

UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

CARIBBEAN REGIONAL

PROJECT PAPER

DOMINICA BANANA COMPANY PROJECT

LAC/DR:82-8

Project Number:538-0083

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BEST AVAILABLE

AGENCY FOR INTERNATIONAL DEVELOPMENT		PROJECT DATA SHEET	1. TRANSACTION CODE A A = Add C = Change D = Delete	Amendment Number _____	DOCUMENT CODE 3
2. COUNTRY/ENTITY Regional Development Office/Caribbean			3. PROJECT NUMBER 538-0083		
4. BUREAU/OFFICE Latin American & Caribbean			5. PROJECT TITLE (maximum 40 characters) Dominica Banana Company Project		
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 06 30 85		7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4) A. Initial FY 82 B. Quarter 4 C. Final FY 82			

8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(1,750)	()	(1,750)	(1,750)	()	(1,750)
(Loan)	()	()	()	()	()	()
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s) BDD				1,874		1,874
TOTALS	1,750		1,750	3,624		3,624

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) DA	130	010							
(2)									
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)								11. SECONDARY PURPOSE CODE	
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)									
A. Code		BF							
B. Amount		100%							
13. PROJECT PURPOSE (maximum 480 characters)									

To improve the cost-effectiveness and financial viability of the Dominica banana industry, while maintaining control of leaf spot disease in bananas.

14. SCHEDULED EVALUATIONS					15. SOURCE/ORIGIN OF GOODS AND SERVICES						
Interim	MM	YY	MM	YY	Final	MM	YY	<input checked="" type="checkbox"/> 000	<input type="checkbox"/> 941	<input checked="" type="checkbox"/> Local	<input type="checkbox"/> Other (Specify)
	06	83	12	83		06	85				

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)									
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17. APPROVED BY	Signature						18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
	Title	William B. Wheeler Director, RDO/C					
	Date Signed	MM	DD	YY			MM DD YY
		09	29	82			

B. Conditions Precedent to Disbursement

1. First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to AID in form and substance satisfactory to AID:

(a) An opinion of counsel acceptable to AID that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms;

(b) Evidence of the formation of a new Dominica Banana Company (DBC) with operational aspects, including financial controls, and an organization, including senior staff and board members, acceptable to AID;

(c) Evidence of the formation of the Dominica Banana Producers Association, or an equivalent organization, as a group which will represent the interests of banana growers to the DBC and the Government of Dominica;

(d) Evidence of an Agreement between the Grantee and DBC which contains a commitment by the DBC to the Grantee that the DBC agrees to observe and act in conformity with the Special Covenants, Conditions Precedent and the Annex I Amplified Project Description of this Agreement;

(e) A time-phased plan for the diversification of boxing plants to private sector groups which at a minimum shall result in the divestiture of 22 boxing plants by the end of 1984.

2. Condition Precedent to Any Disbursement for Project Expenditures Incurred During the Second Year of the Project. Prior to any disbursement or to the issuance by AID of documentation pursuant to which disbursement will be made for any expenditure other than technical assistance incurred after October 1, 1983, the Grantee shall, unless the Parties shall otherwise agree in writing cause to be produced, in form and substance satisfactory to AID, a feasibility plan for the divestiture of other operations such as transportation, input supply and pest control and, with regard to than plan, furnish A.I.D. with a list of actions which the DBC governing board has taken or directed to be taken concerning divestitures recommended as feasible by the plan.

3. Condition Precedent to Initial Disbursement for Agricultural Chemicals: Prior to any disbursement, or to the issuance of documentation pursuant to which disbursement will be made for the procurement of agricultural chemicals, the Grantee shall, unless the Parties shall otherwise agree in writing, present in form and substance satisfactory to AID, evidence of a time-phased procurement plan together with evidence of availability of the necessary resources to manage and carry out the spraying process and a technical plan for the spraying process.

Special Covenants. The Grantee shall covenant as follows:

(a) The Grantee shall assure that the Dominica Banana Company will operate in such a manner as to promote its development into a financially viable organization. The evaluation of its operation will be based at a minimum on the performance targets established in Annex I under "Measurements of Financial Viability". AID may at its option suspend disbursements for agricultural chemicals under the Project if the DBC is not operated on a sound financial basis, including meeting the performance targets established in Annex I.

(b) The Grantee shall assure that input sales activity undertaken by the DBC must be done without increase in credit levels to growers beyond that as of the date of this Agreement or must be for cash or against prepaid cess; furthermore all inputs must be at full market value.

(c) The Grantee shall assure that no new credit except that allowed in 5.1(b) above can be extended by the DBC to any borrower, including DBC staff, for any purpose without the prior written approval of A.I.D.

(d) The Grantee shall assure that no expenditures for purchases of fixed assets will be allowed without the prior written approval of AID;

(e) The Grantee shall assure that, unless AID gives its prior written approval, no principal payments against long-term loans from banks and other creditors will be made during the period October 1, 1982 to March 31, 1985, except those scheduled on the CDB loans, and except for payments arising from (i) below;

(f) The Grantee shall assure that, unless AID gives its prior written approval, no payments against loans from Geest Industries will be made during the period January 1, 1983 to March 31, 1984.

(g) The Grantee will assure that unless AID gives its prior written approval, reductions in outstanding debts, trade creditors, other than Geest will be limited to no more than \$200,000 per quarter, excepting payments arising from (i) below;

(h) The Grantee will assure that the DBC undertakes no additional long-term borrowings or increases in short-term borrowing limits without the prior written approval of AID;

(i) The Grantee will assure that the gross cash flow, surpluses, if any (cash inflow payments to growers, other operating costs, interest and principal payments, fixed assets, purchases and trade creditors reductions, plus donor assistance in the form of grower inputs, other materials or cash) will be assigned as follows:

- (i). If the net cash flow surplus (gross surplus less donor assistance) is positive, 75% of the net will be used to further reduce long-term debt and/or trade credit; the remaining 25% along

with an amount equal to donor assistance will be placed in a contingency fund for disasters or for other purposes agreed to by AID and DBC.

(ii). If the net cash flow surplus is negative, the entire amount of the gross cash flow surplus will be placed in the contingency fund for disasters or other purposes agreed to by AID and DBC.

(j) The Grantee shall cause to be established, within 3 months of the date of the signing of the Project Agreement, a fertilizer procurement and supply/distribution system, acceptable to AID, which eliminates accrual of losses and extension of credit beyond present levels or subsidization of costs to the growers.

William B. Wheddy
Director

Regional Development Office/Caribbean

29 September 1982
Date

DOMINICA BANANA COMPANY PROJECT PAPER

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I. SUMMARY AND RECOMMENDATIONS

A. Recommendation

The Regional Development Office/Caribbean recommends the authorization of the Dominica Banana Company Project in the amount of \$1,750,000 over a period of 27 months.

B. Grantee

The Grantee is the Government of Dominica. The funds provided under this project will be used by the Grantee for the exclusive purpose of procuring certain commodities and technical assistance required by the Dominica Banana Company.

C. Problem Summary

The banana industry in Dominica is in a state of crisis. The Dominica Banana Growers Association (DBGA) is bankrupt with an estimated net worth of negative \$5.3 million. Prices paid to growers for fruit delivered to the DBGA have been below estimated production cost for most of 1982, and grower confidence in the industry has eroded. Consequently, banana growers are not investing in fertilizer and labor to sustain the volume or quality of fruit demanded by the export market. Moreover, due to the financial crisis in the DBGA, it has not been able to purchase the oil and fungicides required to maintain control of leaf spot disease. The interruption of this essential disease control function has contributed to a high proportion of rejected fruit and has exposed the industry to the risk of a major disaster that would result from widespread infestations of leaf spot disease.

The major contributing factors to this financial crisis include: the Hurricane damage in two successive years (1979 and 1980) which significantly reduced DBGA volumes without reductions in fixed costs; pressure by the former Government that forced unwarranted borrowing by the DBGA which was used to give large payments to growers for political purposes; the precipitous negative movement in the U.K. Pound/U.S. Dollar exchange rate during the last year which drastically reduced the E.C. Dollar revenues received by the DBGA without affecting costs; and finally, the operating inefficiencies and poor management of the DBGA.

It is now generally recognized that the problems affecting the DBGA are systemic not temporary; and the problems are organizational as much as they are agricultural. This conclusion is the central theme in each of a series of reports prepared after studies of the banana industry. Detailed financial and operating analysis described in consultants' reports indicated severe operating inefficiencies in boxing, spraying and input supply systems, needed financial reporting procedures were absent, and management was inadequate. In the past six months, at the insistence of AID and BDD and with strong pressure by P.M. Charles, some improvements have been achieved especially in financial reporting. However, unless structural changes are made and costs are reduced, the DBGA could become inoperative due to lack of funds and the Dominica banana industry could well collapse. Such a collapse would not only result in a major economic hardship for thousands of Dominicans, it would very likely endanger the political

stability of the country. Furthermore, it has been stated by the marketing agent (Geest Industries) that a major reduction in the availability of bananas from Dominica would jeopardize their ability to continue buying and shipping bananas from this Region. Such a loss would be devastating, economically and politically throughout the Region. Restructuring of the industry functions served by the DBGA is needed and major sustained assistance is required in order to allow sufficient time to successfully complete it along sound economic lines.

The Government of Dominica has committed itself to undertake a major restructuring of the banana industry by: (1) dissolution of the DBGA, and the creation of a statutory Company, the Dominica Banana Company (DBC), to takeover the essential marketing activities of the DBGA; (2) spinning-off or contracting out boxing plant operations, spraying services and other functions that can reasonably be accomplished by private individuals or groups; and (3) the formation of a Dominica Banana Producers' Association (DBPA) to act as representative for the Growers' interests. The new DBC will be controlled by a nine member Board of Directors composed of individuals from the private business sector and others with demonstrated skills in financial and organizational management.

The new Company will takeover the assets and commercial liabilities of the DBGA. The majority of existing long-term debt has been rescheduled with the agreement of Royal Bank of Canada, Barclays Bank International, and Geest Industries.

The British Development Division has been providing significant Grant assistance to the DBGA in the recent past, and has indicated its willingness to continue support to the DBC provided that management and financial performance is steadily improved.

Forecasting of cash flows for the banana industry (as embodied in the DBGA and/or DBC) have now been completed utilizing the services of a chartered public accounting firm. Taking into account key assumptions regarding the various factors which affect the industry, the estimated amount of assistance which the DBC will need from September, 1982 through December, 1984 is US\$3.5 million. This estimate assumes no major weather or disease disasters, a moratorium on repayment of existing long-term debt which has already been agreed, relative stability in both the London Green Market Price for bananas and the U.S. Dollar to British Pound foreign exchange relationship, and minimum payments to growers at a level expected to keep them growing bananas.

D. Project Summary

To respond to the crisis in the Dominica banana industry and support the initiative of the GOD to restructure that industry, the project will finance procurement of spray oil and fungicides essential for the control of banana leaf spot disease; and will finance long-term technical assistance to accelerate the transfer of boxing plant operations to private firms. The project will also finance short-term consultants to: (1) assess the potential and devise plans to transfer spraying operations and input supply services from the DBC to private firms; and (2) design an improved system for communicating between boxing plants and DBC central office based on management requirements.

The project will complement assistance being provided by the British Development Division to the Dominica banana industry and is fully supportive of the plans of the Government of Dominica to re-establish the industry on a sound financial basis as a commercial business.

Under the project most (75%) of the AID Grant will be used to purchase spray oil and fungicides for leaf spot control. Regular spray applications of these materials is absolutely essential for sustained commercial banana production in Dominica because fruit from banana plants infected with leaf spot disease are simply unacceptable for the market. The new Dominica Banana Company is unable to purchase the spray commodities, due to their poor initial financial condition inherited from the DBGA, even though the DBC has the personnel, equipment, and technical capacity to maintain a disease control program. Therefore, AID grant funds will provide oil and fungicide in an amount equivalent to two years requirement in Dominica under normal growing conditions. Thus, the DBC will be able to maintain the vital program of leaf spot control during the period of industry restructuring. At the end of the project, cash flow projections show that the DBC will be able to purchase spray commodities on a routine basis as an ordinary operating expense.

Under the project, about 25% of the AID grant funds will finance technical assistance. The AID grant will support two long-term small business advisors for a period of two years to assist private individuals and groups undertake boxing plant operations on an independent basis. The spinning-off of boxing plant operations to private firms is a key structural change in Dominica banana industry to be accomplished by the DBC. Technical advisors in small business accounting, personnel, budgeting, and operations control will work intensively with individuals selected to "box bananas" on a fee for service basis. Existing boxing plant facilities owned by the DBC will be leased or sold to private firms, who in turn will be totally responsible for fruit reception, grading, weighing, and final boxing. The AID Project funds will assure that reasonable levels of technical assistance are available to individuals selected to fill the entrepreneurial functions associated with private boxing plants.

AID project funds will also finance consultant services to assess the potential for placing other banana industry services like leaf spot spraying and input distribution in private sector firms, and when found feasible to design operational plans for the DBC to divest itself of these functions.

The activities called for in this project design are found to be technically and financially sound, and are consistent with the economic and social objectives of the Government of Dominica. In particular, spraying for control of leaf spot disease in bananas has been reviewed in depth, including an environmental assessment. RDO/C has determined that the methods used in Dominica to control leaf spot are technically appropriate, implementable, and present no threat to the environment.

The institutional and organizational aspects of the project present no unusual social innovations. Dominican farmers are very much cash crop oriented and independent entrepreneurship is the norm in the business community. Actions to establish more of the boxing plant operations as private firms is believed to be both workable and efficient.

The economic and financial analysis of the Dominica Banana Company Project show it to be viable. Indeed, the overall objective of this project is geared to maintaining the financial viability of the banana industry in light of its economic importance to Dominica. Because of the widespread employment opportunities and substantial export earnings attributable to bananas, maintenance of this industry is essential while simultaneous efforts are put forth to diversify the Dominican economy. While the conceptual leadership for the restructuring of the banana industry has come from the Government of Dominica, RDO/C has worked collaboratively to examine policy alternatives and identify needed areas of structural adjustment that will best lead to financial viability. Also in collaboration with the British Development Division, Geest Industries, and commercial banks, RDO/C has defined a detailed list of performance criteria for the Dominica Banana Company. These criteria represent the primary targets the DBC will need to achieve to establish a sound financial and operational footing. The GOD and all interested parties have reviewed the list of performance criteria and all have agreed in principle that the criteria are appropriate. The AID assistance provided under this project will enable the DBC to maintain the essential control of banana leaf spot disease during the period of planned industry restructuring, and directly promote the key activity of DBC investment of boxing plant operations to private firms.

The project will also benefit from advisory and technical assistance provided by the BDD. The commercial banks and Geest Industries have agreed to restructure the period of payment by the DBC for outstanding loans; and the Government of Dominica has forgiven substantial amounts of debt owed by the banana industry. The aggregate effect of these actions is to provide the DBC with the resources and time needed to solve the industry's financial crisis and re-establish a businesslike operational routine.

The total cost of the project is \$5,224,000. A summary of project cost by source is presented in the Table below.

<u>Dominica Banana Company Project</u>					
<u>Total Project Cost</u>					
<u>(\$000)</u>					
<u>Cost Category</u>	<u>AID</u>	<u>BDD</u>	<u>GOD</u>	<u>Total</u>	
1) Commodities					
a) Disease control materials	1,312				1,312
b) Fertilizer & other inputs		1,474			1,474
2) Technical Assistance					
a) Financial control & management		400			400
b) Divestiture of operations	438				438
3) Loan forgiveness			1,600		1,600
TOTALS	1,750	1,874	1,600		5,224
	=====	=====	=====		=====

E. Project Issues

Issues identified in the PID guidance cable (see Annex B, Exhibit 2) are discussed below.

1. Design Alternatives

Alternative strategies to address the needs identified in the PID of the Dominica banana industry were considered by RDO/C and included: (a) an expanded role for Geest Industries (the existing shipping and U.K. marketing agent) to operate boxing plants, provide on-land banana transport, and otherwise assume many of the functions now performed by the Dominica Banana Growers Association (DBGGA); and (b) the creation of a totally private company to be capitalized and managed by stockholders drawn from Dominican nationals, firms supplying the banana industry, Geest, and other interested investors.

In several discussions with Geest Industries, their representatives made it quite clear that Geest was neither interested nor prepared to "come ashore" to undertake line functions of the banana industry. Their reasoning was based primarily on the fundamental political unacceptability of a transnational company playing a key role in the major industry in Dominica. Geest pointed out that it sold its banana plantations in Dominica in recent years exactly to avoid a negative image associated with large plantations owned by foreign interests. Because the banana industry is so dominant in the economy of Dominica, Geest felt it would be unacceptable for them to increase their vertical integration to include banana boxing, etc.

With regard to the creation of a totally private company, which presumably would purchase the assets of the bankrupt DBGGA, to undertake the functions of the BGA, RDO/C is persuaded that no investors are likely to be interested. Certainly, the banana growers themselves are unlikely to have the amounts of capital required. Other potential investors are likely to find the risk too high in light of the modest potential for profit.

The strategy for restructuring the Dominica banana industry as proposed in this Project Paper was conceived by the Government of Dominica and endorsed by independent experts. Prime Minister Charles has personally contributed to formation of a commercially oriented Dominica Banana Company that would perform the essential marketing functions and coordinate overall industry policy, while spinning-off as many operational functions of the industry as possible. RDO/C fully supports P.M. Charles' concept of allowing private individuals or groups to operate boxing plants, provide transportation services, distribute inputs, and perform any other functions that can be reasonably provided by the private sector. RDO/C believes the Government of Dominica has proposed a strategy that is workable and appropriate in light of prevailing conditions.

2. Debt Rescheduling

The amounts of debt and repayment commitments were identified as major problems in the PID. The total accumulated long-term debt of the DBGGA currently exceeds US\$7.0 million. With the reorganization of the debts proposed in the White Paper the total will fall to less than US\$5.6 million and two commercial banks have already agreed to reschedule payment of outstanding loans.

(See Paras. 49 and 50 of White Paper, Annex C, Exhibit 1). As described in the PP, total long-term debt servicing, interest and principal repayments, will be approximately US\$700 thousand annually from 1985. Two of the three largest commitments are ten year loans (with three year grace periods) from commercial banks.

Cash flow projections indicate that the DBC should achieve an operating surplus of US\$1.1 million in 1984, if payments to growers are held down to minimum reasonable levels. This level of surplus suggests that the industry has the capacity to repay its long-term debts from 1984 or, at least, 1985 and in subsequent years raise the real level of return to producers as well.

3. Recommendations of A.D. Little Consultants

A 1981 review of the financial and economic status of the Windward Islands Banana Industry, conducted by consultants from Arthur D. Little, Inc., with AID funding, resulted in a number of key recommendations that have been included in the design of the Dominica Banana Company Project.

The ADL Consultants wrote, "The first requirement is to establish some industry leadership". In this context, the consultants went on to identify two basic issues the leadership must confront. The first issue concerns ".... BGA finances and the conflict between decisions based on the integration of business, financial, and economic factors, as compared to decisions based blindly on sociopolitical factors". The second issue identified by ADL ".... relates to the cost effective allocation of limited resources available to the industry".

The major thrust of the Dominica Banana Company Project is aimed exactly at addressing the problem of weak leadership in the Dominica banana industry and confronting the two issues identified by ADL. This is the first and essential step to regain and maintain industry financial health over the medium-term.

The ADL Report further specified four major requirements the industry must meet that would characterize the financial stability status which is the primary objective. These four requirements are:

- (a) maintaining production levels close to current levels;
- (b) cutting operating cost;
- (c) improving fruit quality; and
- (d) re-establishing financial responsibility by BGAs.

Again, the DBC project proposed here directly addresses all of these suggested requirements, and emphasizes financial responsibility and cutting operating cost.

The ADL Report also provided a list of "ten priority programs" that could improve the financial viability of the industry. (See Annex C, Exhibit 3). Many of these recommendations are directly addressed under this project, including specific controls on expenditure from growers' accounts, introducing field boxes, providing management assistance, and encouraging production in periods of high fruit prices. Other recommendations like finding

alternative markets/uses for second quality fruit are being attended through separate activities, e.g. inter-regional trading project and PDAP investor search activities. Finally, other ADL recommendations like establishment of a quality fruit program will be investigated further, and where found feasible, promoted by the technical advisors provided under this project.

4. Private Sector Activity in the Banana Industry

An increase in private sector activity in the industry was first recommended in the Report of the Task Force set up in late 1981 by the GOD and chaired by Dr. Bernard Yankey of the CDB. This Report and its recommendations were accepted by the Government of Dominica and so became policy insofar as the DBGA Board was concerned. Private sector operations within the DBGA's scope of responsibility are currently limited to contract transportation services for handling inputs and boxed bananas, although preliminary planning to lease/sale boxing plant operations to private firms is underway.

It is anticipated that the proposed change in key areas of the DBC's operations can be achieved within the life of the project and the GOD is already committed to this process in the boxing plants. Preliminary planning for the transfer has been initiated by the GOD, independently of the DBGA. (Evidence of satisfactory progress in this planning will be a precondition for disbursement of USAID funds - see Section V. A.). It seems likely that input distribution should also be progressively privatized, in parallel with boxing, with which it is physically linked in terms of physical facilities. As well as its commitment to the lease/sale of the boxing plants, the GOD has also indicated that it wishes to explore the possibility of spraying services for leaf spot control being reorganized in this manner.

In the wider context, the legislation which will establish the DBC will provide that, although initially set up as a statutory authority, the Company can be converted to a joint stock company, subject to the Standard Provisions of the Companies Act, in future years. While it seems unlikely that private investors would wish to invest in a Company with a massive debt burden, the prospect exists in the medium-term future of an operational situation in which adequate prices can be paid to farmers while the debt commitment is serviced; in such a situation the gradual shift to private sector ownership appears plausible.

5. DBC Reserve Fund

The GOD has indicated its interest in the concept of a price stabilization fund for the banana industry and will require the DBC to investigate the issues involved in the creation of such a fund. While such a fund may be financially feasible as a means of smoothing short-term price fluctuations, it would not provide the large amounts of money required for disaster relief.

The establishment of such a fund - which presumably would tie up fairly considerable amounts of money on a continuing basis, seems likely to be financially disadvantageous while long-term debts at commercial interest rates are still outstanding. In view of the important role of the banana industry within the economy it is more practical, should funds become available in excess

of short-term requirements, to make additional repayments to the commercial banks on the understanding that these same banks would be expected to assist should a natural disaster again jeopardize the industry's viability. Therefore, within the period of the project, a reserve fund will not be established.

II. PROJECT BACKGROUND AND DETAILED PROJECT DESCRIPTION

A. Development Setting

1. Assessment of the Economic and Social Setting of Dominica

(a) General Overview

Dominica, is the most northerly and largest of the Windward Islands, with a land area of approximately 298 square miles and a population estimated at 74,000 people in 1980. Overall, Dominica is considered the least developed of all the Eastern Caribbean states with estimated per capita GDP in current 1980 prices of US\$550. Unemployment is estimated at between 15 and 20 percent. Dominica is predominantly an agricultural country, with basic manufacturing and tourism sectors of much less significance.

Hurricanes David and Frederick in 1979 and Hurricane Allen in 1980 had a severe negative impact of the Dominican economy. These hurricanes devastated the banana, citrus and coconut crops, disrupted the electrical system, damaged most of the tourist facilities and destroyed 13 percent of the housing units. Real GDP declined by 8 percent in 1979 and 3 percent in 1980. During this same period the country's public finances were further strained by increases in the salaries of civil servants ranging from 50 to 120 percent, and added a significant burden on public sector finances. The GOD's international financial position has also weakened, in part due to a weakening of the British Pound against the U.S. Dollar. The 1980 current account deficit of \$33 million represented 60 percent of GDP.

After being elected to office in June 1980, the Government of Prime Minister Eugenia Charles was faced with a grave economic and political situation typified by a climate of uncertainty, political unrest, shattered economic infrastructure, and very limited resources with which to respond to these problems. A bold economic and political program was essential to avoid a complete breakdown of the economic and political system.

The Government of Ms. Charles has taken a number of steps to reverse the deterioration of the economy and stimulate expanded production and employment. The most significant policy reforms have taken place in the area of public sector finances, especially the control of expenditures. The first step was to sever the automatic link between inflation and wage increases; the GOD promised to honor retroactive salary increases granted by the previous Government in exchange for an agreement from the Civil Servants Association to settle for 10 percent annual increases in 1982 - 1984.

To support this decision, the GOD negotiated an \$11 million EFF Agreement with the IMF. This Agreement, in addition to funding to retroactive salary increases, has enabled the GOD to mobilize significant amounts of other donor assistance through promotion of confidence in the future viability of the Dominican economy. The lynchpin of the IMP Agreement is the requirement that the GOD strengthen its public sector finances and a number of fiscal reforms have initiated. Consequently, the public finances were stronger than had been anticipated last fiscal year. This fiscal year, the GOD is holding current expenditure increases to 7 percent, while additional revenue generating measures will enable domestic revenue to increase by an estimated 20 percent.

Traditionally, the most significant structural difficulties of the Dominican economy were related to: 1) the magnitude of GOD transfers to the public enterprises, and 2) the significant wage and salary component of public sector expenditures. This fiscal year, GOD transfers to public enterprises are to be held to one half of last fiscal year's total. While the GOD wage and salary bill remains high (roughly 60 percent of current expenditure), the Agreement mentioned earlier will serve to limit future increases.

