>15.70</u>
<u>Infrastructure</u>					
Reconstruction Main Roads (LDCs)	1.50	2.00	2.00	2.50	8.00
Reconstruction Highway Bridges (LDCs)	0.50	0.50	1.00	1.00	3.00
Water Supplies (LDCs)	0.50	1.00	1.00	1.00	3.50
Wharf Improvements (LDCs)	1.00	1.00	1.00	-	3.00
Sewerage (LDCs)	1.00	1.00	1.00	1.00	4.00
Airport Terminals (LDCs)	-	0.50	1.00	1.00	2.50
Industrial Estates (LDCs)	0.50	0.50	0.50	0.50	2.00
Industrial Estates (MDCs)	0.50	0.50	0.50	-	1.50
Electricity (LDCs)	0.50	1.00	1.00	1.00	3.50
Total Infrastructure	<u>6.00</u>	<u>8.00</u>	<u>9.00</u>	<u>8.00</u>	<u>31.00</u>
Student Loans (LDCs)	0.75	0.90	0.55	1.15	3.35
Project Preparation Fund (MDCs & LDCs)	0.20	0.20	0.30	0.30	1.00
Grand Total	<u>25.51</u>	<u>24.37</u>	<u>26.33</u>	<u>25.89</u>	<u>102.10</u>

SMALL FARMS CROPS

<u>CROPS</u>	Antigua	Belize	Dominica	Grenada	Montserrat	St. Kitts/Nevis	St. Lucia	St. Vincent	Turks & Caicos	Caymans	Virgin Islands
Coconuts			X	X			X	X			
Bananas		X	X	X			X	X			
Sugar		X				X					
Cocoa		X	X	X			X	X			
Citrus		X	X	X		X	X		X		
Coffee		X	X	X			X	X			
Cotton*	X	X			X	X		X	X		
Peanuts	X				X	X	X	X	X		
Corn (Maize)		X									
Arrowroot								X			
Nutmeg			X	X			X	X			
Food crops	X	X	X	X	X	X	X	X	X	X	X
Vegetables	X	X	X	X	X	X	X	X	X	X	X
Vanilla			X	X							
Bay Oil			X		X						
Rice		X									
Soya Bean*		X									
Red Kidney Bean		X									
Orchard Fruit Crops, e.g. Mangoes, Avocados, etc.	X	X	X	X	X	X	X	X	X		X
Pineapples	X	X				X					X
Beef Cattle	X	X				X	X				
Dairy Cattle	X	X	X	X	X	X	X	X		X	X
Small Ruminants	X	X	X	X	X	X	X	X	X	X	X
Pigs	X	X	X	X	X	X	X	X	X	X	X
Poultry	X	X	X	X	X	X	X	X	X	X	X
Fishing (Inshore)	X	X	X	X	X	X	X	X	X	X	X
Cassava		X	X	X			X	X			

* To be financed by non-AID resources.

CARIBBEAN DEVELOPMENT BANK

ANNEX D
Exhibit 1
Page 1 of 2

BOARD OF GOVERNORS

(As of May 31, 1975)

Hon. C.A. Paul Southwell Hon. George Chambers Hon. John Turner	St. Kitts-Nevis-Anguilla Trinidad & Tobago Canada	Chairman Vice-Chairman Vice-Chairman
<u>COUNTRY</u>	<u>GOVERNOR</u>	<u>ALTERNATE</u>
Antigua	Hon. S. U. Prince, Minister of Finance, Industry and Tourism	Mr. Peter Merchant Financial Secretary
Bahamas	Hon. A. D. Hanna, Deputy Prime Minister and Minister of Finance	Mr. T. Donaldson Governor, Central Bank of the Bahamas
Barbados	Rt. Hon. Errol W. Barrow Prime Minister and Minister of Finance	Mr. L.V.H. Lewis Permanent Secretary (Finance)
Belize	Hon. A. Shoman Attorney General and Minister of Economic Planning	Mr. G. R. Graham Head, Planning Unit Ministry of Economic Planning
Canada	Hon. John Turner Minister of Finance and Receiver-General	Mr. P. Gerin-Lajoie President Canadian International Development Agency
Colombia	Dr. Rodrigo Botero Montoya Minister of Finance & Public Credit	Dr. German Botero de los Rios General Manager Banco de la Republica
Dominica	Hon. P. R. John Premier and Minister of Finance & Development	Mr. A. C. B. Watty Financial Secretary
Grenada	Hon. Geo. F. Hosten Minister of Finance, Trade and Industry	Hon. F. Dolland Minister of Youth Development, Sport and Labour
Guyana	Hon. F. E. Hope Minister of Finance	Hon. S. S. Ramphal Minister of Foreign Affairs and Justice
Jamaica	Hon. David H. Coore, Q.C. Deputy Prime Minister and Minister of Finance	Hon. G. A. Brown Governor Bank of Jamaica

Montserrat
British Virgin Islands
Cayman Islands
Turks and Caicos Islands



Hon. Benson Ebanks
Member of Executive
Council
Cayman Islands

Mr. William Bramble
Montserrat

St. Kitts-Nevis-Anguilla

Hon. C.A. Paul Southwell
Deputy Premier and
Minister of Finance

Hon. R. L. Bradshaw
Premier

St. Lucia

Hon. J. G. Compton
Premier and Minister
of Finance

Hon. W. G. Mallet
Minister of Trade,
Industry and Tourism

St. Vincent

Hon. R. M. Cato
Premier and Minister of
Finance

Mr. C. Ivor Martin
Financial Secretary

Trinidad & Tobago

Hon. George Chambers
Minister of Finance

Hon. K. Mohammed
Minister of Health

United Kingdom

Rt. Hon. Judith Hart
Minister of Overseas
Development
Overseas Development
Administration
Foreign and Commonwealth
Office

Mr. R. H. Belcher
Under-Secretary
Overseas Development
Administration
Foreign and Commonwealth
Office

Venezuela

Dr. Hector Hurtado
Minister of Finance

Dr. R. Figueredo Plauchart
President
Institute of Foreign Trade