In an effort to stimulate production and exports, the GOD has ranked ordered investment projects and has presented lists to the external donor community. As part of this effort, the GOD has established an Economic Development Unit to strengthen its investment planning, implementation of investment projects and its monitoring capability. On the agricultural front, the GOD intends to offer land for sale to small farmers on a "controlled freehold" basis, while integrated rural community development schemes are planned in several areas.

In the area of industrial development, the GOD has placed the Industrial Development Corporation (IDC) under the leadership of the private sector. The current GOD (unlike the previous Government) is actively seeking through the IDC, foreign and domestic private sector investment. The current GOD considers private sector investment a key to the development process. These changes have already led to an improvement in the investment climate.

(b) The Agricultural Sector

As mentioned earlier, Dominica is predominantly an agricultural economy. Despite the recent growth of services and manufacturing sectors, agriculture in 1979 accounted for 32 percent of GDP, employed a large proportion of the labor force and produced nearly all of the country's exports. Clearly, overall development depends heavily upon maintaining agricultural productivity. Table 1 provides annual data on production of principal commodities for the period 1976 to 1980.

TABLE 1: DOMINICAN AGRICULTURAL PRODUCTION 1976-1980
PRINCIPAL COMMODITIES
('000 Long Tons)

<u>Commodity</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980*</u>
Bananas	40.1	35.8	47.5	23.9	13.7
Coconuts	10.9	11.8	12.3	11.7	9.2
Limes	8.0	8.4	8.4	3.4	4.4
Grapefruit	10.0	9.4	9.9	5.9	6.8
Oranges	2.8	3.0	3.2	1.9	2.4
Root Crops	21.0	22.4	24.1	18.1	19.2
Plantains	2.3	2.7	2.7	2.0	2.6
Cocoa	0.3	0.7	0.7	0.4	0.4

* CDB Estimates

Source: World Bank, Economic Memorandum of Dominica - 1981

Of the total land area of Dominica, 18 percent (37,000 acres) is in agricultural use while much of the remainder is in forests, swamps and national parks. The banana industry is, by far, the largest single user of agricultural land, accounting for approximately 10,000 acres. There are no reliable estimates for the breakdown of the remaining 27,000 acres by other principal crops.

The value of agricultural exports has ranged from over US\$10 million in 1975 to US\$13 million in 1978. Due to destruction of crops by Hurricane David, the value of agricultural exports reached only US\$7 million in 1979. The principal export commodities in terms of value have been bananas, accounting for more than 90% followed by grapefruit and coconut oil. Small quantities of other commodities are exported, including root crops and essential oils.

2. Status of the Banana Industry

(a) Traditional Importance of the Industry

Bananas are by far the most important crop in Dominica covering at least one fourth of the arable land area, and the industry (production, packaging and marketing) is the most important economic activity in the country, accounting for more than 50% of all merchandise exports. Approximately 7,000 of the country's 14,000 farmers are banana growers and, for almost all of these, weekly sales of bananas represent their major source of regular cash income. The direct and heavy reliance of other sectors, such as transport and stevedoring, on the industry and the rural employment created by the islandwide chain of boxing plants are further indications of the role of the industry in the nation's economy. About 40% of the national labor force is employed, at least part-time, by the banana industry.

(b) Present Situation and Problems

The Dominica banana industry is in deep crisis and the Dominica Banana Growers Association (DBGA) is bankrupt. Collapse of the DBGA during the past year has been avoided by a patchwork of grant assistance from donors, Government grants, and the forbearance of creditors. Thus, the major symptoms of the crisis include the financial insolvency of the DBGA, low payments to growers during most of 1982, and erratic availability of input supplies due to insufficient cash to purchase on a routine basis.

The current crisis was precipitated by natural disasters in 1979 and 1980, and by the strong rise in the U.S. Dollar against the U.K. Pound in 1981 - 82. Notwithstanding these very real and unfortunate events, it is now generally recognized however that an additional set of more fundamental problems are responsible for the decline in viability of the Dominica banana industry and in particular the problems of the DBGA.

The single most deficient feature of the Dominica banana industry is the organization and management of the DBGA. A report by Arthur D. Little, Inc. consultants concluded that responsibility is so diffused within the industry that it amounts to no one taking any responsibility at all. The special Task Force on bananas, appointed by Prime Minister Charles in late

1981, reported that "the banana industry is a business concern. Its critical debt position, waste, and malpractices are startling". These reports, and others, point out specific deficiencies like:

- poor or absent controls on cost,
- inadequate and poorly performed system of accounting,
- lack of financial responsibility by Board of Directors in taking on debt and use of grower cess accounts,
- over staffing at many levels,
- poor inventory control,
- Board of Directors making decisions for political rather than commercial reasons, and
- tolerance of widespread pilfering and dishonesty.

In summary, the DBGA is not run like a business organization and has suffered from inadequate management, as well as from improper policy direction. This situation has apparently been operative for some years, and the recent temporary effects of natural disasters exposed the more fundamental weaknesses of the DBGA.

In addition to the poor management of the DBGA, experts point to other fundamental problems in the Dominica banana industry. Low physical productivity is cited as a major problem. Dominica has certain environmental and geographic attributes that preclude yields of bananas at levels found in major banana growing regions like Central America. Even so, it has long been recognized that banana yields in Dominica are well below what they could be. With low yields per acre, the average cost of services is relatively high per unit of fruit exported. Ultimately, banana productivity in Dominica must be increased if commercial exports are to be sustained.

Another fundamental problem for the Dominica banana industry has been the steadily worsening terms of trade over the recent past. The rising cost of fertilizer, oil, and other imported inputs has outstripped the increases in prices received for bananas. While this is in part beyond the control of decision-makers in Dominica, consultants have emphasized that the industry must be aware of changing market conditions and aggressively modify purchasing behavior and/or operational methods to accommodate to change. Instead, too frequently, a "business as usual" attitude has prevailed and reasonable alternatives were not explored.

In light of the fundamental problems mentioned above, coupled with the immediate and severe financial problems faced by the DBGA, it is clear to most knowledgeable observers that radical change is required to restructure the Dominica banana industry.

(c) The Response of the Government of Dominica

Dominican Prime Minister Charles has provided personnel leadership in seeking a solution to the banana industry problems. She has forcefully argued that it is her intent that the banana industry be operated on a "businesslike fashion" and that those responsible for its management should be held accountable for sound financial management.

TABLE 2
DOMINICA BANANA GROWERS ASSOCIATION
PROJECTED BALANCE SHEET
AS AT SEPTEMBER 30, 1982
(US\$)

ASSETS

Cash On-Hand and at Banks		\$ 125,175.83
Input Revolving Fund		98,094.05
Royal Bank of Canada - Carton Fund		95,116.73
Accounts Receivable - Staff	\$ 36,963.57	
- Other	119,134.20	
Growers Accounts - Revolving Fund	477,547.95	
- Other	420,517.84	
	<u>1,054,163.50</u>	
Provision for Doubtful Accounts	<u>(185,873.60)</u>	868,289.96
Inventories		900,190.33
Investments		55,247.96
Fixed Assets	1,298,813.30	
Accumulated Depreciation	<u>(430,040.89)</u>	
		<u>868,794.79</u>
TOTAL ASSETS		<u>\$3,010,909.60</u>

LIABILITIES

Bank Overdrafts - Royal Bank of Canada	500,146.46	
- National Commercial Bank	<u>61,571.38</u>	
		\$ 561,717.84
Loans - Royal Bank of Canada	1,743,972.80	
- Caribbean Development Bank	2,513,191.80	
- Barclays Bank International	821,654.27	
- A.I.D. Bank	198,731.59	
- Dominica Social Security	176,582.89	
- Government of Trinidad	287,174.72	
- Coop. Credit Union League	115,002.60	
- National Commercial Bank	<u>61,292.57</u>	
		5,917,603.30
WINBAN		188,845.72
Trade Creditors		1,057,905.20
Prepaid Fertilizer Scheme		473,385.13
Accruals/Accounts Payable		199,507.43
TOTAL LIABILITIES		<u>\$8,398,964.60</u>
DEFICIENCY		<u>\$5,388,055.00</u>

TABLE 3

DOMINICA BANANA GROWERS ASSOCIATION
PROJECTED STATEMENT OF INCOME & EXPENDITURE
FOR THE PERIOD JANUARY 1 - SEPTEMBER 30, 1982

(US\$)

Banana Sales	\$6,423,558.30
Cost of Sales	<u>2,574,073.60</u>
Gross Margin	<u>3,849,484.70</u>

OPERATING EXPENSES

Field Operations	57,016.36
Leaf Spot Control	836,714.12
Transportation Expenses	49,559.85
Boxing Plant Operations	764,412.63
Cartons and Associated Materials	1,715,743.80
Premiums - Private & Coop. Plants	65,793.31
Export Tax	35,993.31
Wastage	49,752.42
Banana Industry Insurance Operations	<u>10,930.11</u>
	<u>3,585,915.90</u>

Surplus/(Deficit) on Fruit Operations	263,568.77
Administration Expenses	(238,988.47)

OTHER INCOME/(EXPENSES)

Bank Charges and Interest	(365,140.52)
Depreciation	(106,989.59)
WINBAN Contributions	(52,611.15)
Miscellaneous Income	12,173.98
Fertilizer Operations	(59,404.83)
Surplus (Deficit) Before Grants	<u>(547,391.82)</u>

GRANTS

Government of Dominica	172,490.70
British Development Division	503,933.45
C.I.D.A.	<u>40,129.74</u>
	<u>716,553.90</u>

SURPLUS FOR THE PERIOD \$169,162.08

In 1981, Prime Minister Charles appointed a Task Force for bananas comprised of recognized authorities on the banana industry. The report of the Task Force enumerated a host of deficiencies ranging from technical shortcomings to financial imprudence. A key finding of the Task Force was the inherent conflict between the growers' short-term interest in high prices and the commercial interest of the DBGA in long-term viability. Among other things, the Task Force recommended that the legislative ordinance establishing the DBGA be changed to alleviate this structural conflict.

Prime Minister Charles requested assistance of donors and other interested parties to help with the restructuring of the industry and provide financial assistance to keep the DBGA operational in the short-run. In response to P.M. Charles' leadership, an ad hoc group made up of representatives from USAID, BDD, Geest Industries, Royal Bank of Canada, and Barclays Bank International, have met several times to discuss appropriate actions and have kept each other informed on their independent decisions. In this way, an informal consortium has been operating since February of 1982, and grant assistance from the BDD and loan rescheduling by the commercial banks has provided much of the immediate relief needed by the DBGA to continue operations.

In the meantime, the P.M. Charles has directed that legislation be drafted to dissolve the current DBGA, and establish two new statutory companies. One, to be known as the Dominica Banana Company (DBC) will be a totally commercial enterprise. The other, to be known as the Dominica Banana Producers Association (DBPA) will be an independent organization to represent the interest of the banana growers. This legislation is scheduled to be debated by the Dominica Parliament soon, and passage is expected. Thus, plans are well advanced to resolve a primary structural conflict identified by the Task Force.

(d) Financial Status

The Dominica Banana Growers Association's (DBGA) total liabilities exceed total assets by about US\$5.3 million. A detailed projected Balance Sheet for the DBGA for September 30, 1982 is presented in Table 2. The Balance Sheet shows the DBGA has modest assets relative to the gross revenues achieved annually, which is appropriate given the nature of its business since few fixed assets are required. However, amounts of long-term indebtedness represented by loans from banks and other institutions is disturbingly large and has helped give rise to the current crisis when combined with the lack of proper financial management. Obviously, the DBGA is bankrupt with total liabilities exceeding total assets by about 2 to 1. Banks and trade creditors are not willing to increase their exposure and there is no alternative for the DBGA but to bring cost rapidly under control while maintaining growers' payments at a bare minimum.

3. AID Strategy and Relation to CDSS and Host Country Priorities

The primary objectives of AID assistance in the Caribbean Region are to promote economic growth, foster democratic institutions, and assist national governments to meet the basic human needs of the Region. RDO/C's strategy to achieve these objectives emphasizes investment in productive sectors of the economies, especially agriculture, light manufacturing, and selected public infrastructure. The performance of the agricultural sector is of central concern to RDO/C's development assistance strategy, and RDO/C's

agricultural strategy is to focus simultaneously on: (a) promoting commercial agricultural diversification, and (b) increasing the production efficiency of traditional export crops. The Dominica Banana Company Project proposed here contributes to the objectives of RDO/C's CDSS for FY 83, and is directly supportive of the agricultural sector sub-strategy. With regard to the banana industry in Dominica, the ability of the farmers to receive increased income, is largely dependent on the ability of the national banana marketing organization to operate effectively and efficiently. While a stable and profitable banana industry in Dominica does not directly facilitate the objective of diversification into other commercial crops (in that it makes banana farming more attractive) it will provide a relatively secure cash crop, thus enabling growers to accumulate capital required to undertake other agricultural enterprises in cases where the potential return is attractive.

The proposed project is also consistent with the development priorities of the Government of Dominica. The Government has stated that its development priorities, while taking account of the benefits created by the introduction of manufacturing industries, are centered around the agricultural sector, wherein the majority of the country's resources - both physical and human - lie. Again, while the diversification of agricultural production is a major goal of GOD agricultural development strategy, the inescapable immediate and medium-term importance of the banana industry to the sector and the country as a whole has ensured that the restructuring of the industry's marketing operations is an overwhelming priority.

Apart from avoiding the identifiable danger of a complete collapse of the industry, the Government's wish is that the DBC should conduct its affairs in such a way as to provide security and stability for the producers and inculcate in them an attitude of confidence in the industry. It is expected that this in turn will lead to the maintenance of production volumes and an incentive for increased efficiency through the more effective application of labor and management skills.

In addition to establishing a company which will adhere strictly to commercial practice, the Government plans to investigate the possibility that the DBC could be transformed to a joint stock company in which suppliers, staff and growers would have the opportunity to be investors. It is also the Government's intention that the industry and not the general tax payer should repay the debts which the industry itself has accumulated.

4. Other Donors (BDD, CDB)

The British Development Division (BDD) has traditionally been the major source of development assistance to the banana industry in each of the Windward Islands, and since 1977 has provided substantial assistance in Dominica (and other islands) aimed primarily at improved field husbandry and improved fruit quality. In light of the current financial crisis in Dominica, the BDD has provided a Grant of about US\$700,000 in fertilizer since February 1982.

The BDD expects to provide an additional US\$300,000 in fertilizer by September of this year. In addition, the BDD will provide two long-term advisors (financial advisor and management advisor) to the Dominica Banana Company, starting October 1, 1982. The BDD has indicated its willingness to

continue assistance in the form of fertilizer and technical assistance over the next two years at a level totaling about US\$1.8 million and collaborate with RDO/C in monitoring project implementation. RDO/C and BDD will in fact act in unison to insist on DBC performance.

The Caribbean Development Bank (CDB) has proposed financing an Input Revolving Fund (IRF) for the regional banana industries, which would be managed by the Windward Island Banana Growers Association (WINBAN) and on-lent to the national BGAs. The concept for an IRF has long been talked about and endorsed by a World Bank sponsored Study Team in 1980. If the CDB proposal for a WINBAN managed IRF is approved and implemented it will help solve certain problems associated with timely stocks and flows of fertilizer and other banana production inputs in the future, but it will not adequately address the financial and organizational problems faced by the Dominica banana industry.

It is important to note that the crisis within the Dominica banana industry has precipitated an unusual degree of concern among donor agencies, and extensive consultation has taken place among technical personnel, agency directors, and heads of Missions. Information has been freely shared and the goodwill of all concerned has been valuable in designing a workable solution. The project described in this PP has been shaped in great part by consultation with other donors, as well as the commercial banks involved. The conditions and covenants described later have been reviewed and agreed to in principal by all other interested parties. RDO/C intends to continue to coordinate closely with other parties during project implementation.

B. Project Description

1. Project Rationale

The primary rationale of the Dominica Banana Company Project is to save and improve the banana industry in Dominica so as to avoid the social, economic, and political trauma that is likely if corrective actions are not taken now. The banana industry is of fundamental importance to the economy, and is a highly visible industry in almost all communities in Dominica. While certain agricultural and technical problems associated with banana production are evident in Dominica, the central theme of recent reports prepared after comprehensive studies of the industry is that the most serious problems are organizational not agricultural; and these problems are systemic, not temporary. Unless structural adjustments are made and industry costs are reduced, the current marketing entity could become inoperative due to lack of funds and the Dominica banana industry could well collapse. Such a collapse would cause a major economic hardship for thousands of Dominicans and would likely endanger the political stability of the country. USAID assistance is essential to enable a restructuring of the industry through divesting of certain operations to private sector management and otherwise placing the marketing operations on a cost effective basis. The actions proposed in this project will broaden the scope of private sector involvement in the banana industry and have positive economic benefits beyond our period of involvement for individuals, the banana industry, and Dominica as a whole.

2. Goal and Purpose

The project objective is to sustain the banana industry in view of its vital importance to employment; small farmer income, and export earnings. The goal of the project is to restructure the banana industry to allow greater participation by private sector individuals and groups to perform most of the functions and activities required to market bananas.

The project purpose is to improve the cost effectiveness and financial viability of the industry, while maintaining control of leaf spot disease in bananas. This will enable the banana growers to be paid more for their fruit than is presently sustainable, without interruption of essential leaf spot disease control.

3. End of Project Status, Outputs and Inputs

In order to achieve the project purposes, it will be necessary to establish the Dominica Banana Company (DBC). The Company will have a positive cash flow by the end of AID project assistance. Shortly after initiation of operations, the DBC will begin to divest itself of the banana boxing plants which it will take over from the Dominica Banana Growers Association (DBGA). By the end of the project the DBC will have leased and/or sold at least 90 percent of all boxing plants to private individuals or groups. In addition, the DBC will have reduced its cash cost of operations^{1/} from 76 percent of banana sales revenues in the 4th quarter of 1982 to no more than 55 percent of revenues.

^{1/} Prior to payments to growers.

The specific project outputs which will result from the direct AID assistance include: (a) the leaf spot control program operating routinely and employing sound technical practices; (b) intensive training of private banana plant entrepreneurs in modern management practices; and (c) detailed plans for divesting other operational functions and plans for improving DBC field communications. The direct AID inputs will include: (a) funding for about 450,000 gallons of spray oil and certain fungicides for the leaf spot control program, and (b) approximately 57 man months of long- and short-term technical assistance aimed at small business development, and study of communications constraints. Further details and magnitudes of both inputs and outputs are provided in the Log Frame, Annex B, Exhibit 1.

4. Detailed Project Description

The project supports a major restructuring of the banana industry in Dominica aimed at accomplishing the essential marketing and other functions using the most cost effective methods available. Major elements of the proposed restructuring are: (a) establishment of a commercially oriented statutory company as the primary banana marketing entity; (b) operation of privately managed banana boxing plants and establishment of private firms to accomplish any other operational functions, i.e. disease control, input distribution, that can be reasonably undertaken by individuals or groups; and (c) establishment of an independent association to represent the interest of banana growers.

A central structural problem to be remedied by the project is the inherent incompatibility of the relatively narrow and short-term banana growers' interest and the broader commercial (and national) interest of the banana industry conducted within a single organization as is the current situation. Thus, as a first and essential action, the Government of Dominica will repeal the existing Ordinance under which the Dominica Banana Growers Association (DBGA) operates, and create two new institutions. The Dominica Banana Producers Association (DBPA) will be responsible to and represent the interest of banana growers and farmers. The DBPA will be, in effect, a lobby group and carry out the representational activities that any trade association may undertake.

The Dominica Banana Company (DBC), will be a commercial operation dedicated to marketing export bananas at the least cost per unit possible, and thus enable the growers to receive the best price for bananas that is consistent with sound commercial operations and the need to pay backdebt. One of the major operational objectives of the project is for the DBC to achieve a positive cash flow within a two year period and maintain financial viability thereafter without subsidies or grants from the GOD or external donor agencies. The USAID funds for this project will assist the DBC to financially survive during the transitional period while more cost effective procedures are put into effect and sound financial management can be accomplished on a routine basis. Close and frequent monitoring of performance targets by AID and BDD ensure that all reasonable efforts are being taken to achieve sound financial management.

(a) Performance Criteria for the DBC

The touchstone of project success will be the commercial orientation of the newly established DBC. This orientation will come from the composition of the DBC Board of Directors which will be dominated by private

sector businessmen and complemented by public sector nominees skilled in financial control and organizational management. The Executive Chairman of the DBC Board of Directors will also serve as General Manager of the DBC for at least the first two years, and will be selected by the Government of Dominica from among individuals with proven records of successful management of private sector enterprises.

Operating parameters and operational performance targets have been developed for the DBC, based on the minimum conditions necessary to help assure that the DBC obtain financial viability within a period of two years. The financial parameters of the DBC will be established as Covenants in the Project Agreement. The performance targets will be included in Annex I of the Agreement. Compliance with the Covenants and achievement of the performance targets will be reviewed quarterly, based on financial reporting to be submitted by the DBC. Satisfactory performance will be a condition of the release of AID Grant funds for the following quarter's procurement of spray oil.

The conditions and targets have been developed based on an analysis of the banana industry, the cash flow, and reasonable estimates of the pace of activities such as the role of lease/sale of boxing plants to the private sector. While these are considered reasonable, some flexibility must be built into the process to prevent a serious disruption of the project for marginal failure to achieve specific targets. As the project proceeds, AID may wish to adjust certain targets to better fit the circumstances influencing the project at a particular moment or to permit disbursement if on balance total performance is adequate even if all stated targets are not reached in the magnitude envisioned.

- (1) At a minimum, the DBC must have divested to private sector groups, from the twenty-four plants presently operated by the DBGA, the operating responsibility of the following numbers of boxing plants by the end of the quarter so indicated: 2/83-5; 3/83-7; 4/83-10; 1/84-13; 2/84-17; 3/84-20; 4/84-22.
- (2) Payments to growers, of which at least 4¢ per pound must be in the form of prepaid inputs, can be no greater than that which is financially prudent. The per pound price to growers will be closely reviewed on a quarterly basis or more frequently if required.
- (3) The physical losses on spray oil, fertilizer, and cartons (defined as the difference between that amount in inventory at the beginning of a period plus purchases during the period less amounts accountably used during the period less ending inventory) must be no more than 7% of the sum of beginning inventory plus purchases during the first quarter of 1983 for each of the above items, and shall be reduced incrementally in the four succeeding calendar quarters as follows: 2/83-6%; 3/83-5%; 4/83-4%; and 1/84-3%. Physical losses shall be no greater than 3% for each item in all succeeding quarters.

- (4) Trading losses on plants owned and operated by the DBC (trading losses are defined as the tonnage of bananas purchased by the DBC, less the tonnage of bananas sold to Geest, less bananas unable to be accepted by Geest, due to production beyond agreed upon space limitations on Geest ships) can be, during each quarter of 1983, no more than 3% of the total tonnage purchased, and 2% during each quarter of 1984.
- (5) The DBC will pay for no more than a 2% trading loss arising from privately operated boxing plants.
- (6) Total boxing costs, excluding the cost of cartons, but including transportation to the docks will not be more than 6.25¢ per pound for the first quarter of 1983, 6¢ per pound during the last three quarters of 1983, 5.75¢ during the first quarter of 1984, 5.5¢ for 2/84, 5.0¢ for 3/84, and 4.75¢ for 4/84.
- (7) The total of other cash costs of the DBC (anything other than direct carton and chemical purchases, boxing costs, payments to growers, interest and principal payments on debt, reduction in outstandings to trade creditors, purchases of fixed assets, WINBAN levy, or export tax) can be no more than \$790,000 per quarter unless USAID otherwise agrees in writing.
- (8) Input sales activity undertaken by the DFC must be done for cash or against prepaid cess; no credit beyond existing levels can be extended by the DBC to growers for these purchases, and all inputs must be sold at full market value.
- (9) No credit beyond existing levels can be extended by the DBC to any other borrowers including staff for any purpose.
- (10) Purchase of fixed assets will be undertaken only within the ability of the DBC to sustain such cash expenditures and only with prior USAID approval.
- (11) No principal payments against loans from Geest, or against long-term loans from banks and other creditors will be made during the period of USAID assistance, excepting those scheduled on the CDB loans, excepting Geest payments after March 31, 1984, and excepting payments arising from No. 14 below.
- (12) Reductions in outstanding debt to trade creditors other than Geest will be limited to no more than \$200,000 per quarter, excepting payments arising from No. 14 below.

- (13) The DBC will undertake no additional long-term borrowings or increases in short-term borrowing limits without prior USAID approval.
- (14) The gross cash flow surpluses if any (cash inflow less payments to growers, other operating costs, interest and principal payments, fixed asset purchases and trade creditor reductions, plus donor assistance in grower inputs, other materials or cash) will be utilized as follows:
 - * If the net cash flow surplus (gross surplus less donor assistance) is positive, 75% of the net will be used to further reduce long-term debt and/or trade credit; the remaining 25% along with an amount equal to donor assistance will be placed in a contingency fund for purposes agreed to by USAID and DBC.
 - * If the net cash flow surplus is negative, the entire amount of the gross cash flow surplus will be placed in the contingency fund for purposes agreed to by USAID and the DBC.

(b) Assistance to be Provided

The performance targets listed above can only be attained by vigilant oversight by the DBC Board of Directors and Management, accompanied by substantial assistance and oversight by donor agencies and other interested parties.

Assistance to the DBC will consist of certain commodities, technical assistance, and loan rescheduling. The BDD and USAID will provide both commodities and technical assistance, while the Royal Bank, Barclays Bank, and Geest Industries will reschedule repayment of outstanding indebtedness owed by the DBC. The kind of assistance, by source, is discussed below.

(1) USAID Assistance

(i) USAID will provide approximately \$1.3 million to finance chemicals required to maintain control of leaf spot disease for a period of two years. Leaf spot disease in bananas is endemic to Dominica and represents a major production constraint. (See Section III.A - Technical Analysis). When infected with leaf spot disease, both the quantity and quality of fruit is significantly reduced. Control of the disease is an absolute prerequisite in all commercial banana production. Moreover, because of the nature of leaf spot disease, which is spread primarily by airborne spores, systematic control measures must be carried out on an industrywide basis.

Control of leaf spot disease is accomplished by the application of oil and Benzimidazole fungicide, which is applied as a spray to banana plants at a frequency of about once each six weeks. Application of the spray mixture is accomplished by fixed wing aircraft and by ground crews using backpack sprayers.

Routine spraying programs have been established in Dominica for several years, and is a major service provided by the Dominica Banana Growers Association. The DBGA owns one aircraft which attends to spraying about two-thirds of the area planted to bananas, and ground spraying is carried out by eight ground crews who attend to the remaining one-third of the banana production.

Given the poor financial condition of the DBGA, timely purchase of the spray oil and fungicide required for leaf spot control has been difficult. Because of this, spraying cycles have been delayed or missed in the recent past, which exposes the industry to unacceptable risk of major losses. It must be emphasized that leaf spot infected bananas are not acceptable for the export market.

The newly established Dominica Banana Company will continue the leaf spot control program already established, at least in the medium-term while alternative methods, e.g. private services, are explored. However, the DBC will not be able to afford the cost of maintaining this service given its other obligations and its poor financial condition inherited from the DBGA. Based on historical levels, leaf spot control in Dominica costs about \$1.5 million per year. Chemicals (oil and fungicide) account for about \$700,000 of this amount, with equipment and personnel accounting for the balance of \$800,000.

The project will provide up to \$1.3 million in AID funds to procure about 460,000 gallons of spray oil and about 12,500 kilograms of fungicide. These commodities are the major chemicals used to control leaf spot disease, and the quantities indicated are sufficient for 24 months under normal growing conditions. An assured supply of spray chemicals will therefore enable the essential disease control program to be adequately maintained for a two year period.

(ii) In addition, USAID will provide about 57 work months of technical assistance to accelerate the transfer of responsibility for certain operations currently performed by the DBC to private firms, operated by individuals or groups.

The priority operational functions to be divested by the DBC are boxing plants. The DBC currently operates 24 boxing plants which are widely scattered in the banana growing communities of Dominica. During the life of the project, 22 or 90% of these boxing plants will be leased or sold to private operators who will then provide boxing services on a "fee for services" basis under management contracts or other provisions of service agreements.

Boxing plants have been called "the heart of the banana industry", because of the important functions accomplished at the plants, including recording of weights of fruit, grading and selection, and final physical packing of fruit. Boxing plant costs in Dominica are currently averaging about 2.3 cents per pound of fruit exported, which appears to be high relative to other Caribbean countries. For example, St. Vincent's average boxing plant costs are about 1.2 cents per pound. St. Vincent achieves this lower cost in great part because almost all boxing plants there are operated by individuals or small groups of growers organized as cooperatives. The project aims to achieve

a similar proportion of private boxing plant operations in Dominica, and costs are estimated to fall to no more than 1.6 cents per pound of fruit exported. This will be a major step toward making the industry more efficient and financially viable.

To achieve this degree of private sector involvement, key work must be performed to identify and aid the individuals in Dominica that can manage boxing plants at acceptable standards and profitably. To assist the DBC in this work, AID funds will finance small business advisors to work intensively with the private firms selected to operate the boxing plants. These advisors will provide training and on-site consultation both in banana boxing plant operations and in small business financial accounting and control. The project will provide two long-term advisors for two years or a total of 48 work months to carry out these functions.

In addition to transferring boxing plant operations to private firms, there are other functions which may be appropriate to spin-off to the private sector. The two most important are: a. spraying operations, and b. input distribution. Each of these functions, currently accomplished by the DBC, have certain technical and economic attributes that argue strongly for centralized operations. More careful study, however, is required to ascertain the feasible alternatives for greater private sector involvement. AID funds will provide about 6 work months of technical assistance to explore and assess the options and potential for spinning-off spray operations and input distribution to private firms.

USAID will also provide two vehicles to the DBC for the exclusive use of the AID funded technical advisors during the life of the project. Each vehicle is estimated to cost about \$14,000 and will be turned over to the DBC at the end of the project. This cost is included in total technical assistance costs in the budget.

Finally, AID funds amounting up to \$30,000 will be used to perform a detailed communication system study and if feasible, design for the DBC. Inadequate communications between the ports and boxing plants is responsible for substantial financial losses to the industry because the volume and timing of fruit to be delivered to ship-side is not well known. Sometimes, fruit arrives at the port too late to be loaded and therefore is "left-back". This situation resulted in about 6% of total fruit purchased by the DBC being unsold during the first 9 months of 1982, and accounts for significant financial losses. Improved communication network has been recommended by consultants to help in solving a part of this problem. Therefore, the project will use AID funds to contract approximately 3 work months of a communication engineer to assess the management communication needs and design the most appropriate system.

(2) BDD Assistance

The BDD will provide fertilizer and other production inputs in an amount required for approximately one year's demand in Dominica. Banana yield response to timely fertilizer application is very significant, and considered a necessity for commercial banana production.

The project will receive about 4,000 tons of fertilizer and certain other commodities from the BDD. These commodities will be sold at market prices to growers primarily for cash or against prepaid cess accounts. In this way, the DBC is estimated to receive about \$1.4 million during the life of project as a result of the BDD commodity grants.

The BDD will also provide about 48 work months of technical assistance to directly assist the DBC to accomplish proper financial reporting and control, and to assist in the establishment of better management procedures. BDD funds will be used to provide two persons for two years each to provide this technical assistance to the management of DBC.

(3) Commercial Bank Assistance

The Royal Bank of Canada and Barclays Bank International have each agreed to reschedule a total of \$2.5 million in outstanding debt to be paid off over a 10 year period, with a three year moratorium on principal repayment, as of March 1, 1982. Thus, until April of 1985, only interest payments will need to be serviced, and by which time the DBC is expected to begin scheduled debt repayment.

(4) Geest Industries

Geest Industries is owed about \$0.5 million by the DBC, for commodities and cash advanced to the DBGA during the recent past. Geest will assist the DBC by agreeing to a moratorium on debt repayment from the time AID disbursement begins until March 31, 1984. During this period, Geest will not charge any interest. This moratorium by Geest will be particularly important to assist the DBC attain its cash flow targets.

5. The Implementing Institution (DBC)

The Dominica Banana Company will be established by Act of Parliament as a statutory corporation. The Company's primary responsibility is the purchase and sale of all export quality bananas in Dominica. Additional responsibilities are to foster other commercial activities needed to sustain profitable banana production in Dominica, including disease control programs, input supply, fruit boxing operations, production forecasting, and internal transportation.

The legislation which will establish the DBC will be introduced into the Dominican Parliament in early October 1982 and is expected to be passed later in the same month. The DBC will commence operations on November 1, 1982.

The structure of the Company will be that of a typical corporation with a Chairman and Board of Directors deciding policy and management and staff employed to carry out these decisions. For at least the first two years, the Chairman will be appointed as Executive Chairman and General Manager. The membership of the Board will represent various interests including growers, the business community, the Company's principal financiers and the Government. The complete membership is shown in Figure A.

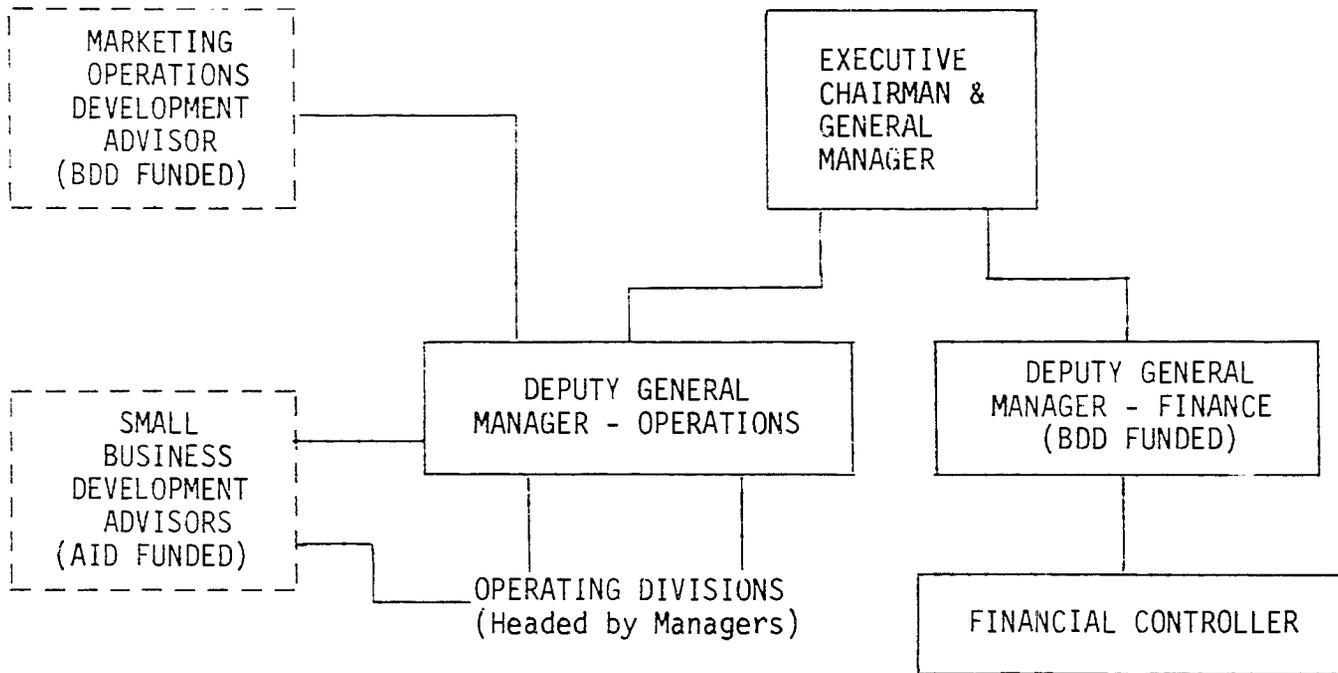
FIGURE A

DOMINICA BANANA INDUSTRY BOARD OF DIRECTORS - MEMBERSHIP

Member	Appointed By	Number Of Positions
Dominican Businessmen	Government of Dominica	2
Dominican Public Sector	Government of Dominica	2
Banana Growers	Dominica Banana Producers' Association	3
Financiers	Caribbean Development Bank/Barclays Bank International/Royal Bank of Canada	1
WINBAN	WINBAN	1
General Manager	DBC, With Prior Approval From Government	1

FIGURE B

DOMINICA BANANA COMPANY
SENIOR MANAGEMENT STRUCTURE



The operational management of the DBC will normally be the responsibility of a General Manager who will be assisted by two Deputy General Managers - for operations and finance. A chart of the structure of senior management appears as Figure B.

Within the senior staff positions, four will be filled by expatriate personnel supplied under Technical Assistance Agreements. One of these, the Financial Advisor to be supplied by the British Government, will operate in a line position within the management structure by filling the position of Deputy General Manager for Finance. The other British Government funded marketing operations specialist will work with the Executive Chairman and Deputy General Manager - Operations to investigate and develop improved operational policies and assist in the implementation of those which are approved by the Board.

AID will provide, under this project, two small business development advisors who will operate exclusively within the banana industry to assist the transition from DBC to private control of boxing plant operations. This assistance will be provided by working with the private contractors (individuals or business groups) during the period leading up to their takeover and the initial months of their operations of the boxing plants as private firms.

With the exception of the small business development advisors who are expected to arrive in Dominica early in 1983, key personnel will all be in place when DBC commences operations on November 1, 1982. The Executive Chairman will be appointed with effect from October 1, 1982 and the two British Government advisors arrived in Dominica early in September and commenced work within the existing institutional framework.

6. Project Costs and Financing

Under the project, AID will disburse funds for the purchase of spray oil and fungicides based on the average quarterly requirement for these commodities by the banana industry, as analyzed in Section III.A. Technical Analysis. The BDD is supplying fertilizer for the project in part based upon the financial as well as technical requirements of the DBA. Other costs, such as technical assistance, and vehicles, are presented based on detailed cost estimates and timing of these inputs. Over the project, BDD and AID will provide US\$3.6 million to the project as detailed in Table 4.

Table 5 presents a summary of total project costs by source and use by fiscal year. This Table also includes the GOD contribution to the project in the form of its forgiveness of loans it has made to the banana industry.

TABLE 4: PROJECTED AID DONOR DISBURSEMENT SCHEDULE BY QUARTERS

(US\$ 000)

	<u>4/82</u>	<u>1/83</u>	<u>2/83</u>	<u>3/83</u>	<u>4/83</u>	<u>1/84</u>	<u>2/84</u>	<u>3/84</u>	<u>4/84</u>	<u>TOTAL</u>
<u>Donor Inputs</u>										
BDD Fertilizer	371.8	371.8	371.7	358.7	-	-	-	-	-	1,474.0
BDD Technical Asst.	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>-</u>	<u>400.0</u>
SUB-TOTAL BDD	421.8	421.8	421.7	398.7	50.0	50.0	50.0	50.0	-	1,874.0
AID Spray Oil/Fungicide	37.2	180.3	176.6	176.6	174.7	182.2	180.3	182.1	22.0	1,312.0
AID Technical Asst.	<u>39.0^{1/}</u>	<u>111.5^{1/}</u>	<u>67.5</u>	<u>47.5</u>	<u>37.5</u>	<u>37.5</u>	<u>37.5</u>	<u>37.5</u>	<u>22.5</u>	<u>438.0</u>
SUB-TOTAL AID	76.2	291.8	244.1	224.1	212.2	219.7	217.8	219.6	44.5	1,750.0

^{1/} Including \$14,000 for one vehicle for AID funded Technical Assistants in each quarter, total two vehicles @ \$28,000.

TABLE 5: TOTAL PROJECT COSTS BY YEARS

(US\$ 000)

<u>Source and Use of Funds</u>	<u>CY 83^{1/}</u>	<u>CY 84</u>	<u>TOTAL</u>
BDD Fertilizer	1,474.0	-	1,474.0
BDD Technical Asst.	<u>200.0</u>	<u>200.0</u>	<u>400.0</u>
SUB-TOTAL BDD	1,674.0	200.0	1,874.0
AID Spray Oil/Fungicide	745.4	566.6	1,312.0
AID Technical Asst.	<u>303.0^{2/}</u>	<u>135.0</u>	<u>438.0</u>
SUB-TOTAL AID	1,048.4	701.6	1,750.0
GOD Loan Forgiveness	<u>1,600.0</u>	<u>-</u>	<u>1,600.0</u>
TOTAL PROJECTED COSTS	4,322.4	901.6	5,224.0

1/ Including last quarter of 1982

2/ Including \$28,000 for two vehicles for AID funded Technical Assistants

III. PROJECT ANALYSIS

A. Technical Analysis

1. Pest Control

Sigatoka leaf spot disease is endemic to Dominica and is the most serious pest affecting banana cultivation. Sigatoka is commonly referred to as simply "leaf spot disease" and is caused by the fungus Mycosphaerella Musicola. Banana plants infected by leaf spot disease are characterized by poor growth rates and poor fruit formation. In addition, the mature fruit harvested from infected plants has an extremely short storage life. The infected fruit will begin to deteriorate rapidly after harvest and will not tolerate the time or conditions for transport to the U.K. market. Leaf spot infected fruit is the major cause of banana wastage from so called "ship ripe" bananas. Ship ripe bananas arriving in the U.K. are not acceptable on the market. Thus, control of leaf spot disease is absolutely essential for export banana production.

Control of leaf spot disease is obtained by the use of sprays of fungicidal materials and by good field sanitation practices. In Dominica, individual banana growers are responsible for field sanitation and husbandry, while spray control programs are accomplished by the DBGA.

The DBGA uses two methods to apply spray: 1) aerial application using an Ayres Turbo Thrus airplane, and 2) ground crews using motorized backpack mist blowers. The spray used is a mixture of petroleum oil and the fungicide benomyl, at a ratio of about 2.7 ounces of benomyl per gallon of oil. Application is made at the rate of about 1.8 gallons of the mixture per acre of bananas. Aerial spraying attends to about 60% of the banana acreage, while the remaining 40% of acreage is sprayed by 12 ground crews. Under normal growing conditions bananas are sprayed about every five to six weeks, or about 10 times per year. In addition, when very high incidence of Sigatoka inoculum is detected in specific areas, extra spray applications are made to those areas. Typically, about a third of the bananas in Dominica receive an extra three cycles.

The monitoring of the incidence of leaf spot and technical direction for control is the responsibility of the WINBAN research plant pathologist. The DBGA therefore has expert technical advice and is free to concentrate on application of the recommended program. The DBGA has the equipment, technical capacity, and personnel to maintain a regular spray program to control leaf spot disease. The primary problem in maintaining this program has been the inability of the DBGA to purchase oil and fungicides on a timely basis due to a poor cash flow position.

Spray oil required for leaf spot control in Dominica (and all the other Windward Islands) is purchased from Texaco Trinidad Limited. The selection of a supplier and the price to be paid is negotiated jointly with the other Windward Island Banana Producers Associations through WINBAN on an annual basis. For calendar year 1982, the DBGA pays Texaco \$2.28 per gallon for oil delivered to bulk storage tanks in Dominica. The Texaco agent in Dominica keeps account of oil supply drawn down by the DBGA and bills for payment on a monthly basis. The DBGA pays Texaco directly.

The fungicide Benomyl is purchased directly from U.S.A. suppliers. The Dupont Co. makes the only suitable commercial Benomyl fungicide and markets it under the trade name "Benlate". Orders for Benlate are paid by the DBGA directly to the Miami vendor.

Suppliers of oil and fungicides require immediate payment or payment within 20 days. In the recent past, the DBGA has not been able to meet these payment requirements and has been forced to interrupt usual spray cycles. So far this year epidemic infestations have not occurred, although the proportion of fruit rejected has increased. Nevertheless, experts in the field of disease control say that the risk associated with interruption of regular spray cycles is unacceptably high. In essence, Dominica banana growers have been "lucky". Leaf spot disease can build up to high levels of incidence very quickly and spread rapidly in the absence of a routine spray program. The effect of a severe and widespread infestation of leaf spot disease would require that most mature banana plants be destroyed and could result in the halt of banana exports for a period until the disease was again controlled. The cost of reducing a major outbreak of leaf spot to tolerable levels would be much more than maintaining control of the disease.

In summary, leaf spot disease is a major problem, although it is well understood and cost effective control methods are known. The DBGA, with technical direction from WINBAN, have the equipment and personnel to conduct a sound program of leaf spot control on a routine basis. Routine spraying operations have been interrupted in the recent past due to the inability of the DBGA to buy the spray oil and fungicide. This interruption exposes the Dominica banana industry to unacceptably high risk of severe leaf spot infestation which would seriously curtail export volumes and could lead to a moratorium on banana exports while the disease was brought under control. The economic and financial cost of a severe outbreak of leaf spot are too great to risk in light of the key role of bananas in the Dominican economy. The AID grant funded supply of oil and fungicide will enable the new DBC to maintain a routine spray program for at least two years under normal growing conditions. Personnel are already trained, and spraying equipment is in place and normal maintenance and replacement is budgeted. Expert services of a plant pathologist from WINBAN is available to monitor disease incidence and advise on spraying cycle frequency as required. Thus, the AID grant funded commodities will enable the maintenance of an established disease control program to continue during the period while the new DBC is simply unable to afford the cost of the oil and fungicide required. At the end of two years, cash flow projections indicate that the DBC will then be able to continue the leaf spot control program (directly or under contract with private firms) on a self-financing basis.

Cost estimates for spray oil and fungicide to be financed with AID funds are based on current prices paid by the DBGA for these commodities, and on the historical levels of use. Spray oil cost \$2.30 per gallon delivery to Dominica. Fungicides now being used cost \$21.00 per kilogram. Thus a two year supply of spray oil amounting to about 456,000 gallons is estimated to cost \$1,050,000; and a two year supply of fungicide amounting to about 12,500 kilograms is estimated to cost about \$262,000. Therefore, total commodity cost in this project is estimated to be \$1,312,000.

2. Transfer of Boxing Plant Operations to Private Sector

The transfer of boxing plant operations to private sector individuals or groups is an important policy change embodied in the plan to restructure the Dominica banana industry. This transfer will not be accomplished easily, nor quickly, and will take concerted effort on the part of the Operations Manager of the DBC who is presently being provided by the BDD, the DBC Executive Manager, and the Board of Directors of the DBC, as well as assistance from small business advisors provided by USAID.

A very preliminary review has been recently completed by the PDAP Advisor in Dominica who has been working closely with the Prime Minister regarding the banana industry. Although his work did not involve specifying a list of people who are certain to become operators of boxing plants, enough discussion was held to give him confidence that there are a sufficient number of people with the aptitude and willingness to proceed with the divestiture of at least 22 of the 24 boxing plant operations. He has written suggested procedures for the initial selection of prospective boxing plant contractors; suggested clauses to be embodied in boxing plant operators' contracts for boxing procedures, transport of boxed bananas to reception stations and storage and distribution of inputs; reviewed potential forms of business entities which might take over the boxing plant operations; suggested timing and procedures for the implementation of such activities; and made observations on boxing plant operations in St. Lucia and St. Vincent. It should be noted here that it is envisioned that most of the boxing plants under DBC ownership will not be sold to operators, but will instead be leased, due to the expected lack of available capital and/or financing for the purchase. However, where possible, they will be sold.

The next step which needs to be taken, is for the Operations Manager provided by the BDD to review the preliminary plan, draw up a more detailed plan after talks with operators in Dominica, St. Lucia and St. Vincent, present the plan to the new Executive Manager of the DBC and in turn to the Board of Directors of the DBC for approval. Once Board approval of the detail is received, requests for bids should be sought which include specifications of the minimum requirements sought. After bids have been received and reviewed, the top two to three candidates should be contracted to put together an operations plan, perhaps with the assistance of the small business advisors and the Operations Manager of the DBC. The DBC should probably limit itself to divesting of only a few operations in the first few months, to determine how successful the transition is, and to allow their people to plan sensibly for future divestitures.

The covenants of the USAID Grant Agreement specifies minimum numbers of plants whose operations must be divested into private sector hands by the end of specific quarters. This is considered to be reasonable yet aggressive, acknowledging that if the first few plants which are spun off are successful for the operators, there is a possibility that all the plans could be leased or sold within twelve months. On the other hand, a perceived lower level of success for the operators may slow down the divestitures and it may take all of two years to accomplish the minimums.

Pressure on the DBC to accomplish this spin off of operations responsibility will come from the covenant on numbers of plants to be divested, from the measure of financial viability target for boxing plant costs which has

assumed the significantly lower costs attributed to privately run boxing plants, and finally, from continued pressure from the consortium group for completion of this activity in order to lower operating costs. The Prime Minister has given her full support to this effort, as well as to proposed efforts to do the same with other DBC operations, where feasible.

A major concern during the transition period when boxing plant operations will convert to the private sector, is the operators management capabilities to sustain a cost-effective business. To ensure that operators have the necessary management concepts and tools to develop and maintain a solvent business, technical advisors will provide training in sound business practices and assist with day-to-day implementation under field conditions. The advisors will devote one entire work day per month with each plant operator assisting with establishing effective management technique, inventory control, improved labor and transportation utilization. To develop and maximize a system that will deliver undamaged fruit at the time and place required. The need for this intensive effort is to assure that a majority of the operators develop a successful business, that will maximize small farmers' income, export earnings and employment levels. Should the project fail, massive disruptions to the political and economic stability of Dominica would result. A concentrated effort to reduced risks and problems to plant operators by providing extensive technical assistance on an individual basis will allow for optimal success. The estimated cost of this technical assistance is \$328,000 for forty-eight (48) man-months of service. This is base on a monthly cost of approximately \$6,800 per month for salaries, transportation, travel, per diem and housing.

B. Institutional Analysis

1. The DBC

The DBC will bear great similarity to the DBGA in that all of its responsibilities will be responsibilities which are held by the DBGA. The primary difference will be that, whereas the DBGA currently performs the dual role of producers' representative organization and marketing authority, the activities of the DBC will be limited to those of a commercial nature; a separate institution - the Dominica Banana Producers Association - will be the producers' representative body.

It is not correct to think of the DBC as purely a marketing organization as its marketing functions are only one of three main areas of activity, the other two being input supply for producers and leaf spot control. In the context of AID support for the DBC, it is relevant to examine the rationale for each of the three main areas of operational activity being included in the scope of responsibility of a national organization, rather than leaving the farmers to arrange these services themselves and/or procure them from the private sector.

Leaf spot control is probably the area in which the advantage of centralized, nationwide control is most easily demonstrated. The disadvantages to others created by inadequate crop protection standards maintained by any individual, demand that for such an important crop there be either severe penalties and an effective inspection and enforcement operation or a national agency which takes full responsibility and operates on behalf of the producers. The latter has been, and still is considered the most cost-effective system for the situation in Dominica.

The rationale for the DBC being involved in input supply is substantially less appealing in economic terms. While there are, no doubt, some volume discounts obtained through the aggregation of fertilizer purchases, this is not a function which the DBC will perform itself; for the most part fertilizer orders are placed by WINBAN. It seems possible, therefore that private entrepreneurs in Dominica could purchase from WINBAN and eliminate the DBC from the market; it is certainly an aspect of DBC policy which will receive investigation.

A more important reason for the DBC being however involved is the ability to deduct amounts from growers' sales accounts as prepayments for fertilizer. The impact of this system is to ensure that all producers have available to them reasonable quantities of fertilizer, a key factor in determining banana yields. While such a system exhibits a fair measure of paternalism, the importance of the industry to the overall economy of the country has led industry advisors to the conclusion that too much national interest is at stake to allow banana farmers to damage their own position if they wish by failing to make regular applications of fertilizer. Within this scenario there would appear to be two distinct options for change - the prepaid inputs levy could be retained and merchants given authority to supply fertilizer against DBC prepayment coupons and, in the longer-term, successful diversification within the agricultural sector, coupled with education of banana farmers to assist the acceptance of improved management practices, may remove the necessity for compulsory prepayments.

The primary rationale for a national body to be responsible for the marketing function appears to be based largely on the belief that there is an advantage in having a powerful organization (WINBAN) negotiate with the marketing agent and, as currently structured, WINBAN is a regional grouping of national associations.

Even though it might be possible to hand over all marketing functions to a number of private banana traders, it would appear inevitable that they would form some kind of national association for the purposes of negotiating with Geest and making cargo space reservations on the banana ships going to the U.K. Again, it seems possible that the DBC may eventually evolve into such a grouping, especially if the private sector operation of the boxing plants and other operations proceeds successfully. On the other hand, the possibility that a single private company might one day provide all marketing functions for the industry seems remote, at present, as it appears that the banana industry will remain significantly large, in relation to the national economy, to ensure that monopoly control will not be seen as being in the country's best interest.

2. The DBPA

An examination of the current situation, in which the DBGA acts as both commercial trader and growers' representative body, suggests that there are losses on both sides. Not only do the commercial operations frequently suffer through the direct application of short sighted grower interests but, in other matters, growers are actually unrepresented in the sense that there is no formal, separate structure for dealing with industry problems created by the DBGA.

The establishment of the DBPA, which will, in every sense, be wholly independent of the DBC, can be expected to increase the influence which banana growers can exert in relation to national policy issues which are of relevance to them. The Association, which will be funded directly by Government (a minimal national level administration is envisaged, with the Roseau office staffed by a Secretary/Manager and an office Secretary), will be responsible to the Minister of Agriculture. It will elect three members to positions on the Board of Directors of the DBC and the Secretary/Manager will be a member of the DBC Management Coordination Group; as such he/she will attend all DBC Board meetings. The DBPA structure will allow numerous levels of grower representation vis-a-vis the operations of the DBC; minor issues emanating from individual growers or district branches be taken up by the DBPA Secretary/Manager on an informal basis with more important issues being raised at Management Coordination Group meetings, or if necessary by representatives at DBC Board meetings. At the highest level, should satisfaction not be obtained through these channels, the DBPA will have direct access to the Government through the Minister of Agriculture. Such a system appears to be a substantial improvement on the level of representation which growers can achieve under the existing (DBGA) system.

3. Critical Institutional Issues

(a) Prospects for Legislation

The legislation, which was first drafted in April and has since had several amendments incorporated in subsequent drafts, is now nearing finalization. It is anticipated that it will be approved by Cabinet on

September 14 and introduced into the Parliament on September 27, 1982. The Government's timetable calls for the legislation to be debated and voted upon in the House of Assembly during the regular monthly session of Parliament in October and to become effective from November 1, 1982. As the Government commands an overwhelming majority in the Parliament, no difficulty is expected with the passage of the legislation.

(b) Management of the Debt

The financial projections based on the Government's stated intentions and agreements in relation to the various outstanding long-term debts indicate that financial viability can be maintained while the debt commitment is serviced. (See Section III. D. of this Paper and para. 50 of the Government's White Paper which is attached as Appendix C, Exhibit 3).

The nature of several of the major factors influencing the financial viability of the industry is such that financial projections for the DBC exhibit a high potential for significant change from the base assumptions with more than a low level of confidence in the chances of these matching the real outcome. The two most volatile factors, to which the projection of operating results exhibits a high degree of sensitivity, are exchange rates and weather in the form of major natural disasters. Should movements in these factors to be the disadvantage of the industry, the DBC may incur substantially increased deficits during the transitional period and have the currently projected surpluses for later periods threatened.

On the other hand, there are good grounds for believing that in the medium-term, at least, the value of sterling will recover against the dollar and the realized outcome of DBC operations will favorably exceed the current projections. In this case it will be important to restrict the extent to which payments to growers are improved, or reinvestment in the DBC occurs. The large majority of any funds accumulated through such windfall gains should be applied to reducing the burden of long-term debt. It is believed that the greatly improved staffing in the senior financial positions in the Company as well as restraints under this Agreement will ensure that this occurs. In any case, it is important to understand that improvements in factors under the control of DBC management will ensure that whatever the effect of whether exchange rates, or other influences not under their control, the DBC will be better off than it could otherwise be if existing policies of the DBGA were continued.

(c) Implementation of Private Sector Activities

Initial planning for the leasing/sale of boxing plants to the private sector is already underway. Current indications are that the most appropriate way to commence will be to identify a small number of efficient and knowledgeable individuals from within the currently employed boxing plant supervisors. These people would then be strong contenders for the award of the boxing contract for these plants when such contracts were offered publicly. Following the award of a contract, which it is envisaged would be done at a predetermined price, all employees at each plant, including the supervisors, would be made redundant so that the contractor would be free to hire whatever labor force he/she saw fit.

Technical assistance inputs will be made available by USAID to enable detailed preliminary planning to continue during the period leading up to and subsequent to November 1 when the DBC will commence operations. It is expected that a comprehensive plan will be available by that time and that the DBC will have little left to do before commencing the process of procuring bids and letting the initial contracts. April 1, 1983 has been targeted as the date on which the first of the private boxing plants operators would commence operation.

Although there is no current program for the assumption of any other operations by the private sector, there are statements of Government intentions as well as a second year condition precedent in respect to investigations of the possibilities for ground spraying operations in other areas of DBC responsibility.

(d) Inventory Control and Wastage

In the opinion of the DBGA auditors, Coopers & Lybrand, who have been providing additional financial assistance to the Association (under BDD funding), inventory control is an area in which major improvement will be crucial to a reversal of the recent poor operating results. As auditors, the firm has some time ago provided recommendations to the DBGA management as to the steps they should take and systems they should introduce in order to improve this area of their operations. Though there have been some claims from within the Association that these recommendations have been implemented, the auditors do not share this view and it, appears therefore, that this will be a priority area for the BDD financial specialist to tackle. It will also be an area in which close monitoring by the donors associated with this package will be required, to ensure that suitably rapid progress is achieved.

C. Economic Analysis

1. Macroeconomic Considerations

The proposed assistance to the banana industry in Dominica -- the first of a series of structural adjustment programs that RDO/C will be negotiating with the less developed countries (LDCs) of the Eastern Caribbean -- is of critical importance to the country's economic future. The banana industry -- the country's lifeline -- in encountering severe financial and structural difficulties and failure to resolve these difficulties could destroy the industry, a development that would have grave consequences for the economy and the current pro-U.S. administration headed by Prime Minister Charles. This project intends to resolve these difficulties.

While a thriving banana industry would produce a number of benefits, its most significant contribution would be in the areas of employment and the balance of payments. Although agriculture, primarily bananas, accounts for less than 25 percent of total full time employment on the island, almost everyone in the country's labor force of 15,000 derives some income from banana farmings. For instance, according to the most recent data, roughly 7,000 individuals are active banana producers. This grant, in addition to promoting employment, will help fortify the country's balance of payments. The \$1.75 million that is to be provided under this project will not have a significant direct impact on the balance of payments because most of the grant proceeds will fund foreign exchange costs. However, without the grant, the banana industry would encounter difficulties, producing a serious void in the country's foreign exchange earnings. Traditionally bananas have accounted for roughly 50 percent of the country's foreign exchange receipts. The \$8.4 million that was generated in 1981 represented 40 percent of total receipts, up sharply from \$2.8 million and 22 percent the year before when the country was ravaged by hurricanes.

2. Economic Viability of the Dominica Banana Industry

While the proposed USAID project will produce significant benefits for the Dominica banana industry by making it more efficient and by enabling it to reschedule its massive debts, the ultimate rationale for providing assistance to the industry must rest on a demonstration of the industry's economic viability over the medium-term -- the 1982 - 88 period. Any projections beyond 1988 would be highly suspect because of uncertain market prospects. To demonstrate economic viability, economic costs and benefits must be specified. For the most part, economic costs and benefits for the industry are synonymous with financial costs and benefits. Nonetheless, to specify economic costs and benefits, several important adjustments must be made in the financial cash flow projections that already reflect the positive impact that this AID project will have on industry efficiency.

The most significant adjustment lies with respect to "payments to growers". Of the total "payments to growers", approximately 25 percent reflect fertilizer purchases; the remainder labor costs. Of all financial costs, labor costs amount to nearly 25 percent. These financial labor costs, however, do not reflect economic costs. Little alternative productive employment possibilities exist for growers. In the agriculture sector -- the country's most important -- production of other products is constrained primarily because of the inability to identify and properly service markets, while the other productive sectors -- manufacturing and tourism -- are quite small, providing

scant employment opportunities. In sum, the economic costs of labor are much lower than the financial costs. To derive the economic costs of labor the financial costs of labor was reduced by 50 percent, this latter adjustment reflecting the lack of alternative employment opportunities for the growers.

Economic costs and benefits also diverge from financial costs and benefits if the stated value of a country's currency diverges from its economic value. The East Caribbean dollar -- the common currency for (a) Dominica, (b) the other Windward Islands of Grenada, St. Lucia and St. Vincent, and (c) the Leewards of Antigua, Montserrat and St. Kitts -- is tied to the U.S. dollar. A comparison of the U.S. price performance within inflation in these other states suggests that the East Caribbean dollar may be worth less than its stated value by as much as 10 percent, thereby making foreign exchange worth more than its stated value. Almost all of the banana industry's revenues in Dominica comes in the form of foreign exchange -- the pound sterling; cost items involving foreign exchange include (a) the chemicals used in leaf spot control, (b) the cartons used in packaging (c) vehicle operations expenses, (d) grower fertilizer purchases, and (e) the proposed fixed assets purchases. Consequently, to derive economic benefits and costs from the financial flow data, export revenues were increased by 10 percent while those cost items involving foreign exchange were adjusted upward by a similar amount.

"Export tax" appears as a financial cost line item in the cash flow statement. Export tax, however, is not an economic cost because it merely represents a transfer within the economy, in this case from the industry to the government. Hence, "export tax" was not included as an economic cost.

Dominica's banana industry has debts totalling over \$8 million. An economic cost -- the opportunity of cost of capital -- exists for the debts. For the most part, these economic costs have been reflected in the financial cash flow projection in the form of debt servicing. However, to the extent that the economic costs are not reflected in the form of debt servicing over the project's 1982 - 88 life, financial costs will understate economic costs. Hence, as a measure of the opportunity cost of capital, we use 12 percent.

Financial and economic rates of return were calculated using a salvage value that took into consideration the company's estimated capital deficit at year end 1988. The economic returns were significantly positive; the financial rate of return was negative, although a 9 percent financial rate of return was computed when the salvage value was excluded from the analysis. The significant economic returns suggests that the Dominica banana industry is viable over the medium-term.

D. Social Soundness Analysis

The majority of the population of Dominica is distributed in the relatively flat coastal areas. Since the population is generally rural in nature and most people have access to agricultural land, a majority of the population is involved at least part-time in agriculture. It is estimated that there are 14,000 small farmers. As a predominantly rural, agrarian society, Dominicans have a strong tradition of village identification and communal cooperation. Atypical of the other Caribbean islands, Dominica has not had tremendous urban migration, although the population of the capital city has increased in the last decade. A commitment to and interest in agriculture prevails with approximately 87% of the labor force involved in various aspects of farming and related activities on at least a part-time basis; and over 35% of the labor force is employed full time in the agricultural sector. Young people are willing to pursue farming as an occupation, however a farm income is usually expected to be supplemented with at least occasional off-farm employment.

Typically, the small farmer in Dominica is residentially stable, depends mostly on family labor for the operation of the farm, has an annual income of between \$300 to \$1,800, and will spend six to eight hours per day on farming related activities during the main growing season and two to four hours during the off-season.^{1/}

Impact of Project Activities

Bananas are the most commonly cultivated crop in Dominica, and the banana industry has an impact on the entire economy. The project will restructure parts of the industry and will promote change that may result in some short-term dislocations for selected individuals. These changes, however, are expected to be supportive to the overall banana industry and will be widely accepted by industry participants. In fact, an underlining rationale for AID assistance is to ensure stability in the industry while required structural changes are accomplished.

Since the farmers in Dominica are very much oriented toward a market economy, and since small independent businesses are the typical form of commercial organization, RDO/C believes the activities call for in the project design are totally compatible with the existing social norms in Dominica. Clearly, the Government of Dominica is confident that the restructuring of the growers association and spinning-off boxing plants to private individuals or groups will be both more efficient and more popular with the overwhelming majority of industry participants.

Benefits from Project Activities

Approximately 85% of the small farmers grow bananas and are the direct beneficiaries of banana production. The indirect beneficiaries include boxing plant personnel, truck owners, small business owners, port workers and certain administrative employees. Through this project, the banana growers will benefit through the receipt of a fair and stable price for their fruit.

^{1/} A Profile of Small Farming in St. Vincent, Dominica and St. Lucia
T. H. Henderson and P.I. Gomes. The University of the West Indies.

In addition, the DBC pricing systems will likely build in incentives in the form of higher prices during periods when the Green Market Prices are higher, which should induce skewed production toward the months of highest prices resulting in increased income to growers. The growers will also benefit via improved yields from the more timely availability of inputs resulting from the improved operation of the DBC. Finally, reduction in wastage, increased operational efficiency and overall proper management of the DBC will enable the banana industry to ultimately improve compensation to the growers after debts are reduced.

Certain boxing plant operators who are currently salaried employees and other private sector entrepreneurs will become private boxing plant operators under the project. Because the operations will be in private hands, incentives will be in place to ensure minimum wastage of cartons and other supplies, as well as loss of fruit, thus benefiting the industry. Competition is expected to be keen and as operational efficiency is improved some boxing plant workers are likely to be made redundant. Nevertheless, the majority of employment opportunities will be sustained for owners, managers, and workers in the plants, thus maintaining incomes and stimulating private sector employment.

Many employees will continue to work for the DBC and others may become private operators of ground spraying services, input suppliers, or maintenance operators. Currently, the DBGA has redundant employees whose level will be reduced to maximum extent feasible but at the same time be restructured to ensure efficiency and increased production levels.

Role of Women

Of the total population of 85,000, 51% are women and of the labor force 37% are women. Households headed by women are 43% and more women are employed than men. Small-scale farming is a traditional occupation for women in Dominica and relatively few positions in the Dominica agricultural work force, particularly in banana production, cutting, boxing, and loading bananas are designated as male jobs.

Women are also involved in a number of other areas which will make them indirect beneficiaries of the project. Domestic marketing of bananas, making banana flour, dried bananas, and banana chips are all income generating activities typically undertaken by women. The introduction and experimentation of solar dryers for these purposes is currently being publicized through training programs funding through other project activities.

E. Financial Analysis

1. Introduction

The key to understanding the changes in financial condition of the DBC is the projected cash flow statement contained in Table 1, Annex C 3, as the industry will stand or fall in the near-term based on its ability to generate sufficient liquidity to pay for its cash requirements. Additional borrowings other than minor amounts from the CDB are highly unlikely from either trade creditors or lenders; the cash flow from the DBC operations, plus donor assistance will be the only sources of funds. Given the initial inability of the DBC to accrue any expenses, and given that their income will be cash and not accrued, the projected income statements and balance sheets would be of limited value and are, therefore, not presented in this analysis. As a reference point, however, the June 30, 1982 balance sheet of the DBGA, most of which will be assumed by the new DBC, is presented in Table 3, Annex C 3.

2. Analysis

The projected cash flow covers the period from the beginning of the fourth quarter of 1982 through the end of 1988, although USAID assistance as proposed in this Project Paper is scheduled to run only through the fourth quarter of 1984, after which the Dominica Banana Company should be able to be self-sufficient on its own. The assumptions used in developing the cash flow presented as detailed in Annex C 3 have been very carefully examined both by consultants to USAID as well as the PDAP Representative in Dominica who is familiar with the banana industry and who has been working very closely with the Prime Minister. Certain of the assumptions were also reviewed by WINBAN. All of them are considered to be reasonable, yet conservative.

The Dominica Banana Company is expected to continue to have a negative cash flow (although gradually reducing) through the first quarter of 1984, after which time only the first quarter of 1985 is negative (the first quarter is always a low revenue quarter for the Company, due to lower volume and lower prices). The maximum cumulative cash flow deficit which the Company would incur over the next nine quarters without donor assistance is just over \$1.7 million by the end of the first quarter of 1984. Proposed donor assistance, however, is sufficient to allow the DBC to continue functioning while providing some cushion for unexpected downturns in results and for the small additional need during the first quarter of 1985. Table 2, Annex C 3 shows the expected inflows of leaf spot chemicals, fertilizer, and field boxes to be provided by USAID and the British Development Division which will allow the Company to operate over the next nine quarters while it gradually reduces its operating costs.

The keys to financial success of the Company can be broken down into four crucial factors; banana revenues; control of packaging, boxing and leaf spot control costs; level of payments to growers; and control of other (primarily fixed) costs.

Banana revenues are dependent upon not only the tons shipped (which at this point in time is not a crucial factor to the DBC due to the high variable costs of the Company, but which is important for the future of the

industry), but also on the Green Market Price for bananas in London (upon which the Geest price to the DBC will be based) and on the exchange rate that exists between the English Pound and the U.S. Dollar (the E.C. Dollar is tied to the U.S. Dollar while sales are for English Pounds). As the Banana Company is unable to influence either the Green Market Price or the exchange rate, and banana volumes are not in any case directly under its control, the DBC has little influence over its level of revenues. However, it must be noted that any increases or decreases in the Green Market Price, or changes in the Dollar/Pound exchange rate immediately and directly affects the cash flow surplus. The potential for an improvement in the Pound against the Dollar is presently considered good, although this has not been taken into account in the projections.

Control of packaging, boxing, and leaf spot control costs are a primary factor in the proposed operation of the DBC compared to the present operating mode of the DBGA. While the cost per carton and cost per gallon of chemicals are not under the DBC's control, the loss rate on these two items is, and can be greatly reduced from the presently estimated levels of ten to fifteen percent. Boxing costs at over EC¢6 per pound are at least double those in St. Vincent, and there is good reason to believe that the DBC can reduce this to 4¢ per pound through improved management controls within its own plants, and the rapid divestiture of boxing plant operations to private sector operators.

Control of fixed costs does not harbor the potential for great improvements as does the control of variable costs; however, it is an important area to be reviewed for whatever savings can be made, and to make certain that the fixed costs under DBC control do not rise. The WINBAN levy, export tax, interest and principal payments on debt are not truly controllable, but purchase of fixed assets can be managed in line with available cash.

The level of payments to growers represents an extremely important management decision point for the new DBC. In the past, the growers have often received significantly more than the residual cash flow after all other cash expenses, which a policy helped to bankrupt the DBGA. Without reductions in other costs, high and even moderate levels of payments to farmers are not possible without experiencing a deficit. The new DBC will have to plan carefully, in order to maintain the payments to growers at a level which will keep the desired volumes flowing, while not giving up cash which should be flowing into a contingency fund or for extra reductions in the level of debt. High debt levels place a high interest burden on the DBC and should be reduced as rapidly as is prudent.

3. Financial Summary and Sensitivity Analysis

Under the most likely assumptions made, the project is financially sound. Although a sensitivity analysis was not done for the attached cash flow statement (which has been updated to reflect very recent information) the analysis for an earlier similar cash flow (Table 4, Annex C 3) shows the dramatic effect of a 5% fall in revenues attributable to prices. Lower reductions than expected in wastage combined with a higher increase in prices of cartons also has a significant impact. A 5% fall in projected tonnage of bananas exported has a markedly lower effect than the other sensitivities, due to the high (75%) proportion of variable costs in the total cash flow, which vary directly with tonnage (such as cartons, packaging, and payments to growers).

In summary, the sensitivity analysis shows how important are the prices Geest pays to the DBC (which is based on the Green Market Price in London), and the exchange rate. With good management and careful control of expenses which are under their control, the DBC can improve its chances for success, but it could still lose money if revenues drop due to the price they receive for the bananas they sell. It is felt at this time, however, that the potential for revenues dropping below the levels shown is much lower than the potential for them rising above these levels, and, thus, management will be the key to a successful DBC over the next two to five years, assuming no natural disasters. Furthermore, even if prices fell significantly, the result of a well arranged DBC will hold losses to a minimum, this requiring less assistance in the future.

IV. IMPLEMENTATION ARRANGEMENTS

A. AID's Role in Project Monitoring and Evaluation

1. Project Monitoring

AID's project monitoring will be the responsibility of RDO/C, specifically the Mission's Office of Rural Development. Assistance will be provided by the Offices of the Mission Controller and Development Resources, as well as the Regional Legal Advisor.

The primary monitoring concern will be that of the financial condition of the DBC. The DBC's financial condition will be influenced on their ability to reduce inefficiencies by lease/sale of the boxing plants, improved inventory control and overall operational cost control. The DBC will be requested to submit a certification by its external auditors that its accounting system will enable them to produce accurate and timely financial accounting and reporting and that proper financial controls are in place. AID will require the DBC to submit detailed quarterly financial statements and semi-annual statements which are duly certified by the external auditors, as well as some monthly information such as sales revenues and payments to farmers.

These financial statements compared with the financial projections contained in this Project Paper will provide the AID Project Manager with a measure of progress against the established goals. In addition to this tool, the AID Project Manager will meet on a quarterly basis with BDD personnel, the AID and BDD financed advisors and DBC personnel to discuss progress toward the objectives of the project.

The AID Project Manager will, during the early part of project implementation, follow closely the schedule of major events presented in part C below. The schedule provides an additional frame of reference against which implementation progress can be measured. In addition, the AID Project Manager will routinely review the reports of both the AID and BDD funded project advisors. In this regard, the AID funded resident technical advisors will provide monthly reports and serve as first hand observers of project progress.

2. Evaluation

All project evaluations will be carried out jointly by AID and the BDD with the collaboration of the DBC. The evaluations will be conducted primarily by RDO/C staff, supplemented if necessary by TDY assistance from LAC/DR. The evaluations will also involve the technical advisors funded both by the BDD and AID.

The first evaluation will be conducted in July 1983 after receipt of the financial statements for the quarter ending June 30, 1983. This evaluation will examine DBC's overall performance including: financial viability, progress on divestiture of boxing plants, spraying program, inventory control and the schedule of major events. Problems will be clearly defined and actions required for their solution will be specified. The Project Manager will be responsible for follow-up with respect to the implementation of these actions.

A second evaluation will be held one year later in July 1984 to examine the same elements of the program. By this time, the DBC should be in a positive cash flow position and divestiture of 90 percent of the boxing plants should be completed. This evaluation will examine progress on the actions specified in the previous evaluation. A final evaluation may be conducted in early 1985 if deemed appropriate at that time.

B. Disbursement and Procurement Procedures

1. Spray Oil and Fungicides

Up to \$1,312,000 of AID grant funds will be used to procure spray oil and fungicide for the project. Given the quantity of commodities required, the delivery schedule, and RDO/C's understanding of the supply market, some modification in AID's standard procurement procedures is envisioned.

As discussed in the technical analysis, the only known fungicide which will perform as required is Benomyl, marketed under the brand name of Benlate and manufactured by the DuPont Company in the U.S. As part of the procurement plan to be submitted as a condition precedent to disbursement for fungicide, we will confirm the above information and request a waiver to permit the procurement of Benlate.

Spray oil is a more complex problem given the relatively small quantities involved on a shipment by shipment basis (approximately 20,000 gallons per month), the existing marketing system for the product and the Mission's intent to link quarterly disbursement of spray oil to the satisfactory performance of the DBC. This latter requirement and the limited storage capacity available in Dominica precludes bulk delivery of spray oil in one lot. While a procurement of spray oil of the total value anticipated may interest a U.S. supplier, the quarterly requirements of less than \$150,000 coupled with the logistical problems of moving such a small volume to Dominica will make procurement from the U.S. problematic.

The procurement plan to be submitted as a condition precedent to disbursement for commodities should confirm the preliminary findings of the technical analysis that the current procurement system for spray oil is competitive and the oil is reasonably priced. Following our review of the plan, we will seek the necessary waiver to permit procurement following a system as close as possible to the current marketing arrangements.

2. Vehicles

Two vehicles will be purchased for use by the two long-term, AID financed advisors. The vehicles will be purchased by the Grantee with title passed to the DBC and assigned to the advisors.

It is anticipated that right-hand drive utility vehicles will be purchased for the project. A source waiver therefore will be required. Examination of the market for vehicles in Dominica revealed that no U.S. manufactured vehicles are sold normally in Dominica. No spare parts or service are available from franchised dealers. In addition, use of left-hand drive vehicles is unsafe given the narrow roads and difficult terrain in Dominica. The Mission believes a source waiver is justified and will process the waiver when appropriate.

3. Technical Assistance

All technical assistance for the project will be procured by direct AID contracts. Personal Services Contracts will be most appropriate for the long-term advisors who will be working with individual boxing plant operators. Fixed Price Contracts are likely to be the most appropriate for the communications design work and the work to assess the alternatives for divesting operations other than boxing plants. Disbursement of funds for technical assistance will follow usual methods required in Personal Services or Fixed Price Contracts.

C. Schedule of Major Events

<u>EVENT</u>	<u>DATE</u>
1. BDD Advisors in Dominica.	9/06/82
2. Cabinet approves restructured banana industry proposals and proposed legislation.	9/28/82
3. Banana legislation introduced in Parliament for first reading.	10/11/82
4. USAID Grant Agreement signed.	9/30/82
5. Proposed Executive Chairman of DBC begins work.	10/01/82
6. Banana legislation establishing DBC and DBPA passes Parliament.	10/25/82
7. Official publication of new legislation published in Dominica Gazette.	10/28/82
8. DBC commences operations.	11/01/82
9. DBC Board of Directors' meeting.	11/01/82
10. Government of Dominica provides USAID with letter describing progress to meeting conditions precedent to first disbursement to include:	11/15/82
* Membership of B. of D.	
* Name and qualifications of General Manager.	
* Statement by C & L that financial reporting and accounting can be accomplished in timely manner.	
* Description of long-term debt rescheduling and copies of relevant correspondence with banks and other creditors.	
* Transmittal of letter from Geest Industries deferring loan repayment.	
* Transmittal of letter from BDD describing intent to assist DBC.	

<u>EVENT</u>	<u>DATE</u>
11. USAID sends GOD Implementation Letter acknowledging that CPs have been satisfactorily met.	11/30/82
12. DBC provides financial reports and management comments to GOD, BDD, and USAID for period ending 10/31/82.	11/19/82
13. DBC/B. of D. meeting; special agenda items: * Management's operational plans for boxing plant divestiture. * Management's plans for establishing improved communication system.	12/01/82
14. DBC provides financial reports for period ending 11/30/82.	12/22/82
15. USAID funded Business Advisors arrive.	1/12/83
16. DBC/B. of D. meeting; special agenda items: * Request to USAID for spray oil reimbursement purchased during previous quarter. * Request to BDD for additional fertilizer assistance. * Response to issues raised by BDD/AID project monitors.	1/12/83
17. DBC provides financial reports for period ending 12/31/82.	1/21/83
18. DBC/B. of D. meeting; special agenda items: * Management's recommendation to divest at least 3 boxing plants to private individuals. * Management's report on progress to implement improved inventory controls.	2/02/83
19. DBC provides financial reports for period ending 1/31/83.	2/23/83
20. DBC/B. of D. meeting; special agenda items: * Management's and consultant's cost estimate and recommendations for installing improved communication capability. * Request to USAID for funding to install communication equipment. * Management's recommendation to divest at least 3 additional boxing plants.	3/7/83

<u>EVENT</u>	<u>DATE</u>
21. DBC provides financial reports for period ending 2/28/83.	3/23/83
22. DBC/B. of D. meeting; special agenda items: <ul style="list-style-type: none">* Request to USAID for reimbursement of spray oil purchased during previous quarter.* Request to BDD for additional fertilizer assistance.* Response to issues raised by BDD/AID project monitors.* Management's recommendation to divest 3 additional boxing plants to private individuals.	4/04/83
23. DBC provides financial reports for period ending 3/31/83.	4/20/83
24. DBC/B. of D. meeting; special agenda items: <ul style="list-style-type: none">* Management's recommendation to plan for divestment of spraying operations.* Management's recommendations for increasing the number of boxing plants.	5/01/83
25. DBC provides financial reports for period ending 4/30/83.	5/23/82
26. DBC/B. of D. meeting; special agenda items: <ul style="list-style-type: none">* Management's recommendations for divesting additional boxing plants to private individuals.	6/7/83
27. DBC provides financial reports for period ending 5/31/83.	6/22/83
28. Special BDD/AID progress evaluation completed.	6/30/83
29. Special Audit Report by C & L completed.	6/30/83
30. DBC/B. of D. meeting; special agenda items: <ul style="list-style-type: none">* Issues raised by BDD/AID evaluation.* Recommendations of C & L Audit.* Request to USAID for reimbursement of spray oil purchased in previous quarter.* Request to BDD for additional fertilizer assistance.* Management's recommendation for further divestiture of boxing plants.	7/10/83
31. Note: Beginning in July, 1983 a revised schedule of major events for the next year will be developed in light of progress made.	



OFFICE OF THE PRIME MINISTER
 CABINET SECRETARIAT

Telegrams: External, Dominica.
 Telax 613 EXT. DO
 Reference: P.

GOVERNMENT HEADQUARTERS.
 ROSEAU.
 COMMONWEALTH OF DOMINICA,
 WEST INDIES.

23rd August, 1982.

Dear Mr. Wheeler,

BANANA INDUSTRY

As you know, the Banana Industry in Dominica, a vital component of the national economy, is heavily in debt and operating at a level of efficiency which suggests that the debt will increase unless substantial changes are made.

ACTION	INFO
AGRI	
DIR	✓
A/DIR	✓
PLA G	
ECON	
COOP	
PLA	
CEO	
ASST	
EDU	
HLTH	
JAG	
DUI	08/30/82
TAKING	
SIGN	

My Government is deeply concerned with the prospect of such an important industry failing and has therefore taken steps to bring about a major restructuring of the industry and its principal institutions. In this context, Cabinet has recently approved a White Paper on the industry in which the proposed changes are spelt out and indications given of the Government's policy intentions for key operational areas. A copy of this paper is attached.

The Government's principal decisions are as follows:

1. to replace the Dominica Banana Growers Association with two separate institutions - the Dominica Banana Company, which will be responsible for all the commercially oriented activities currently handled by the DBGA, and the Dominica Banana Producers Association, which will be a growers representative organisation;
2. to establish the DBC with a Board of Directors who have experience and expertise in commercial management and private sector operations;
3. to progressively privatize as many of the DBC's operations as is feasible and, in doing so, stimulate small business activity in the private sector; and
4. to convert to grants all Government loans now outstanding with the DBGA - a total of approximately EC\$4.9 million.

The long term debt commitments of the DBGA are a serious problem which the Government is unable to solve. Nonetheless, it has taken steps to reduce the burden as much as possible;

these are detailed in the White Paper. At present, the outcome of my request to Barclays Bank International and the Royal Bank of Canada for a rescheduling of their loans to the industry is not known, however, I have requested conversion of the loans to 20 year terms with five year grace periods.

The financial projections which the Government has made indicate that deficits will continue for some months after the transfer of responsibility from the DBGA to the DBC and the implementation of a new set of operational policies. For example, we believe that privatization of the boxing plants - the first phase of the privatization programme to which we are committed - will not commence (in terms of transfer of functions) until the second quarter of 1983 and will take almost two years to complete. We believe that it would be entirely counter-productive for the DBC to incur further debt responsibilities during this period and are therefore committed to seeking grant aid funds to assist the industry through this transitional period.

The other major area of assistance for which we have identified a need is specialist expertise in finance, marketing operations and small business development. We believe that appropriate staffing in the last mentioned area would be crucial to the success of the privatization programme.

As you know, the DBGA has been receiving financial assistance from the British Government in the form of fertilizer. The British Government have indicated that they are prepared to continue with this programme of assistance and to provide both the financial and marketing operations specialists which we believe are required.

Taking this assistance into account, we believe that the DBC will need, in addition, a further EC\$3.46 million (US\$1.285 million) as grant finance, to cover deficits which are likely to occur, and the services of a small business development specialist. My Government would be most grateful if this assistance could be made available to the Government, for transfer to the DBC, from your agency.

From our earlier discussions, I understand that, should this request be approved, the US Government would require compliance with several provisions prior to disbursement of funds. Amongst these, I believe, are two concerning interest and principal repayments on loans which the DBGA currently has from two commercial banks and Geest Industries. My government finds the imposition of these conditions unreasonable and does not agree with the reasoning which appears to have led to their formation.

However, with respect to the interest payments which will be due to the two commercial banks during the project period, my Government has reluctantly agreed to draw down funds allocated to the Ministry of Agriculture for that Ministry's recurrent budget in order to meet the payments due. These funds will be provided to the DBC as ⁽¹⁾interest free loan to be repaid to the Government in the two years following the conclusion of the project. You can appreciate the hardship that this places on

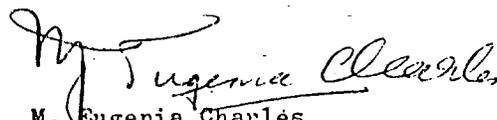
my Government which suffers from a cash flow problem equivalent to that of DBGA.

With respect to the condition proposed in relation to the loan from Geest Industries, I regret to inform you that the Government is not prepared to accept responsibility for these payments, even in the short term, and that I am similarly not prepared to approach Geest Industries to request a moratorium on a loan which I know was provided on particularly generous conditions at my personal request and with my personal guarantee for early repayment, at a time when the future of the industry was severely threatened and when there was no one else to whom we could turn for urgent assistance.

Should your Agency wish to approach Geest Industries on this issue, my Government would be willing to accept any outcome of such negotiations which was not to the Government's or the DBC's financial disadvantage.

Notwithstanding the above comments in relation to the pre-conditions for disbursement which have been proposed, I am particularly grateful for the interest shown in the future of the Dominica Banana Industry by the US Government and look forward to the favourable consideration of the request for assistance contained in this letter.

Yours sincerely,


M. Eugenia Charles
Prime Minister.

Mr. William Wheeler,
U.S.A.I.D.,
Bridgetown,
BARBADOS.

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

Name of Country: Dominica
Name of Project: Dominica Banana Company Project
Number of Project: 538-0083

Pursuant to Part II, Chapter 4, Section 531 of the Foreign Assistance Act of 1961, as amended, and to Redelegation of Authority No. 133.3, I hereby authorize a grant to Dominica of not to exceed One million seven hundred fifty thousand United States Dollars (US\$1,750,000), the "Authorized Amount" to help in financing certain foreign exchange and local currency costs of goods and services for the project as described in the following paragraph.

The project will support the restructuring of the banana industry in Dominica and will include the following elements:

- (1) Creation of financially viable Dominica Banana Company (DBC); and the Dominica Banana Producers Association (DBPA);
- (2) Privatization of sub-components in the industry;
- (3) Maintenance of a leaf spot control program including financing of spray oil, fungicides and other commodities and equipment necessary for the project; and
- (4) Financing of procurement of professional, technical and administrative services.

I approve the total level of AID appropriated funding planned for the project of not to exceed One million seven hundred fifty thousand United States Dollars (US\$1,750,000) of Grant Funding during the period FY 1982 through FY 1984.

I hereby authorize the initiation of negotiation and execution of the Project Agreement as the case may be, by the officer to whom such authority has been delegated in accordance with AID regulations and Delegation of Authority, subject to the following essential terms, covenants and major conditions, together with such other terms and conditions as AID may deem appropriate:

A. Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed by AID under the project shall have their source and origin in the United States and the cooperating country. Ocean shipping financed by AID under the project shall be procured in the United States, except as AID may otherwise agree in writing.

B. Conditions Precedent to Disbursement

1. First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to AID in form and substance satisfactory to AID:

(a) An opinion of counsel acceptable to AID that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms;

(b) Evidence of the formation of a new Dominica Banana Company (DBC) with operational aspects, including financial controls, and an organization, including senior staff and board members, acceptable to AID;

(c) Evidence of the formation of the Dominica Banana Producers Association, or an equivalent organization, as a group which will represent the interests of banana growers to the DBC and the Government of Dominica;

(d) Evidence of an Agreement between the Grantee and DBC which contains a commitment by the DBC to the Grantee that the DBC agrees to observe and act in conformity with the Special Covenants, Conditions Precedent and the Annex I Amplified Project Description of this Agreement;

(e) A time-phased plan for the diversification of boxing plants to private sector groups which at a minimum shall result in the divestiture of 22 boxing plants by the end of 1984.

2. Condition Precedent to Any Disbursement for Project Expenditures Incurred During the Second Year of the Project. Prior to any disbursement or to the issuance by AID of documentation pursuant to which disbursement will be made for any expenditure other than technical assistance incurred after October 1, 1983, the Grantee shall, unless the Parties shall otherwise agree in writing cause to be produced, in form and substance satisfactory to AID, a feasibility plan for the divestiture of other operations such as transportation, input supply and pest control and, with regard to than plan, furnish A.I.D. with a list of actions which the DBC governing board has taken or directed to be taken concerning divestitures recommended as feasible by the plan.

3. Condition Precedent to Initial Disbursement for Agricultural Chemicals: Prior to any disbursement, or to the issuance of documentation pursuant to which disbursement will be made for the procurement of agricultural chemicals, the Grantee shall, unless the Parties shall otherwise agree in writing, present in form and substance satisfactory to AID, evidence of a time-phased procurement plan together with evidence of availability of the necessary resources to manage and carry out the spraying process and a technical plan for the spraying process.

Special Covenants. The Grantee shall covenant as follows:

(a) The Grantee shall assure that the Dominica Banana Company will operate in such a manner as to promote its development into a financially viable organization. The evaluation of its operation will be based at a minimum on the performance targets established in Annex I under "Measurements of Financial Viability". AID may at its option suspend disbursements for agricultural chemicals under the Project if the DBC is not operated on a sound financial basis, including meeting the performance targets established in Annex I.

(b) The Grantee shall assure that input sales activity undertaken by the DBC must be done without increase in credit levels to growers beyond that as of the date of this Agreement or must be for cash or against prepaid cess; furthermore all inputs must be at full market value.

(c) The Grantee shall assure that no new credit except that allowed in 5.1(b) above can be extended by the DBC to any borrower, including DBC staff, for any purpose without the prior written approval of A.I.D.

(d) The Grantee shall assure that no expenditures for purchases of fixed assets will be allowed without the prior written approval of AID;

(e) The Grantee shall assure that, unless AID gives its prior written approval, no principal payments against long-term loans from banks and other creditors will be made during the period October 1, 1982 to March 31, 1985, except those scheduled on the CDB loans, and except for payments arising from (i) below;

(f) The Grantee shall assure that, unless AID gives its prior written approval, no payments against loans from Geest Industries will be made during the period January 1, 1983 to March 31, 1984.

(g) The Grantee will assure that unless AID gives its prior written approval, reductions in outstanding debts, trade creditors, other than Geest will be limited to no more than \$200,000 per quarter, excepting payments arising from (i) below;

(h) The Grantee will assure that the DBC undertakes no additional long-term borrowings or increases in short-term borrowing limits without the prior written approval of AID;

(i) The Grantee will assure that the gross cash flow, surpluses, if any (cash inflow payments to growers, other operating costs, interest and principal payments, fixed assets, purchases and trade creditors reductions, plus donor assistance in the form of grower inputs, other materials or cash) will be assigned as follows:

(i). If the net cash flow surplus (gross surplus less donor assistance) is positive, 75% of the net will be used to further reduce long-term debt and/or trade credit; the remaining 25% along

with an amount equal to donor assistance will be placed in a contingency fund for disasters or for other purposes agreed to by AID and DBC.

(ii). If the net cash flow surplus is negative, the entire amount of the gross cash flow surplus will be placed in the contingency fund for disasters or other purposes agreed to by AID and DBC.

(j) The Grantee shall cause to be established, within 3 months of the date of the signing of the Project Agreement, a fertilizer procurement and supply/distribution system, acceptable to AID, which eliminates accrual of losses and extension of credit beyond present levels or subsidization of costs to the growers.

William B. Whede
Director

Regional Development Office/Caribbean

29 September 1982
Date

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable generally to projects under the FAA and project criteria applicable to individual funding sources: Development Assistance (with a subcategory for criteria applicable only to loans); and Economic Support Funds.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP-TO-DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act
Sec. 523; FAA Sec. 634A;
Sec. 653(b).

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project;

An Advice of Program Change has been forward to Congress

(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes

3. FAA Sec. 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 the assistance?

The Government of Dominica must enact legislation legislation modifying the structure of the current Dominica Banana Growers Association and creating the Dominica Banana Company. In the letter of application, the Prime Minister committed her Government to this action. With her parliamentary majority and the support of the Cabinet for the new legislation, we are confident that action will

be taken on a timely basis.

4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? N/A
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. This project is not susceptible as part of a regional program
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and The Project:(a) directly supports Dominica's export of bananas; (b) requires the prioritization of key aspects of the current public sector enterprise; and (c) will promote the technical and financial efficiency of the banana industry.

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.

8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). U.S. Goods and services will be used in the project as appropriated.
9. FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507. 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 U.S. are utilized in lieu of dollars. The host country is making a significant contribution through its forgiveness of debt currently owed to the Government by the banana industry.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No.
11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.

12. FY 1982 Appropriation Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

The project supports the export of Dominican bananas to the protected market the the industry enjoys in the U.K., no U.S. produces will be caused injury by the project.

13. FAA 118(c) and (d). Does the project take into account the impact on the environment and natural resources? If the project or program will significantly affect the global commons or the U.S. environment, has an environmental impact statement been prepared? If the project or program will significantly affect the environment of a foreign country, has an environmental assessment been prepared? Does the project or program take into consideration the problem of the destruction of tropical forests?

Yes. An environmental study of the application of pesticides has been carried out and is contained in the PP.

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N/A

B. FUNDING CRITERIA FOR PROJECT

N/A

1. Development Assistance
Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A 104, 105, 106. Does the project fit the criteria for the type of funds

N/A

(functional account)
being used?

- c. FAA Sec. 107. Is N/A
emphasis on use of
appropriate technology
(relatively smaller,
cost-saving, labor-using
technologies that are
generally most
appropriate for the small
farms, small businesses,
and small incomes of the
poor)?
- d. FAA Sec. 110(a). Will N/A
the recipient country
provide at least 25% of
the costs of the program,
project, or activity
with respect to which the
assistance is to be
furnished (or is the
latter cost-sharing
requirement being waived
for a "relatively least
developed" country)?
- e. FAA Sec. 110(b). N/A
Will grant capital
assistance be disbursed
for project over more
than 3 years? If so, has
justification
satisfactory to Congress
been made, and efforts
for other financing, or
is the recipient country
"relatively least
developed"?
- f. FAA Sec. 122(b). Does N/A
the activity give
reasonable promise of
contributing to the
development of economic
resources, or to the
increase of productive
capacities and
self-sustaining economic
growth?
- g. FAA Sec. 281 (b). N/A

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 civil education and training in skills required for effective participation in governmental processes essential to self-government.

2. Development Assistance Project Criteria (loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest. N/A

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan? N/A

c. ISDCA of 1981, Sec. 724 (c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)? N/A

3. Project Criteria Solely for Economic Support Fund

- a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the extent possible, does it reflect the policy directions of FAA Section 102? Yes.
- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? No
- c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? N/A
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

ANNEX B, EXP. 011
Life of Project
from FY 82 to FY 84
Total U.S. Funding \$1,750 M

Project Title & Number: Dominica Banana Rehabilitation Project, 538-00

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																				
<p><u>Program or Sector Goal: The broader objective to which this project contributes:</u></p> <p>To restructure the Dominica banana industry to allow greater private sector participation.</p>	<p><u>Measure of Goal Achievement:</u></p> <p>Increased revenue paid to banana growers.</p>	<p>Annual statistical data - GOD</p>	<p><u>Assumptions for achieving goal targets:</u></p> <ul style="list-style-type: none"> . GOD will remain stable and pursue economic growth. . No major weather disasters. 																				
<p><u>Project Purpose:</u></p> <p>To improve the cost effectiveness and financial viability of the industry, while maintenance control of leaf-spot disease in bananas.</p>	<p><u>Conditions that will indicate purpose has been achieved: End of project status.</u></p> <ul style="list-style-type: none"> . Establishment of the Dominica Banana Company. . Divestiture by DBC of at least 90% of the boxing plants. . DBC operating costs reduced from a level of 76% of sales revenue to 55% of sales revenue. 	<ul style="list-style-type: none"> . Laws of Dominica published in the Official Gazette. . DBC records. . Audited DBC financial statements. 	<p><u>Assumptions for achieving purpose:</u></p> <ul style="list-style-type: none"> . Relative stability of the London Green Market Price for bananas. . Relative stability of the U.S. Dollar to British Pound relationship. . Continued BDD support for industry. 																				
<p><u>Outputs:</u></p> <ol style="list-style-type: none"> 1. Effectively operating leaf spot control program. 2. Improved boxing plant - ports communication design. 3. Management training for boxing plant operators. 	<p><u>Magnitude of Outputs: By 1984:</u></p> <ol style="list-style-type: none"> 1. Ten annual spray cycles - 100% of acreage covered. 2. Completed design for capability to notify at least 75% of all boxing plants within 30 minutes when required. 3. At least 22 operators receiving 100 hours of training per year. 	<ul style="list-style-type: none"> . DBC records. . Reports from Cable and Wireless of Dominica. . Reports from the T.A. Advisors. 	<p><u>Assumptions for achieving outputs:</u></p> <ul style="list-style-type: none"> . T.A. will be available. 																				
<p><u>Inputs:</u></p> <ol style="list-style-type: none"> 1. Spray oil. 2. Technical assistance. 3. Loan forgiveness. 	<p><u>Implementation Target (Type and Quantity):</u></p> <p style="text-align: center;"><u>All Years (\$000)</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>AID</u></th> <th style="text-align: center;"><u>GOD</u></th> <th style="text-align: center;"><u>TOTAL</u></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td style="text-align: right;">\$1,312</td> <td></td> <td style="text-align: right;">1,312</td> </tr> <tr> <td>2.</td> <td style="text-align: right;">438</td> <td></td> <td style="text-align: right;">438</td> </tr> <tr> <td>3.</td> <td></td> <td style="text-align: right;">1,600</td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>\$1,750</u></td> <td style="text-align: right;"><u>\$1,600</u></td> <td style="text-align: right;"><u>\$2,350</u></td> </tr> </tbody> </table>		<u>AID</u>	<u>GOD</u>	<u>TOTAL</u>	1.	\$1,312		1,312	2.	438		438	3.		1,600			<u>\$1,750</u>	<u>\$1,600</u>	<u>\$2,350</u>	<ul style="list-style-type: none"> . USAID disbursement records. . GOD records. 	<p><u>Assumptions for providing inputs:</u></p> <ul style="list-style-type: none"> . AID funds available as planned.
	<u>AID</u>	<u>GOD</u>	<u>TOTAL</u>																				
1.	\$1,312		1,312																				
2.	438		438																				
3.		1,600																					
	<u>\$1,750</u>	<u>\$1,600</u>	<u>\$2,350</u>																				

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E.O. 12356: N/A

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SUBJECT: DOMINICA BANANA INDUSTRY PID

BUREAU REVIEWED AND APPROVED PID AUGUST 2, 1982. MISSION MAY PROCEED WITH INTENSIVE REVIEW, TAKING INTO ACCOUNT CONCERNS OUTLINED BELOW:

2. ALTERNATIVE STRATEGIES: INTENSIVE REVIEW SHOULD INCLUDE AN EXAMINATION OF FEASIBLE ALTERNATIVE STRATEGIES FOR MEETING NEEDS OF DOMINICA'S BANANA INDUSTRY, SUCH AS (I) A JOINT VENTURE BETWEEN GOVERNMENT OF DOMINICA (GOD) AND A MAJOR U.S. OR OTHER FOREIGN FIRM IN THE BANANA INDUSTRY, OR (II) AN EXPANDED MARKETING ROLE FOR GEEST INDUSTRIES WHICH WOULD EFFECTIVELY ELIMINATE NEED FOR DBGA OR PROPOSED DBC. PP SHOULD DISCUSS THESE AND POSSIBLY OTHER ALTERNATIVES AND DRAW CONCLUSIONS AS TO THEIR VIABILITY IN THE MEDIUM AND LONG TERMS.

3. ANALYSIS OF CONSULTANT'S REPORT: THE A.D. LITTLE REPORT ON THE WINDWARD ISLANDS BANANA INDUSTRY'S FINANCIAL AND ECONOMIC STATUS, COMPLETED IN NOVEMBER

1981, IDENTIFIED SEVERAL PRIORITY PROGRAMS FOR THE INDUSTRY'S FINANCIAL RECOVERY. WHILE THE PROPOSED PROJECT AND COMPLEMENTARY DONOR ACTIVITIES WILL ADDRESS SOME OF THESE RECOMMENDED PROGRAMS, IT IS NOT CLEAR THAT OTHER PROGRAMS (E.G., IMPROVING FRUIT QUALITY, INTRODUCING A SUPERIOR FIELD BOX AND A 39 POUND CARTON, SKIVING PRODUCTION TOWARD HIGHER PRICE PERIODS, AND FINDING PRODUCTIVE USES FOR REJECTED BANANAS) WILL BE UNDERTAKEN IN THE NEAR FUTURE. DURING INTENSIVE REVIEW, THE MISSION SHOULD ANALYZE EACH OF THE REPORT'S RECOMMENDED PROGRAMS AND DRAW CONCLUSIONS AS TO ADVISABILITY OF INCORPORATING THESE PROGRAMS WITHIN THE PROJECT OR AS COMPLEMENTARY ACTIVITIES TO BE FINANCED BY THE GOV OR OTHER DONORS. FYI, AMB W/ AWARE OF HONDURAS GOVERNMENT'S BANANA CORPORATION EFFORTS TO IDENTIFY AND DEVELOP MARKET FOR BANANA CHIPS USING SURPLUS OR REJECT EXPORT GREEN BANANAS. WORLD TRADE INSTITUTE WAS CONSULTED BY GOV IN THIS EFFORT AND COULD BE CONTACTED FOR ADVICE ON DOMINICAN SITUATION. END FYI.

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INTENSIVE REVIEW SHOULD ALSO GIVE PRIORITY ATTENTION TO ALREADY SELECTED AS WELL AS ANY OTHER MEANS BY WHICH PROJECT CAN ASSIST PROPOSED DBC TO GENERATE ADDITIONAL REVENUE, IMMEDIATELY OR OVER TIME, AND TO REDUCE OR ELIMINATE CERTAIN EXPENSES. DEVELOPING ALTERNATIVE USES FOR SURPLUS OR REJECT PRODUCTION MENTIONED ABOVE IS ONE POSSIBILITY WORTH EXAMINATION; SELLING OFF UNNEEDED FIXED ASSETS COULD BE ANOTHER; AND DECREASING PRICE PAID TO PRODUCERS--PARTICULARLY LARGER, MORE FINANCIALLY STRONG GROWERS--DURING THIS RESTRUCTURING OF THE IPGA/DBC MAY BE ANOTHER.

FURTHER, AS NOTED IN PARA. 5 BELOW, IT IS ESSENTIAL THAT ADEQUATE RESERVS BE A KEY ELEMENT OF THE FINANCIAL PLANNING. INTENSIVE REVIEW SHOULD EXAMINE THE VALIDITY OF KEY ASSUMPTIONS, AMONG THESE WOULD BE THOSE LISTED IN PARA. 4 OF THE PID CABLE. GIVEN PAST HISTORY, IT WOULD APPEAR HIGHLY UNREALISTIC TO ASSUME NO MAJOR WEATHER DISASTERS AS WELL AS STABILITY IN FOREIGN MARKET PRICES AND FOREIGN EXCHANGE RELATIONSHIPS.

4. PRIVATE SECTOR CONTROL OF INDUSTRY: THE STRATEGY OUTLINED IN PID CALLS FOR LEGISLATION TO REPLACE THE DEGA WITH A STATUTORY CORPORATION (DBC) IN WHICH BOARD OF DIRECTORS IS DOMINATED BY PRIVATE SECTOR INDIVIDUALS. A SECOND ELEMENT OF THE STRATEGY CALLS FOR THE STATUTORY CORPORATION TO QUICKLY DIVEST ITSELF OF OPERATIONAL FUNCTIONS (E.G., BOXING, TRANSPORT, SPRAYING

AND INPUT SUPPLY) THAT CAN BE UNDERTAKEN BY PRIVATE INDIVIDUALS OR FIRMS. THIS STRATEGY, LEADING EVENTUALLY TO PRIVATE SECTOR CONTROL OF DOMINICA'S BANANA INDUSTRY, RAISES FOLLOWING QUESTIONS AND CONCERNS:

--A. PROSPECTS FOR LEGISLATION: MISSION SHOULD ASSESS PROSPECTS FOR SECURING REQUIRED LEGISLATION IN A TIMELY MANNER, IN ACCORDANCE WITH REQUIREMENTS OF SECTION 611 (A)(2) OF THE FAA, AS AMENDED.

--B. PRIVATE SECTOR INTEREST/CAPABILITY: THE STRATEGY ASSUMES THAT PRIVATE SECTOR WILL UNDERTAKE MANY OF THE FUNCTIONS CURRENTLY BEING PERFORMED BY THE DEGA. MISSION SHOULD DETERMINE WHETHER, IN FACT, PRIVATE INDIVIDUALS OR FIRMS EXIST WHICH ARE WILLING TO AND CAPABLE OF MANAGING THE VARIOUS OPERATIONAL FUNCTIONS TARGETTED FOR DIVESTITURE UNDER THE DBC.

--C. FINANCIAL VIABILITY: STRATEGY FURTHER ASSUMES THAT CURRENT DEBT OF DEGA CAN BE EFFECTIVELY RESCHEDULED TO ALLOW DBC TO BECOME SOLVENT AND EVENTUALLY REPAY DEBT. ASSUMPTIONS REGARDING DEBT RESCHEDULING SHOULD BE

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CONFIRMED DURING INTENSIVE REVIEW. PP SHOULD ALSO INCLUDE A REALISTIC FINANCIAL PLAN WHICH DEMONSTRATES PPC'S LONG TERM FINANCIAL VIABILITY, WITH UNDERLYING ASSUMPTIONS CLEARLY SPECIFIED.

5. RESERVE FUND: GIVEN THE RISKS ASSOCIATED WITH BANANA PRODUCTION IN DOMINICA (E.G., HURRICANES, DISEASES, INTERNATIONAL PRICE VARIATIONS, AVAILABILITY OF SHIPPING), MISSION SHOULD EXAMINE FEASIBILITY OF ESTABLISHING A RESERVE FUND TO MEET THESE RISKS IN FUTURE.

6. ECONOMIC VIABILITY: THE PROJECT'S ECONOMIC ANALYSIS SHOULD FOCUS ON THE ECONOMIC VIABILITY OF BANANA GROWING AS AN ACTIVITY, RATHER THAN NARROWLY ON A.I.D. INPUTS. IN CALCULATING BENEFITS, CARE SHOULD BE TAKEN NOT TO ASSUME AN INDEFINITE STREAM OF BENEFITS IF SUCH AN ASSUMPTION IS NOT WARRANTED BY THE INDUSTRY'S REALISTIC MEDIUM/LONG TERM PROSPECTS. ON THE COST SIDE, MISSION SHOULD DETERMINE THE APPROPRIATE SHADOW PRICE OF INPUTS (E.G., LAND AND LABOR BASED ON ALTERNATIVE USES OF THESE INPUTS).

7. MISSION AUTHORIZATION: ASSUMING PROJECT ANALYSES DEMONSTRATE PROJECT'S FEASIBILITY, MISSION MAY PROCEED WITH PP REVIEW, APPROVAL AND PROJECT AUTHORIZATION.

SEPT/EL WILL PROVIDE CN EXPIRATION DATE AND BUDGET ALLOWANCE. SHULTZ
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THE BANANA INDUSTRY IN DOMINICA

INTRODUCTION

The current state of the Banana Industry in Dominica is such that there are a very wide range of problems. In some cases, steps are in progress to overcome identified problems. However, the measures themselves, and the impact that they are likely to have, are insignificant in terms of the total problems.

2. Though it is possible to identify the complete range of difficulties which currently beset the industry and propose actions which will help to overcome them, the immediate impact can only be that which is derived from the structural changes which can be effected in the near future through legislation and adjustments to the calibre of employees and others in management functions. The other actions which are required can only be foreshadowed, through policies and intentions being defined at this point, and directions being given to the restructured industry organization to follow these policies through this paper therefore represents an explanation of a Government's various intentions within these time frames.

STRUCTURAL CHANGES

3. The Government acknowledges the authenticity of the content of each of the recent reports prepared after studies of the banana industry, that is, that inadequate management has been the major continuing problem and the root cause of much of the industry's current high level of debt burden. The management problem is not simply the result of inadequate human resources within the DBCA staff, though an improvement in skills and greater application to duty at this level would have a significant impact on the association's performance.

Rather, it has been the management by the Board of the Association which has been severely lacking in expertise. Two major underlying problems have been identified, the more important of which the Government believes it can overcome by legislative restrictions on the industry. The problems which have been identified are:-

- a) An inherent incompatibility of growers representation and commercial operations conducted within one organization; and
- b) Unwarranted political interference by previous administrations.

4. The Government's response to the incompatibility problem has been to devise legislation which will:-

- . create two ^{new} institutions - the Dominica Banana Company which will be wholly commercial and the Dominica Banana Producers' Association which will fulfill a purely representative role. The existing legislation under which DBGA operates will be repeated.

5. The DBC legislation will, among other things, provide for

- (a) A BOARD OF TEN PERSONS, of whom three will be growers representatives appointed by the DEPA; two will be Government nominees from the public sector; two will be successful businessmen selected by the Government from the Dominican business community; one a representative of the Financial Institutions on whom the industry depends; one a representative of Winban and the tenth member, the Company's General Manager. The Chairman of the Board will be one of the two Government appointed business community representatives and may be employed as an Executive Chairman at the Government's discretion.

In the latter case, the condition of membership of the Dominica business community may be waived. It is proposed that the option of appointing an Executive Chairman will be exercised for the first two years of the new company's existence.

(b) A MANAGEMENT COORDINATION COMMITTEE, which will meet to discuss the day to day operations of the company. Its members will be the Chairman, the General Manager and senior management staff and the ^PDB/A's Secretary Manager. The local Geest Industries' representative will be invited to attend when this is considered desirable. The Committee will also have the power to co-opt additional members and it is anticipated that this power will be used in relation to senior advisors working with the industry such as the two BDD advisors who will shortly join the organization.

(c) The conversion of the Company, which will be established as a statutory authority, to a company under the Companies Act and its subsequent sale, in whole or part to the private sector. Such changes will be effected by the Government on the recommendation of the Board of the time.

6. As explained above, the immediate impact which can be created will be through the structural changes which can be effected - the business-oriented leadership, the restricted grower impact on commercial operations, and the addition of the BDD advisors to the management structure. Even before any operational policy changes can be effected, these changes should ensure the prompt production of current accounting statistics and management information. At the same time, the introduction of some improved management systems which have already been drafted and recommended (for example, in relation to inventory control) should begin to bring about improvements in the financial viability of the company.

7. In this context, it is also appropriate to note that the Government is committed to the achievement of genuine increases in administrative productivity and to this end will give all necessary support to the Board and Management of the DBC in their pursuit of this goal through improved levels of staff supervision and increased emphasis on individual accountability. The Government will expect the Management of the Company to proceed with disciplinary action, up to and including dismissal, where this is considered necessary and will give its support to such actions.

POLICY INITIATIVES

8. The Government acknowledges that the changes required in the operation of the industry cannot be made overnight. However, the Government will insist that the initiatives nominated in this paper are investigated and if found suitable instituted in the most appropriate form as soon as possible. In addition to those referred to in Paragraphs 14-48, which have been grouped under cash flow items, the following proposals will also be pursued;

9. A. STOCK HOLDING.

The legislation incorporating the DBC will provide that the Company, which will commence as a Government statutory authority, can be converted to a joint stock Company at some future date. It is considered desirable that growers should be given the opportunity to invest in their own industry's controlling organization. It is believed that this would create a sense of identity, provide small, but useful, amounts of capital and possibly provide the vehicle through which increased private sector participation can be achieved. It is also possible that suppliers of goods and services to the industry could be interested in becoming shareholders. Whilst the investment levels might only be notional, such a step would generate identification with the industry for those individuals and companies and, more importantly, indicate to growers that those for whom the industry provides a secure living are also prepared to support its operations and be at least partially exposed to the vagaries of the market and other uncertain factor.

In this context, it may be possible to include DBC employees in some form of stock-holding through deductions on wages.

10. B. PRIOR ANNOUNCEMENT OF AN ANNUAL SCHEDULE OF PROPOSED PAYMENTS.

The Annual seasonal variations have, in recent years, been sufficiently regular to suggest that a conservative proposed price schedule incorporating month to month variations could be announced in advance of the first deliveries for a new season. So long as the level of payment chosen was conservative there is no reason why such a system should be a financial burden. Nonetheless, there would be advantages in that growers could be expected to trade off lower prices for a restricted level of price uncertainty and so be encouraged to increase production. The introduction of a system of foreshadowed payments could also be linked to the operation of a stabilization fund with different levels of Government underwriting. An investigation of this proposal will receive high priority.

11. C. PREMIUMS FOR QUALITY.

The current system of payments is considered less than optimal in that it rewards an individual's decision regarding production inputs rather than the quality of the fruit offered to the DBA for purchase. The criteria for and method of payment of premiums is an issue on which Winban must act in concert - it is not an issue for Dominica to pursue in isolation. However, the DGC will press for the reorganization of the premium system and, following any changes introduced, will ensure that the achievement of premium bonuses by Dominican growers is given high priority in extension efforts.

12. D. DISINCENTIVES FOR INEFFICIENT PRODUCERS.

The definition of economically unsuitable production areas (described in Paragraph 21) will help to ease out many of the inefficient producers from the industry. However, it can be equally or more expensive to the industry to provide leaf spot control to growers in good areas who produce low yields, than

it is to service growers in high cost areas who achieve normal yields. The present lack of information on individual or total land area makes assessment of individual yields particularly difficult. However, steps will be taken to devise a program which would put pressure on inefficient producers to either make appropriate use of the extension services provided and improve their crop husbandry or drop out of the industry. In this context, proposals to facilitate increased returns for the more efficient producers have already been partially developed and there appears to be considerable scope for restructuring the industry's operations and DEGA policies to provide incentives for initiative and superior management and production skills.

13. The following section outlines under cash flow items headings the various policy directives which the Government will pass on to the DBC as soon as it is established.

F. PAYMENT TO GROWERS

14. The present system of deriving the level of payment to growers, in which various costs are deducted from the Green Market Price (GMP), is considered cumbersome and restrictive. Beginning on October 1st, there will be a growers payment system based on a standard all-inclusive deduction from the GMP which will be set to cover the DBC's operating costs. This deduction will not include an amount for pre-payment for inputs, as this will be a levy made from the payment to growers.

15. Another important aspect of payments to growers is the forecasting of quantities which will be available for export. The current obligation to buy all bananas of an acceptable quality which are delivered at times results in substantial losses for the DEGA when the space booked with Geent is not

sufficient. Similarly, the need to book space six months in advance also creates high unit costs for transport when the deliveries are insufficient to fill the space reserved. Efforts will be directed towards devising a more accurate procedure, possibly by linking growers payments to their forecasts in some way.

G. LEAF SPOT CONTROL

(i) Reorganization of Aerial Spraying

16. At present the DBGA owns and operates its own aircraft for aerial spraying for leaf spot control. It seems likely that this capital investment is underutilized and therefore unnecessarily inflating the cost of operations. A recent proposal that aerial spraying be reorganized on a regional basis will be investigated with a view to reducing the cost to the Dominican industry.

(ii) Privatisation of Ground Spraying

17. It is proposed to investigate the the possibility that those areas that cannot be economically serviced by aerial spraying can be defined and divided into zones. Should this be possible, it is anticipated that leaf spot control in these zones could be progressively contracted out to private individuals or business groups formed from within the local agricultural community. The very high cost of spraying operations at present should allow attractive contract prices to be offered and substantial performance bonuses to be included in the contract. Contractors would draw spraying equipment and materials from the DBG with each allocation being charged against their contract account - a procedure which should ensure a marked reduction in the levels of spray oil wastage. The counter-balance, to ensure that sufficient spraying material is used and efficient spraying procedures employed - would be the performance bonus awarded for the maintenance of good sanitary conditions in the contract zone. Performance would be monitored

by DBC personnel, in the course of their normal rounds of meetings with banana growers, and the growers themselves.

18. It is also possible that a scheme can be developed which, based on zones or catchment areas, would allow growers in discreet areas to be charged the actual cost of the spraying required for their area. In this way an incentive would be provided for growers to take steps to minimize the need for spraying.

19. A further initiative in this area will be to examine the cost effectiveness of aerial spraying vis a vis ^{the} more efficiently conducted ground spraying arrangements.

(iii) Inventory Control of Materials

20. One outcome of the inadequate level of management with the industry has been poor inventory control resulting in high levels of wastage of various inputs, particularly spray oil, where losses are considered to be in the region of 15% p.a. The introduction of improved inventory control procedures should substantially reduce wastage.

(iv) Definition of High Spraying Cost Areas

21. It is common knowledge within the industry that there are many growers now producing in areas which are economically non-viable for banana production. In some cases this non-viability is caused by agronomic conditions, but in many others it is the high cost of leaf spot control, brought about by poor accessibility, which creates the major problem. It is intended that the latter areas will be defined and financial disincentives brought to bear on the producers concerned so as to encourage them to either transfer their banana production to land in more suitable areas or grow a different crop.

It is thought unlikely that these disincentives would have a noticeable effect on total production as many growers with planting non-viable areas will also have plantings or land available in better areas. The impact of the disincentives in these cases may be to transfer inputs to the latter areas which will result in production increases on these plots through increase yields.

H. CARTONS

(i) Inventory Control

22. Another area of poor inventory control and high levels of unnecessary cost has been the distribution and use of cartons. Wastage is thought likely to be at least 10% p.a. New procedures are about to be initiated, to control the delivery of cartons to boxing plants, which can be expected to have a noticeable impact on the total cost of cartons required.

(ii) The Privatization of Boxing Plants

23. The progressive privatization of boxing plants should also help alleviate the problem of carton wastage, which currently occurs not only in the course of distribution to boxing plants but also within the boxing plant themselves. Contract boxing plant operators will have their contract account debited according to the number of cartons delivered to them.

(iii) Improved Stocks

24. Considerable disruption to the industry has been caused in recent months by the FBFA's financial inability to hold sufficient stocks of cartons to meet boxing plant needs. Deliveries of cartons to plants have been made, in some cases, only hours before dispatch has been necessary. Adequate stocks should result in an increase in exported tonnage.

(iv) Carton Weights

25. In recent months there have been suggestions that the cost of boxing per pound of bananas delivered to the UK could be effectively reduced by increasing the weight of bananas packed into each carton. This is an option which, if found practical, the DBC will be able to pursue in isolation from the other Winban members, as Geest pays on tonnage loaded in each island. Nevertheless, there are disadvantages from an industry point of view of differing average weights from differing islands and an investigation will be sought by Dominica to establish the practicality of this suggestion at the Winban level. If the findings of such an investigation are favourable, the DBC will then push for the adoption of this recommendation throughout the industry.

26. A further issue in this area is the variability of product weight in each carton. Irrespective of the weight chosen to be packed into each carton, at either the island or Winban level, it is in the Dominican industry's best interests to ensure that, first, this weight is always attained and, secondly, that the excess over the minimum weight chosen is as small as possible. Whilst again this is a Winban problem, which also requires the cooperation and assistance of Geest Industries, the Dominican industry should begin working towards the standardization of weights from the inception of the new company.

I. FERTILISER

(i) Storage

27. The DBC will carry out a program of improving and expanding storage points throughout the growing areas during its first two years of operation. The estimated total cost is EC\$126,000. Wherever possible the storage points will be linked to boxing plants, both those existing and those to be constructed under the proposed building program (see paragraph 42). This investment will help to reduce wastage, which is considered to be as high as 10% at present, through damage to stocks and inadequate inventory control.

(ii) Stocks

28. The DBGA's recent financial situation has precluded the maintenance of adequate stocks of fertilizer. The forthcoming CDB loan to establish an Input Revolving Fund should ensure that stocks can be maintained, guaranteeing reliable availability for producers. This improvement can be expected to result in increased levels of application which, in turn, should increase both field and marketed production.

(iii) Credit Availability

29. Except for the producers who have already achieved high yields through superior management the amounts of fertilizer generated by the pre-paid levy, which is linked to production, will not be adequate to optimize production. It is therefore essential that a simple but practical and viable system of credit purchases of fertilizer be established. It is believed that 50% of the prepaid levy may be an appropriate limit to the level of credit to individual growers.

(iv) Fertilizer Operation

30. Fertilizer supply and distribution should not be an operational expense for the company but rather a self financing service which it performs for growers. All costs related to the service will be borne by growers through an adequate margin applied to the landed cost price. All fertilizer related costs have been excluded from the accompanying cash flow projections.

J. OTHER INPUTS

(i) Storage and Distribution

(i) Storage and Distribution

31. The consolidation of storage points at conveniently located boxing plants accompanied by the accumulation of adequate stocks should ensure improved accessibility and reliability of supply to producers.

(ii) Inventory Control

32. Improved management procedures in these areas can also be expected to produce considerable savings as wastage is considered to be in excess of 10%.

(iii) Input Operations

33. Non fertilizer input operations will also be conducted on a self financing basis identical to that for fertilizer, see paragraph 30.

K. EXPORT TAX AND WINBAN LEVY

34. In line with recommendations made under F, PAYMENT TO GROWERS, paragraph 15, the export tax cess will be abolished as a deduction which the growers pay. The tax will be paid directly to the Government by the exporter, i.e. the DBC, and included in its operational cost. The Winban levy will be similarly treated.

L. BOXING PLANTS

(i) Privitization of Operations

35. The DEGA has already accepted the concept of conversion to private boxing operations through the transfer of association operations to individuals and business groups. This transfer represents an addition to private sector boxing over and above those growers who have been carrying out their own boxing in their own premises for some time, and more recently, field boxing by other growers. Recent cost analyses of the Association's boxing operations suggest that these are substantially less efficient than the private operations now in existence; private operators are receiving 3 cents reimbursement for carrying out their own boxing, while DBC operations have recently been costing over 6 cents per lb. It is envisaged that to transfer 90 per cent of the work at DBC plants to the private sector will require two years.

(ii) Lease of Fixed Assets

36. In the first instance contract boxing plant operators, while being paid a fixed price per lb. for the boxing operations, would be required to lease the boxing plant premises and equipment from the DBC.

(iii) Quality Control

37. It is envisaged that contract boxing plant operators would be subject to spot checks by DBC inspectors who would ensure that the quality of fruit accepted by the operators for packaging was of the standard required. Further random checks would be made at the Geest reception point by company inspectors, with the responsibility for rejected fruit, at either point, lying with the contractor.

(iv) Acceptance and Delivery

38. Contractors would be responsible for the delivery of the fruit from the boxing plant to the Geest reception point and consequently for the timing of the closure of the plant for further acceptance of fruit for packaging and subsequent loading. Thus, as Company involvement in boxing plants is progressively reduced, so will the Company's exposure to losses through arriving late at the reception point fruit also be reduced.

(v) Distribution of Fruit

39. As mentioned previously, input storage points are being consolidated to conveniently located boxing plants. It is anticipated that contractors operating these plants would also be required, under separate agreement and separate compensation to act as distribution agents for the company. This plan should help the company's inventory control problems.

(4.4) Point of Payment

40. Although there would be some advantage if the DBC only took financial control of the fruit at the reception point, this would create a need for boxing plant operators to conduct their own grover payment system and result in the duplication of many of the existing procedures which would, in any case, have to be maintained by DBC. It is therefore proposed that the point of payment of financial control by the DBC will be at the time the boxing plant operators accept bananas for packaging, subject to the conditions described above in relation to fruit quality acceptance and time of delivery to the loading point.

M PURCHASE OF FIXED ASSETS

(i) Input storage

41. An investment program of improvements and expansion to input storage facilities has already been drawn up. The estimated total cost is EC\$126,000, while construction time is estimated at twelve months. It is proposed to implement this program during the first two years of the Company's operation.

(ii) Boxing Plants

42. A need for additional boxing plants located within close accessibility to major production areas has been demonstrated. These would both reduce congestion at some current plants, thereby increasing efficiency, and also reduce delivery distances between fields and boxing plants which should reduce rejection rates at boxing plants. To create this improvement the DBC will go ahead with a construction program for 20 such plants with an average unit cost of EC\$6,300. The construction program is expected to be completed in 1977. The construction program is expected to commence only after the partialation of the existing boxing plants in accessibility in 1977.

(iii) Mail and Communication System

43. The anticipated replacement of vehicles by the DBC will not be affected by the proposed changes, however, investment in some form of communication system linking the head office to Roseau with those boxing plants which cannot be connected to the telephone system appears highly desirable. The purchase and efficient utilization of such a system could be expected to have a major impact on the coordination of operations and through that on exported tonnage and left-on-bank costs.

(iv) Field Boxes

44. The impact and benefits associated with the distribution of the first shipment of field boxes, which were provided by the British Government, is currently underway. It appears likely that this will be a program which is considered to be worth continuing. Should this be the case, additional investment by the DBC in further supplies of boxes (recoverable from those growers to whom the boxes are issued) will be required.

H. ADMINISTRATION

(i) Salaries

45. The major addition proposed to current salary costs is the salary proposed for the Executive Chairman who will be employed for the first three years. Following this contract, the position of Chairman will revert to a part time job, equivalent to those of the other directors of the Company.

(ii) Other Costs

46. The DBCA is already planning a number of redundancies which, though incurring substantial costs in redundancy payment in the first year will have a noticeable effect on salaries in subsequent years.

47. It is also proposed that examination be made of the existing management systems and the systems requirements of the restructured operation, particularly the flow of paper within the company, with a view to developing the least cost practical system. It is possible that such an examination will result in a simplification of the existing system and demonstrate the capability of the organization to function effectively with a smaller number of administrative staff. The system study would probably be undertaken by a consultant and is expected to be in two parts. The first would examine the operations of the company and advise, in broad terms, on the most appropriate management and operational systems. The second phase would be to evaluate whether such system would be more cost effective and accurate if they were used in conjunction with a computer than if they were performed manually.

(iii) Field Operations

48. It is assumed that for the immediate future and at least the period covered by the attached cash flow projections, that the extension service provided under the Banana Development Program will be continued in a reduced form with BDD funding. The planned integration of the extension service into the DBGA (DBC) will proceed.

CURRENT DBGA DEBT POSITION

49. The Government has decided to separate the long term debt restructuring economy refinancing problem from the banana industry reorganization problem so that the latter can be dealt with more simply and quickly. The long term commercial debts, while not included in the cash flow projections for the DBC during the period 1982 - 1984, will, however, remain a DBC responsibility. The Government will endeavour to persuade the banks to reschedule those debts and will pay any interest due during the period in which the DBC would be incurring further deficits to do so.

However, it will insist that as soon as the industry is self financing the debts are serviced by the DBC.

50. The DBGA has, at present, ten long term commitments outstanding in addition to the short term liabilities which have been incorporated into the cash flow projections (trade creditors, bank overdrafts and the short term loan from Geest Industries).

The ten commitments are:

- (i) Loans totalling EC\$4.9 million from the Government; these will be written off by the Government, effectively converting them to grants; this will bring the total of Government grants to the industry since 1980 to EC\$11.6 million;
- (ii) two loans totalling EC\$6.4 million (\$0.8 m and \$5.5m) from the CDB; interest on these loans is being paid at present, the first principal repayments are due on the smaller loan in January 1984 and on the larger in January 1986. These loans will remain the responsibility of the DBC;
- (iii) two loans from the local branches of international commercial banks - EC\$4.7 million from the Royal Bank of Canada and EC\$2.1 million from Barclays Bank International both these banks for which the Government is the guarantor are repayable over ten years with three years grace; they will remain the responsibility of the DBC, however, the Government will undertake to meet any payments of interest due while the DBC is still generating deficits on its recurrent operations. The Government will endeavour to renegotiate the terms of these loans.

- (iv) two loans - of EC\$400,000 from Dominican Social Security, and approximately EC\$300,000 from the Cooperative Credit Union League which will be refinanced by the National Commercial Bank on terms which will not impose further strain on DBC resources during the expected deficit period.
- (v) a loan of EC\$150,000 from the National Commercial Bank, currently repayable over ten years; this loan will be rescheduled and the refinancing of the Credit Union and Social Security loans incorporated into the new package.
- (vi) two soft term loans to the Government from bilateral donors (Trinidad and Tobago, and Canada) which were on-lent to the DBCA at more commercial rates; Trinidad and Tobago will be asked by the Government to agree to the DBC repaying the loans from Government on the same terms as the Government has while the Canadian Government will be requested to agree to the loan provided and the subsequent on-lending being concerted to a grant.

50. To facilitate the introduction of the new operating policies and improved management practices which will be adopted, the Government believes that additional skilled advisors will be required. While the arrival of the two EDD funded advisors - in Finance and Marketing - will effectively cover the needs in those areas, the privatization of the boxing plants, and possibly leaf spot spraying operations, will create a need for assistance in this area. A small business development advisor could make a significant impact on the ease of the transfer of those operations from the DBC to the new contractors, while at the same time ensuring that the new contractors received appropriate advice on the management of their businesses. It is envisaged that the advisor would be required for two years.

51. It may also be appropriate to introduce a system analyst once the direction of the DBC's policies and operations are determined. Whereas the required timing for the small business advisor input is critical and can be readily identified at this point, the timing of the system analyst is less critical and would seem better left to the discretion of the management of the new Company, particularly the Financial Advisor.

ENVIRONMENTAL ASSESSMENT AND RISK-BENEFIT
ANALYSIS FOR THE USE OF PESTICIDES IN THE
DOMINICA BANANA COMPANY PROJECT

(PROJECT NUMBER 538-0083)

Prepared By:
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Berkeley, CA 94720, U.S.A.

I. SUMMARY

The Dominica Banana Company (DBC) Project provides for the purchase of the fungicides petroleum spray oil, benomyl, and mancozeb to assist Dominica in preserving its banana industry. Use of these pesticides is authorized under AID guidelines. All are very low in mammalian and environmental toxicity and most of the supplies provided will be applied by aircraft, at low volumes, by experienced pilots. Benomyl in oil is the standard fungicide for Sigatoka leaf spot control and is currently being used in Dominica and elsewhere. Mancozeb will serve as a "back-up" fungicide.

II. INTRODUCTION

The Eastern Caribbean island of Dominica is extensively dependent on its agriculture for foreign exchange earnings. In 1978, 38% of its GDP was generated through agriculture, a percentage greater than that of any other CARICOM country. Bananas, exported to U.K., are the principal cash crop and occupy about 12,000 acres on Dominica.

Critical to the successful production of bananas in the Caribbean is the ability to control Sigatoka leaf spot disease caused by the fungus Mycosphaella musicola. Bordeaux mixture, applied as a spray in high volumes, formerly was the standard fungicide for Sigatoka control. Later this gave way to the use of petroleum oil to which the fungicide benomyl (Benlate) was added. Applied at the rate of only 1.5 U.S. gallons per acre using ultra low volume (ULV) technology, this innovation allowed aircraft coverage of banana holdings during leaf spot disease cycles with speed impossible with the high gallonage requirements for Bordeaux. Yet some acreage must be sprayed from the ground because of the steep land on which some Dominica plantings are sited.

To improve Sigatoka control, and to provide a measure of insurance against the development of new races of the fungus pathogen which cannot be controlled

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by benomyl alone, the fungicide mancozeb (Dithane M-22) is sometimes included in spray mixtures.

The Dominica Banana Company (DBC) Project would provide for the purchase of spray oil, benomyl, and mancozeb to assist Dominica in preserving its banana industry. Because both benomyl and mancozeb appear on the EPA list of pesticides in the Rebuttable Presumption Against Registration (RPAR) process, completion of an Environmental Assessment (EA) is required. This EA has been prepared in accordance with procedures outlined in Regulation 16 of the Code of Federal Regulations, Part 216, Environmental Procedures (effective 26 June 1976 as amended 3 May 1978).

III. RISK-BENEFIT CONSIDERATIONS

1. USEPA Regulatory Status of Requested Pesticides

Petroleum oils, when applied to growing plants, are exempt from the requirement of a tolerance. Both benomyl and mancozeb are registered by the USEPA, and have had tolerances established, for use on bananas. All pesticides requested are therefore authorized, under AID guidelines, for use in the DBC Project.

2. Basis for Selection of the Required Pesticides

Oil and benomyl have had a long history of effectiveness against Sigatoka leaf spot in the Caribbean islands and in Central and South America. Benomyl is the standard fungicide for leaf spot control. However, the emergence of benlate-resistant strains of the Mycosphaerella pathogen has now been demonstrated. Availability of mancozeb to the DBC Project is considered an insurance measure, as noted in Section II. Some Sigatoka control programs in Central America now routinely use the oil/benomyl/mancozeb combination.

Selection was based also on the registration status of these fungicides with USEPA.

3. Extent to Which the Proposed Pesticide Uses are Part of an Integrated Pest Management (IPM) Program

Spore levels of the Mycosphaerella pathogen are regularly monitored by field agents of four Windward Island Banana Growers Associations. Levels are interpreted by a plant pathologist employed by the Windward Islands Banana Growers Association (WINBAN), an organization which acts as a central coordinating body for the banana industry of the Windward Islands. Spray applications of fungicide are made in accordance with the occurrence of Sigatoka disease cycles. Around 9 to 12 cycles occur annually on the Windward Islands. Monitoring of pest levels is one of the tenets of IPM.

Adjustment of plant populations, in accordance with site quality and nutritional regime and directed toward alleviation of crowding, is a cultural practice that reduces disease development because of decreased humidity. Proper plant spacing also permits better spray coverage.

Sanitation, including removal of Sigatoka infected leaves or leaf tips, and destruction of banana plants taken out of production or on abandoned farms, provides a measure of inoculum reduction. Sanitation is not now considered practical in the Windward Islands because of the large number of "house bananas" and small farms, yet its implementation could result in the reduced need for aerial spraying.

4. Proposed Method or Methods of Application, Including Availability of Appropriate Application and Safety Equipment

The Dominica Banana Growers Association (DBGA) purchased an Ayres Turbo Thrush airplane ~~only~~ in 198⁷⁹ for aerial application of fungicides to bananas. For applications from the ground, motorized backpack mist blowers are available and used. Specialized safety equipment is not needed or used when applying oil, benomyl, or mancozeb because of their very low order of toxicity to mammals by the oral, dermal, or inhalation route. Oil is considered a "safe"

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pesticide and requires only the signal word "caution" on its container. Benomyl has an oral LD50 which exceeds 10,000 mg./kg.; mancozeb's oral LD50 exceeds 7,500 mg./kg. Like oil, the signal word "caution" is required for both benomyl and mancozeb.

5. Acute and Long-Term Toxicological Hazards, Either Human or Environmental, Associated with the Proposed Use, and Measures Available to Minimize Such Hazards

The pesticides requested are regarded as safe when applied in accordance with manufacturers' instructions. All but a small portion of the banana acreage involved will be treated by air at a dosage of only about 1½ gallons (U.S.) of oil-fungicide per acre.

6. Efficacy of the Required Pesticides for the Proposed Uses

See Section II.

7. Compatibility of the Required Pesticides with Target and Non-Target Ecosystems

The pesticides used are expected to have no significant adverse effects on target or non-target ecosystems.

8. Conditions Under Which Pesticides are to be Used, Including Climate, Flora, Fauna, Geography, Hydrology, and Soils

Dominica lies at the northern end of the Windward Islands chain of the Eastern Caribbean, between the French Islands of Guadeloupe, to the north, and Martinique, to the south. It is the largest of the Windward Islands, roughly rectangular in shape, and is 29 miles long and 16 miles wide. Its total land area is 290 square miles. Dominica's population is 83,000.

Soils on the island are volcanic in origin, rich and porous. About 75% of Dominica's farms are less than 5 acres in size. There are 12,000 acres in bananas, about 8,000 in coconuts, 4,000 in citrus, 20,000 in other orchard crops, and 4,500 in grassland. Forests occupy about half the island, consisting

to a large extent on the Gommier tree, Dacryodes excelsa.

Considered the most ruggedly beautiful of all the West Indian islands, Dominica's higher mountains reach an elevation of nearly one mile. It has a climate characterized as maritime tropical, and its temperatures are moderated by sea breezes. Numerous streams flow to the sea from the higher elevations. Catchment of water is a problem, therefore most potable water is provided by wells. Dominica has 135 species of native birds, representing its most significant desirable wildlife resource.

9. Availability and Effectiveness of Other Pesticides or Non-Chemical Control Methods

Bordeaux mixture, maneb, and zineb are registered, and have been used for, Sigatoka control on bananas but these have been displaced by benomyl. As noted earlier, mancozeb is requested as a "back-up" material to benomyl. No non-chemical control method, by itself, is sufficient to keep Sigatoka in check. (See Section III-3).

10. Requesting Country's Ability to Regulate or Control the Distribution, Storage, Use and Disposal of the Required Pesticides

Dominica has a Pesticide Control law, with regulations to cover registration, labelling, recommendations, storage, application, residues, worker exposure, and environmental impact. Apparently the law has not been enforced, for few private sector firms have been importing pesticides.

The DDBA, and Dominica Division of Agriculture, are the major users and storers of pesticides. A hurricane contingency plan needs to be developed to prevent stored pesticides from being washed out to sea.

11. Provisions Made for Training of Users and Applicators

None. Nearly all quantities of the pesticides required will be applied by one or two skilled pilots. Pesticides required have very low mammalian and environmental toxicity.

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12. Provisions Made for Monitoring the Use and Effectiveness of the Pesticides

For cost reasons, it will not be in the interests of the DBC to use required pesticides at any times except when disease cycles are imminent, as determined by inoculum monitoring. For its own protection, DBC should begin a bioassay effort to determine the possible occurrence, and levels of, benomyl resistant strains of Sigatoka.

LAC/DR-IEE-82-38

ENVIRONMENTAL THRESHOLD DECISION

Project Location : Dominica

Project Title and Number : Dominica Banana Company Project
538-0083

Funding : \$1,750,000 - Grant

Life of Project :

IEE Prepared by : C. S. Koehler
University of California/Berkeley

Recommended Threshold Decision : Negative Determination

Bureau Threshold Decision : Concurrence with recommendation

Action : Copy to William Wheeler
Director, RDO/C

: Copy to William Baucom, RDO/C

: Copy to Larry Armstrong, LAC/DR/CAR

: Copy to IEE file

James S. Hester Date 27 Sept. 1982

James S. Hester
Environmental Officer
Bureau for Latin America
and the Caribbean

DRAFT
7/19/82

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Berkeley, CA 94720, U.S.A.

I. SUMMARY

The Dominica Banana Company (DBC) Project provides for the purchase of the fungicides petroleum spray oil, benomyl, and mancozeb to assist Dominica in preserving its banana industry. Use of these pesticides is authorized under AID guidelines. All are very low in mammalian and environmental toxicity and most of the supplies provided will be applied by aircraft, at low volumes, by experienced pilots. Benomyl in oil is the standard fungicide for Sigatoka leaf spot control and is currently being used in Dominica and elsewhere. Mancozeb will serve as a "back-up" fungicide.

II. INTRODUCTION

The Eastern Caribbean island of Dominica is extensively dependent on its agriculture for foreign exchange earnings. In 1978, 38% of its GDP was generated through agriculture, a percentage greater than that of any other CARICOM country. Bananas, exported to^{the} U.K., are the principal cash crop and occupy about 12,000 acres on Dominica.

Critical to the successful production of bananas in the Caribbean is the ability to control Sigatoka leaf spot disease caused by the fungus Mycosphaerella musicola. Bordeaux mixture, applied as a spray in high volumes, formerly was the standard fungicide for Sigatoka control. Later this gave way to the use of petroleum oil to which the fungicide benomyl (Benlate) was added. Applied at the rate of only 1.5 U.S. gallons per acre using ultra low volume (ULV) technology, this innovation allowed aircraft coverage of banana holdings during leaf spot disease cycles with speeds impossible with the high gallonage requirements for Bordeaux. Yet some acreage must be sprayed from the ground because of the steep land on which some Dominica plantings are sited.

To improve Sigatoka control, and to provide a measure of insurance against the development of new races of the fungus pathogen which cannot be controlled

by benomyl alone, the fungicide mancozeb (Dithane M-22) is sometimes included in spray mixtures.

The Dominica Banana Company (DBC) Project would provide for the purchase of spray oil, benomyl, and mancozeb to assist Dominica in preserving its banana industry. Because both benomyl and mancozeb appear on the EPA list of pesticides in the Rebuttable Presumption Against Registration (RPAR) process, completion of an Environmental Assessment (EA) is required. This EA has been prepared in accordance with procedures outlined in Regulation 16 of the Code of Federal Regulations, Part 216, Environmental Procedures (effective 26 June 1976 as amended 3 May 1978).

III. RISK-BENEFIT CONSIDERATIONS

1. USEPA Regulatory Status of Requested Pesticides

Petroleum oils, when applied to growing plants, are exempt from the requirement of a tolerance. Both benomyl and mancozeb are registered by the USEPA, and have had tolerances established, for use on bananas. All pesticides requested are therefore authorized, under AID guidelines, for use in the DBC Project.

2. Basis for Selection of the Required Pesticides

Oil and benomyl have had a long history of effectiveness against Sigatoka leaf spot in the Caribbean islands and in Central and South America. Benomyl is the standard fungicide for leaf spot control. However, the emergence of benlate-resistant strains of the Mycosphaerella pathogen has now been demonstrated. Availability of mancozeb to the DBC Project is considered an insurance measure, as noted in Section II. Some Sigatoka control programs in Central America now routinely use the oil/benomyl/mancozeb combination.

Selection was based also on the registration status of these fungicides with USEPA.

3. Extent to Which the Proposed Pesticide Uses are Part of an Integrated Pest Management (IPM) Program

Spore levels of the Mycosphaerella pathogen are regularly monitored by field agents of four Windward Island Banana Growers Associations. Levels are interpreted by a plant pathologist employed by the Windward Islands Banana Growers Association (WINBAN), an organization which acts as a central coordinating body for the banana industry of the Windward Islands. Spray applications of fungicide are made in accordance with the occurrence of Sigatoka disease cycles. Around 9 to 12 cycles occur annually on the Windward Islands. Monitoring of pest levels is one of the tenets of IPM.

Adjustment of plant populations, in accordance with site quality and nutritional regime and directed toward alleviation of crowding, is a cultural practice that reduces disease development because of decreased humidity. Proper plant spacing also permits better spray coverage.

Sanitation, including removal of Sigatoka infected leaves or leaf tips, and destruction of banana plants taken out of production or on abandoned farms, provides a measure of inoculum reduction. Sanitation is not now considered practical in the Windward Islands because of the large number of "house bananas" and small farms, yet its implementation could result in the reduced need for aerial spraying.

4. Proposed Method or Methods of Application, Including Availability of Appropriate Application and Safety Equipment

The Dominica Banana Growers Association (DBGA) purchased an Ayres Turbo Thrush airplane early in 1981 for aerial application of fungicides to bananas. For applications from the ground, motorized backpack mist blowers are available and used. Specialized safety equipment is not needed or used when applying oil, benomyl, or mancozeb because of their very low order of toxicity to mammals by the oral, dermal, or inhalation route. Oil is considered a "safe"

pesticide and requires only the signal word "caution" on its container. Benomyl has an oral LD50 which exceeds 10,000 mg./kg.; mancozeb's oral LD50 exceeds 7,500 mg./kg. Like oil, the signal word "caution" is required for both benomyl and mancozeb.

5. Acute and Long-Term Toxicological Hazards, Either Human or Environmental, Associated with the Proposed Use, and Measures Available to Minimize Such Hazards

The pesticides requested are regarded as safe when applied in accordance with manufacturers' instructions. All but a small portion of the banana acreage involved will be treated by air at a dosage of only about 1½ gallons (U.S.) of oil-fungicide per acre.

6. Efficacy of the Required Pesticides for the Proposed Uses

See Section II.

7. Compatibility of the Required Pesticides with Target and Non-Target Ecosystems

The pesticides used are expected to have no significant adverse effects on target or non-target ecosystems.

8. Conditions Under Which Pesticides are to be Used, Including Climate, Flora, Fauna, Geography, Hydrology, and Soils

Dominica lies at the northern end of the Windward Islands chain of the Eastern Caribbean, between the French Islands of Guadeloupe, to the north, and Martinique, to the south. It is the largest of the Windward Islands, roughly rectangular in shape, and is 29 miles long and 16 miles wide. Its total land area is 290 square miles. Dominica's population is 83,000.

Soils on the island are volcanic in origin, rich and porous. About 75% of Dominica's farms are less than 5 acres in size. There are 12,000 acres in bananas, about 8,000 in coconuts, 4,000 in citrus, 20,000 in other orchard crops, and 4,500 in grassland. Forests occupy about half the island, consisting

to a large extent on the Gommier tree, Dacryodes excelsa.

Considered the most ruggedly beautiful of all the West Indian islands, Dominica's higher mountains reach an elevation of nearly one mile. It has a climate characterized as maritime tropical, and its temperatures are moderated by sea breezes. Numerous streams flow to the sea from the higher elevations. Catchment of water is a problem, therefore most potable water is provided by wells. Dominica has 135 species of native birds, representing its most significant desirable wildlife resource.

9. Availability and Effectiveness of Other Pesticides or Non-Chemical Control Methods

Bordeaux mixture, maneb, and zineb are registered, and have been used for, Sigatoka control on bananas but these have been displaced by benomyl. As noted earlier, mancozeb is requested as a "back-up" material to benomyl. No non-chemical control method, by itself, is sufficient to keep Sigatoka in check. (See Section III-3).

10. Requesting Country's Ability to Regulate or Control the Distribution, Storage, Use and Disposal of the Required Pesticides

Dominica has a Pesticide Control law, with regulations to cover registration, labelling, recommendations, storage, application, residues, worker exposure, and environmental impact. Apparently the law has not been enforced, for few private sector firms have been importing pesticides.

The DBGA, and Dominica Division of Agriculture, are the major users and storers of pesticides. A hurricane contingency plan needs to be developed to prevent stored pesticides from being washed out to sea.

11. Provisions Made for Training of Users and Applicators

None. Nearly all quantities of the pesticides required will be applied by one or two skilled pilots. Pesticides required have very low mammalian and environmental toxicity.

12. Provisions Made for Monitoring the Use and Effectiveness of the Pesticides

For cost reasons, it will not be in the interests of the DBC to use required pesticides at any times except when disease cycles are imminent, as determined by inoculum monitoring. For its own protection, DBC should begin a bioassay effort to determine the possible occurrence, and levels of, benomyl resistant strains of Sigatoka.

IV. RECOMMENDATIONS

Dominica's rich wildlife resources will be exposed to pesticides sprayed by aircraft and by their normal presence in the treated banana plantations. While the toxicity of pesticides to be used by AID is low, there is still a potential for an adverse impact on the wildlife, especially the birds.

The project will spend up to \$5,000 to monitor this potential adverse impact. A local conservation group, such as the Caribbean Conservation Association, will provide such monitoring and make recommendations during the course of the project on better ways to protect the wildlife while allowing for increased banana production.

DRAFT SCOPE OF WORK FOR
SMALL BUSINESS DEVELOPMENT ADVISORS

1. Background

A major component of restructuring which is to take place within the Dominican banana industry will be the privatization of the Dominica Banana Company's boxing plants. It is anticipated that many of these who will become involved in this activity of the industry as private contractors will need training and assistance in running independent businesses.

2. Objective

To achieve a situation within the banana industry in Dominica in which the boxing of bananas is overwhelmingly a private sector operation, and which is carried out at high levels of efficiency.

3. Consultant's Responsibilities

Within the framework of the privatization program which is to be authorized by the Board of the DBC, the consultant will be responsible for ensuring that all potential contractors have a fair opportunity to present competitive submissions for the award of contract and that those chosen receive all reasonable management assistance to make a success of their contracts.

Specifically, the consultant will:

- (a) identify, in relation to each plan listed for privatization, each group or individual with an interest in operating the boxing plant;
- (b) facilitate the formation of groups - as cooperatives or in other organizational structures - which have an interest and skills to becoming boxing plant contractors;
- (c) encourage each interested group or individual to prepare and submit a proposal for the award of contract and, where necessary, provide assistance in the preparation of these proposals;
- (d) assist the Contractor Selection Committee of the DBC, by way of the provision of information, in their evaluation of the competitive proposals received from prospective contractors;
- (e) in the period between award of contract and commencement of operations, assist the contractors to plan and institute the administrative and management systems which will be required;
- (f) following the commencement of operations by contractors,
 - i) monitor the financial status of the operations;

- ii) provide any advice and training required in relation to the maintenance of adequate financial records by the contractors;
 - iii) review management policies and practices with the contractors on a regular basis; and
 - iv) provide management advice where required;
- (g) provide advice to the DBC Operations Manager on the various aspects of DBC operations which affect the operations of the boxing plant contractors;
- (h) report to the General Manager, on at least a monthly basis, on the progress achieved during the reporting period and on any other issues which in any way affect the success of the privatization program; and
- (i) provide written reports to the RDO/C in Barbados at the end of each quarter, recording progress achieved and highlighting any problems encountered in the execution of the privatization component of the restructuring program, and any other aspect of the banana industry as appropriate.

1.3 Principal Findings ^{1/}

The Windward Island banana industry is facing insolvency and will require some refinancing, as well as strengthening of its present organization, if it is to survive in viable form into the future. While the present situation was brought to a point of confrontation by a long and steady drop in the exchange rate (EC\$ to £), ample time was available to assess its impact, and viable alternatives to the course events have been allowed to follow were available and could have been implemented. We were deeply concerned over the "business as usual" attitude which appeared to prevail among those interviewed and the willingness to accept the view that forces external to the industry, and therefore out of its control, were the major cause. In part we attribute this attitude to the unbelievable fact that the financial control system of the industry had not identified a financial crisis prior to the Winban/PMMC auditing review of early August, carried out in support of our visit. We also attribute this attitude in part to the decision making system within the industry, in which accountability is so murky that no effective responsibility structure exists. A subtle game of shared responsibility is played between BGA Management, BGA Boards and Island Governments to the point that divided responsibility is essentially no ultimate responsibility.

Throughout the industry there is an absence of the relevant timely flow of information from management required for responsible decision making by growers, Boards and Governments. Costs in general are not known and are out of control. Often misinformation due to a total lack of information by design and by default, is the rule. The grower, whose interests all parties (Managements, Boards, and Governments) feel they are responsible for guarding, is the

^{1/} Source: Review of Windward Islands Banana Industry's Financial and Economic Status, August, 1981 and Principal Technical Assistance, Funding and Organizational Requirements for Financial Recovery Under Changing Market Conditions. Prepared by Arthur D. Little, Inc. - November 1981

last entity to receive information or an exploration of the situation. It is this claimed sense of responsibility that has resulted in a concerted effort by the island Governments to gain control of BGA boards, without having clear firm policies on the industry.

Managerial weaknesses, and particularly financial management weaknesses, are probably the major cause for the occurrence of the situation described above, as will become evident in the report. This lack of management strength has allowed the industry to concentrate more on techniques for maximizing production rather than on stabilizing the industry's profitability. Financial policies adopted have resulted in the unauthorized expenditure of grower/donor funds held in trust. Managerial weaknesses are not new and have been well documented in the past. We note that in 1975, St. Lucia and Dominica were refused loans from the Caribbean Development Bank (CDB) totaling approximately \$1,000,000 due to BGA unwillingness to accept conditions relating to organizational change. In a 1976 report to Winban by ULG consultants, The Windward Islands Banana Industry, many of the weaknesses and problems which prevail today and have contributed to the impending insolvency, were identified and solutions were recommended. Yet implementation action is still lacking today.

In a private sector insolvency of the nature present in Dominica and St. Lucia, a court appointed Trustee in Bankruptcy would customarily be appointed to furnish the necessary leadership for effectively dealing with the crisis at hand. In this situation it does not appear likely to us that creditor action will bring about court intervention. Therefore, we believe the leadership vacuum which exists will prevail and a patchwork of short-term

decisions will be made, robbing the industry of any potential that may exist for long-run viability.

Considering the hazardous financial situation of the industry, the progressive development of the following scenario could easily take place:

1. Production and productivity levels decrease as the procurement and supply of fertilizer and other inputs by BGA's dry up. Meanwhile, scarce funds continue to be directed toward maintaining grower payment levels and BGA operating costs.
2. Grower margins continue to be squeezed, prompting the larger growers, who account for 40-45% of production and face high labor costs, to abandon their fields, laying off increasing numbers of workers.
3. As production falls, the fixed costs per pound of banana packed and shipped will rise at an increasing rate, squeezing the margin of the small and medium farmer.
4. The quality and size of shipments become unacceptable to Geest and regular shipments are reduced.
5. The supplies of Windward Island fruit become sporadic, so that the UK government finds it increasingly difficult to retain the protected market status, without which the industry collapses.

Rather than concentrating on treating the symptoms, that is, solving each of the problems encountered, this report concentrates on the requirements for the industry to achieve an acceptable and financially viable condition. These requirements imply objectives, which in turn suggest strategies and programs. Once the requirements for the industry have been identified it is

possible to set priorities for all participants in the industry in order to make recommendations for necessary management and financial structures.

The first requirement is to establish some industry leadership. In our judgement, Winban represents the logical base from which crisis leadership can come. The effectiveness of Winban in this role will first require BGA (industry) acceptance of its crises intervention authority. In addition, Winban will require some modifications in the composition of its professional staff, as well as short-term technical assistance to increase its capability commensurately with its expanded role.

Simultaneously the industry must confront two basic decision areas impacting on long-term performance. The first concerns BGA finances and the conflict between decisions based on the integration of business, financial and economic factors, as compared to decisions based blindly on socio-political factors. This conflict is particularly strong with respect to the minimum or floor price to be paid to growers. In addition it concerns the BGA's reaffirming their respect for the fiduciary trust concept, and turning their present banking and trust functions over to financial institutions, while concentrating on the physical marketing of production.

The second issue relates to the cost effective allocation of the limited resources available to the industry. This will require the prioritizing of possible action steps by adopting the concepts of strategic management. Simply, this means that industry management must adapt its priorities and activities to the strategies which are most important in achieving principal industry objectives. (This approach focuses on the banana industry as a total system rather than as a set of interrelated subsystems. See Table 1).

TABLE 1

EXAMPLES OF OPERATIONAL DEFICIENCIES IDENTIFIED WITHIN BANANA
INDUSTRY SUB-SYSTEMS WHICH MAY MERIT FURTHER STUDY AS THE
INDUSTRY REGAINS ITS FINANCIAL STABILITY

Input Procurement

- Inadequate funding
- Inadequate distribution of inputs
- Excessive number of out-of-stock situations

Production

- Permanent ratoon crops
- Husbandry/extension service quality
- Land tenure
- High labor costs

Harvesting/transport

- Quality control
- Scheduling
- Operating Management

Production Marketing

- Single product/single market constraints
- First market price set at the retail store
- High cost packing materials

Industry Management

- Responsibility Definition
- Forward planning
- Integrated, standardized information systems
- Price stabilization
- Disaster planning
- Credit extension
- Production forecasting
- Disaster Planning
- Shipping arrangements (Geest)
- Research

In addressing these two sets of concerns the industry should focus on, what in our judgment is its principal objective, that of regaining and maintaining industry financial health, over the medium term (5-7 years), under changing market conditions. Considering the expected increase in market competition as production in other producing countries increases^{1/} and the comparative disadvantage, relative to these countries, faced by the Windward Islands due to high production costs, it would be unrealistic to state as an objective the realization of viability over the longer term or higher profits across the board.

Attainment of this objective would benefit the major industry participants. The Windward Islands would benefit from the political stability gained by the preservation of a major source of foreign exchange and employment. Banana growers and the labor they employ would benefit from an assured albeit modest source of cash income. Geest would benefit from a continued supply of fresh fruit tailored to its market. Industry creditors could refinance outstanding loans and re-incorporate a major industry into their financial activities. The international donor organizations would be able to focus loan and grant priorities to other sectors without fear of precipitating a major industry collapse. BGA and Winban management would have clear goals and feedback on their performance.

There are four major requirements which the industry must meet, to stimulate the complementary actions characterizing the financial stability status of the principal objective to be focussed on. These requirements and complementary actions are:

^{1/} World Bank IRF Scheme, July 1980, and recent news report about Standard Fruit and the Government of Jamaica undertaking a joint venture to increase production by 170 thousand tons per year.

1. Production levels are maintained at close to present levels, allowing for a constant or growing volume of Windward Island fruit on the UK market. As a result,
 - a. The UK is encouraged to retain the protected market status for Windward fruit.
 - b. Socio/political stability in the Islands is preserved as the employment and foreign exchange earnings provided by the industry are maintained.
 - c. Geest's confidence in the continuity of supply is restored and continues to provide regular shipping service.
 - d. The industry can establish a system of scheduling and estimating production involving grower participation.
 - e. Alternative uses and markets for rejected fruit are developed, particularly through processing.
2. Industry operating costs are trimmed and maintained in line with f.o.b. revenue levels, such that:
 - a. The price level to the significant grower is high enough in the short run and predictable enough to warrant continued cultivation and harvesting.
 - b. The yearly peak of the price level is high enough in the longer run to warrant continued cultivation and harvesting and improved production and harvesting methods.
3. The quality of fruit as delivered to the UK market continues to improve. As a result,
 - a. GNP rises as sales of premium fruit increase.

- b. A dual price system is established which provides an incentive to control quality from the field to the dock, raises the volume "shipped" by reducing rejects and losses, and reduces unit costs.
 - c. The industry's marketing operation becomes more cost effective.
4. Industry management re-establishes its financial responsibility.
- As a result,
- a. Trust accounts are established and maintained separately.
 - b. Books are kept current.
 - c. The market is maintained and reserves are built to deal with foreseen and unforeseen problems.
 - d. Accurate and uniform records on operations and costs are established and maintained.
 - e. A collection program for loans outstanding is established and enforced and a debt repayment program is undertaken.

1.4 Technical Assistance, Funding and Organizational Requirements

Ten priority programs have been identified as providing the basis for industry's financial recovery. A first priority is the establishment of the Donor and Grower Input account as a means of ensuring that the input revolving fund monies are not dissipated into operating expenses and can be used as a means of supporting the industry's input requirements. Donor insistence that the terms of the grant agreement are respected is key to this effort. Funding requirements from outside the industry should not be required, and the organizational requirements are detailed in Section 3.3.

Second among priority programs is the establishment of a premium fruit program, which can increase annual revenue to the industry by some \$8.8 m. Details for the establishment of this program will require negotiation by Winban and Geest, possibly with input from BDD advisors at Winban. Some reorganization may be required in the handling of fruit packing. The cost of any modification at present packing stations would probably have to be donor funded.

Third among priority programs is the introduction of a double-layer field box which could increase revenue to the industry by some \$6.5 m dollars by raising the salable proportion of fruit harvested. Capital cost of boxes would have to be funded from outside the industry.

Fourth among priority programs is the introduction of a 39-lb carton and the resourcing of supplies as a first step in containing BGA operating cost increases. A study of both the effectiveness of this box and the resourcing possibilities will be required. Some reorganization of packing methods may have to be considered. The funding for this change would have to come from outside the industry. The savings to the industry could reach \$5-10 m dollars per year.

Setting up a program to skew production toward high price periods is a fifth priority, which could generate some \$4.6 m in extra revenue. It is clear that achieving this priority will not necessarily be quick and easy, nevertheless getting more of the small infrequent growers into the high price periods will increase revenue and income with little cost change.

Sixth among priority programs is finding productive uses for rejected bananas and determining means of adding value to the present production. This could offer alternative markets to the industry as well as alleviate

some of the time pressure presently found in the marketing of fresh fruit. A study of alternatives and funding would have to come from outside the industry.

Providing Winban and BGA boards with sufficient volume and price information to allow for meaningful GMP negotiation is a seventh priority, which can be achieved in part by requiring grower production forecasts with rewards and penalties. Just in savings from left-back and shut-out fruit, there are some \$3m to be reaped. Tying field box and fertilizer deliveries to information on production estimates could produce forecasts over 2-week, 3-month and 6-month periods. No direct donor action is required.

An eighth priority program is the identification of labor savings practices in the production of bananas. The trade offs of capital/labor would have to be evaluated by Winban, possibly with additional input from donor funded technical assistance. This program would directly benefit large growers who are most exposed by low price to abandoning production.

The placement of management advisors in each of the BGA's is seen as a ninth priority program which will require donor funding. It is important that these advisors be assigned as counterparts to BGA general managers and maintain a continuous liaison activity with Winban.

A tenth priority is the establishment of crop diversification programs and an extension service for the total agricultural sector in the Ministry of Agriculture. This will give these programs a more integrated impact and will reduce the cost burden to the industry of supporting its own programs. This will give BGA's the opportunity to reduce functions/services and thus operating costs. Donor assistance will be required in rebudgeting extension subsidies to integrate these activities into one service.

Funding from outside the industry will be required to set up grower payment levels set by a moving average method. Funds will also be needed to bring all industry books up to date and establish within the industry the capability to do this on a continuing basis. Funding may be required to cover projected deficits of BGA's while the Donor/Grower Input Account is fully established. All of the latter funding requirements can only be determined after reviewing the accounts of the BGA's as they presently stand. This activity should be easily carried out by the industry auditors.

DOMINICA BANANA COMPANY

PROJECTED CASH FLOW STATEMENT - ASSUMPTIONS ^{1/}

1) Export Tons

Increases assumed to come predominantly through increased availability of fertilizer, improved spraying, and normal recovery from hurricane reduced levels. Tonnages are still well below historic highs and are in line with WINBAN estimates.

2) Geest Price

The EC Dollar prices used are based upon those provided by WINBAN which made projections of the (Sterling) Green Market Price over the period to mid-1985. The Dollar/Pound exchange rate has been assumed to be constant at \$1.80:1 Pound throughout the period.

The projected rate of increase in the GMP incorporated into the WINBAN estimates is approximately 10%. This rate has been applied through to the end of the period for which projections have been made, and is in line with the historical pattern.

3) Other Income - CDB Loan

It is estimated that in the first two quarters of the project period there will be small drawdowns against the residual of the most recent loan.

- Growers' Accounts

Growers who have already received field boxes are now making repayments. It is anticipated that the British Government will provide, as a Grant, a second consignment of boxes. These boxes will also be sold to growers by way of a levy against banana sales or for cash.

4) Packaging - Cartons and Other Materials

A base cost of EC\$253.12 per ton has been assumed for the commencement of DBC operations. This estimate originated with C & L, who have been monitoring DBGA performance. Current wastage has been estimated at 10% - the cash flow projections anticipated a halving of the wastage rate over the first six quarters of operations. The unit cost of cartons has been assumed to rise by 5% on January 1st, 1983 and 1984 and by 10% thereafter. It should be noted that the first quarter projection includes an additional EC\$264,218 which is the amount calculated to be the cost of two weeks supply of cartons, the minimum which should be kept on-hand in order to avoid shortages at critical times.

^{1/} All prices quoted in these assumptions are in EC\$ which were converted to U.S. Dollars for the cash flow statement at US\$1=EC\$2.69.

- Other Carton Expenses

This item incorporates payroll, transport stevedoring and handling, none of which will be significantly affected by any economies made in the use of materials. The item has, therefore, been assumed to increase at 10% per annum.

5) Boxing Plants - Fixed Costs--DBC; - Variable Costs--DBC

It has been assumed that privatization will be progressively introduced into boxing plant operations so that by the beginning of the last quarter of 1984, the importance of DBC boxing operations will have been reduced by 90%. At the same time, it is recognized that the plants which are the easiest to operate will be the first to be privatized and that the boxing plants which remain the responsibility of the DBC are likely to be the least efficient. The efficiency of DBC boxing plant operations has therefore been reduced so that by the last quarter of 1984, fixed costs on company operated plants have risen by 50%. Inflation in unit costs has been estimated at 5% for the fixed cost item. No inflation has been assumed for variable costs as it is believed that improvements in management in the DBC will have an impact which would at least offset the inflation increase.

- Contract Cost

Private operators currently box 11% of total exports at EC\$0.03 per lb. These operators are mainly large growers packaging their own production. Contractors using existing boxing plants may have somewhat higher costs, so for the purposes of these projections Contract costs have been assumed to be EC\$0.04 per lb. in 1983, increasing at 10% per annum thereafter.

The volume of exports originating from Contract boxing plants is anticipated to rise from a base of 11% to 91.1% (89×0.9) over a period of 24 months.

6) Leaf Spot Control - Chemicals

The base cost used is the C & L estimate of EC\$156,400 per month. Improved inventory control and other reductions in wastage are anticipated to reduce the quantity of oil required by 10% over a two year period. Unit costs of chemicals are estimated to rise by 7% per annum in each of 1983 and 1984 and by 10% per annum thereafter.

- Other Costs

Some improvements in operational efficiency are expected in ground spraying operations (about 40% of the total area). To allow for these, the increase in unit costs (inflation rate) has been held down to 5% for the first two years and 10% thereafter.

7) Administration - Salaries

The C & L estimate of EC\$110,000 for the last quarter of 1982 has been increased at 10% per annum, effective January 1st, in each subsequent year. The Executive Chairman or General Manager, is included at an EC\$60,000 per year base.

- Other Expenses

The C & L base has been inflated by 10% per annum.

8) Field Operations

C & L base figure inflated by 10% per annum.

9) Vehicle Operations

C & L base figure inflated by 10% per annum.

10) Insurance

C & L costs used with 20% annual progression incorporated in first two years 1983 and 1984, to take account of any capital development program, as well as impact of inflation on replacement values. Ten percent inflation assumed from 1985 onwards. It should be noted that a large proportion of the DBC's fixed asset stock will be leased to boxing contractors, in which case the associated insurance costs should be recovered within the lease payments. However, no account has been taken of this cost recovery in this item.

11) WINBAN Levy

This levy has been assumed to remain constant at EC\$0.004 per lb.

12) Export Tax

Assumed constant at EC\$0.0024 per lb.

13) Interest on Overdraft

It is anticipated that the DBC will operate with a total overdraft limit of EC\$1 million which, on average, will be 85% drawn down. Eleven per cent per annum interest has been assumed.

14) Geest Loan Repayments

These are payable at a fixed rate against exports. It has been assumed that no repayments will be made from January 1983 until April 1984.

15) Other Loan Repayments and Interest

In the period to 1985, these are limited to the commitments under the two CDB loans which are held. From 1985, repayments are assumed against all the other long-term loans which will be held by the DBC.

16) Trade Creditor Reduction

It is believed that the current level of trade creditors is not sustainable if the DBC is to operate as a commercially viable organization. A reduction of EC\$1 million is therefore anticipated in the first five quarters of the project; though this will reduce trade creditors to approximately EC\$60,000, excluding Geest. This is considered to be a reasonable level for normal operation, representing just under one month's average carton costs.

17) Purchase of Fixed Assets

Apart from a small amount required for the replacement of vehicles, the fixed assets to be purchased relate almost entirely to an expansion of DBC capability. The components of the program are shown below.

Capital Expenditure (EC\$000)

	1982	1983				1984			
	4	1	2	3	4	1	2	3	4
Vehicles		35				40			
Inputs Storage		50 56							
Boxing Plants						100	100	200	200
TOTAL	-	-	35	50	56	100	140	200	200

18) Proposed Payments to Growers

Payments to growers are to be those amounts which are considered to be financially prudent, given the cash flows of the company. The following schedule of payments, inclusive of the 4¢ per pound which will be deducted as a prepayment for inputs, is considered prudent during the first two years, given the other assumptions. From 1985 onwards an annual increase of 10% has been assumed. It is believed that these estimates, which have been reviewed through comparison with separate estimates prepared by WINBAN, will be acceptable to growers while maintaining desired production volumes.

<u>EC¢ Per Pound of Bananas</u>	<u>1983</u>	<u>1984</u>
January	18	19
February	18	19
March	18	19
April	19	21
May	20	22
June	21	23
July	22	24
August	22	24
September	21	23
October	19	21
November	18	20
December	18	20

TABLE 1: DOMINICA BANANA COMPANY: PROJECTED CASH FLOW FOR PERIOD OCTOBER 1982 - 1988

(US\$)

YEAR QUARTER	1982				1983				1984				1985				1986		1987		1988	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Export Tons	6,785	7,223	8,444	9,482	7,820	7,299	9,994	11,171	9,122	7,299	9,994	11,171	9,122	38,000	38,000	38,000						
Geest Price to DBC US\$/Ton	329	325	383	393	365	358	422	433	403	394	464	477	443	489	538	551						
Banana Sales Revenue	2,232,240	2,346,804	3,233,204	3,729,352	2,857,643	2,612,968	4,213,084	4,837,998	3,675,929	2,873,472	4,632,906	5,323,874	4,042,165	18,576,208	20,426,765	22,475,092						
Other Income - CDB Loan	35,688	35,688	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
- Growers Accounts	11,896	11,896	11,896	11,896	11,896	11,896	11,896	11,896	11,896	9,294	9,294	9,294	9,294	44,610	44,610	44,610						
Total Income	2,279,823	2,394,387	3,245,100	3,741,248	2,869,539	2,624,864	4,224,980	4,849,894	3,687,824	2,882,766	4,642,200	5,333,168	4,051,459	18,620,817	20,471,375	22,519,702						
Packaging - Cartons & Other Materials	736,568	705,507	817,606	908,744	741,734	726,535	984,972	1,100,972	895,031	799,628	1,083,469	1,211,070	988,934	4,491,411	4,640,552	5,434,607						
- Other Carton Expenses	42,379	44,498	44,458	46,723	46,723	49,059	49,059	51,512	51,512	53,965	53,965	56,664	56,664	243,363	267,721	294,493						
Boxing Plants - Fixed Costs - DBC	55,390	58,014	57,578	55,833	45,365	32,977	25,648	17,710	9,160	10,076	10,076	10,076	10,076	55,419	65,561	67,657						
- Variable Costs - DBC	253,844	261,626	303,567	330,563	221,511	143,130	152,436	117,645	49,689	43,735	59,884	65,933	54,658	560,109	515,115	577,731						
- Contract Costs	18,645	37,291	55,970	90,959	121,380	172,226	280,856	336,443	304,479	267,993	366,943	410,158	334,927	1,323,744	1,456,116	1,601,730						
Leaf Spot Control - Chemicals	174,424	181,313	177,651	177,468	175,599	182,448	180,456	182,065	180,064	200,659	198,502	200,271	198,071	877,254	964,379	1,061,477						
- Other Costs	97,026	101,877	101,877	106,971	106,971	112,320	112,320	117,936	117,936	123,552	123,552	129,729	129,729	557,216	612,533	674,226						
Administration - Salaries	40,893	44,424	44,424	44,424	44,424	48,867	48,867	48,867	48,867	53,753	53,753	53,753	53,753	285,392	314,591	346,050						
- Other Expense	42,379	44,498	44,498	46,723	46,723	49,059	49,059	51,512	51,512	53,965	53,965	56,664	56,664	243,363	267,721	294,493						
Field Operations	16,357	17,175	17,175	18,033	18,033	16,535	19,882	19,882	19,882	20,829	20,829	21,870	21,870	93,537	103,310	113,654						
Vehicle Operations	26,766	28,104	28,104	29,677	29,677	30,925	30,965	32,534	32,534	34,083	34,083	35,787	35,787	153,715	165,027	178,356						
Insurance	-	31,970	-	-	-	41,150	-	-	-	45,309	-	-	-	49,635	-	-						
WINEM Levy	22,600	24,059	28,126	31,583	26,047	24,312	33,288	37,209	30,384	26,743	36,617	40,930	33,422	151,454	166,622	182,256						
Export Tax	-	14,435	16,875	18,950	15,628	14,587	19,973	22,325	18,230	16,046	21,970	24,558	20,054	83,455	91,821	100,551						
Interest on Overdraft	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	8,690	34,759	34,759	34,759						
Geest Loan Repayments	95,218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Other Loan Repayments & Interest	95,750	95,750	95,750	95,750	95,750	168,004	168,004	191,651	61,934	30,390	29,813	-	-	-	-	-						
Total Basic Operating Cash Costs	1,770,587	1,730,049	1,822,203	2,010,905	1,744,089	1,757,133	2,262,923	2,438,398	1,985,350	1,913,799	2,341,058	2,512,143	2,182,255	9,852,752	10,820,175	12,022,174						
Trade Creditor Reduction	74,349	74,349	74,349	74,349	74,349	-	-	-	-	-	-	-	-	-	-	-						
Purchase of Fixed Assets	-	-	13,011	18,597	20,517	37,175	52,055	74,349	74,349	-	-	-	-	-	-	-						
Total Operating Cash Costs	1,814,936	1,774,394	1,929,563	2,103,852	1,839,936	1,794,308	2,317,038	2,512,747	2,059,699	1,913,799	2,341,100	2,512,143	2,182,255	9,852,752	10,820,175	12,022,174						
Residual for Payments to Growers	454,887	619,993	1,313,537	1,637,406	1,030,303	830,576	1,907,042	2,337,146	1,628,126	968,967	2,301,102	2,821,025	1,863,174	8,627,726	9,651,200	10,452,918						
Proposed Payments to Growers	948,092	1,101,049	1,432,377	1,787,159	1,205,674	1,162,900	1,844,043	2,207,177	1,548,880	1,276,375	1,997,314	2,418,584	1,671,123	7,310,761	8,040,245	8,492,557						
Cash Flow - Surplus (Deficit) Aid Need	(483,205)	(481,056)	(116,840)	(149,753)	(175,371)	(332,324)	63,899	129,969	79,245	(307,408)	303,708	402,442	192,050	716,965	1,610,955	1,960,361						
Cumulative Cash Flow Surplus (Deficit)	(683,265)	(564,262)	1,081,102	(1,230,851)	(1,406,226)	(1,738,553)	(1,674,651)	(1,544,682)	(1,465,436)	(1,772,842)	(1,469,056)	(1,066,613)	(874,562)	1,557,675	3,168,630	4,128,991						

TABLE 2: DBC CASH FLOW COVERAGE

(US\$)

<u>QUARTER</u>	<u>CASH FLOW SURPLUS/(DEFICIT)</u>	<u>DONOR ASSISTANCE</u>		<u>CASH FLOW</u>	
		<u>USAID</u>	<u>BDD</u>	<u>NET</u>	<u>CUMULATIVE</u>
4/82	(483,205)	37,175	371,747	(74,283) ^{1/}	(74,283)
1/83	(481,056)	180,297	371,747	70,988	(3,295)
2/83	(116,840)	176,580	371,747	431,487	434,782
3/83	(149,753)	176,580	258,736	285,563	720,345
4/83	(175,371)	174,721	-	(650)	719,695
1/84	(332,324)	182,156	-	(150,168)	569,527
2/84	63,899	180,297	-	116,398	685,925
3/84	129,969	182,150	-	52,181	738,106
4/84	79,245	22,044	-	(57,201)	680,905
1/85	(307,408)	-	-	(307,408)	373,497
2/85	303,788	-	-	303,788	677,285
3/85	402,442	-	-	402,442	1,079,727
4/85	192,050	-	-	192,050	1,271,777
		<u>1,312,000</u>	<u>1,473,977</u>		

^{1/} This can be absorbed either through earlier input of USAID spray oil assistance, or through reduction in the \$74,349 which was shown to be paid to trade creditors in the fourth quarter of 1982.

TABLE 3: **DOMINICA BANANA GROWERS ASSOCIATION**
BALANCE SHEET
AS AT JUNE 30, 1982

US\$000

ASSETS

CASH - Unrestricted		\$ 323
Restricted		61
USAID/BDD INPUT REVOLVING FUND		17
ROYAL BANK - Carton Revolving Fund		139
ACCOUNTS RECEIVABLE - Staff	\$ 41	
Other	121	
GROWERS ACCOUNTS - USAID/BDD Scheme	478	
Other	630	
	<u>1,269</u>	
PROVISION FOR DOUBTFUL ACCOUNTS	186	
		1,084
INVENTORIES		524
INVESTMENTS		55
FIXED ASSETS	1,295	
ACCUMULATED DEPRECIATION	<u>394</u>	
		<u>3,105</u>
		=====

TOTAL ASSETS

LIABILITIES

BANK INDEBTEDNESS - Royal Bank of Canada	376	
National Commercial Bank	<u>60</u>	
		436
LOANS - Royal Bank of Canada	1,744	
Caribbean Development Bank	2,420	
Barclays Bank International Limited	799	
A.I.D. Bank	200	
Dominica Social Security	182	
Government of Trinidad	287	
Co-operative Credit Union League	108	
National Commercial Bank	<u>56</u>	
		5,795
CREDITORS - WINBAN		207
- Trade		1,168
PREPAID FERTILIZER SCHEME		314
ACCRUALS/ACCOUNTS PAYABLE		<u>303</u>
		8,223
		=====
CAPITAL DEFICIENCY		5,118
		=====

TABLE 4: PROJECT SENSITIVITY ANALYSIS: EFFECTS OF CHANGES IN ASSUMPTION
ON PROJECTED CASH FLOW DEFICIT

(US\$ 000)

	<u>YEAR</u> <u>QUARTER</u>	<u>1982</u> <u>4</u>	<u>1</u>	<u>1983</u> <u>2</u>	<u>3</u>	<u>4</u>	<u>1984</u> <u>1</u>	<u>TOTAL</u>
1. Cash Flow Deficit as projected in the base case (see Table).		(372.5)	(540.7)	(145.3)	(178.4)	(204.1)	(511.6)	(1,952.6)
2. Cash Flow Deficit as projected assuming a 5% fall in revenue from base case ^{1/} .		(484.5)	(658.5)	(307.6)	(365.6)	(347.5)	(642.7)	(2,806.4)
Percentage Increase in Deficit		30%	22%	112%	104%	70%	26%	44%
3. Cash Flow Deficit as projected assuming 10% increase in price of cartons (rather than 5%) and 5% LOP reduction in wastage (rather than 10%).		(372.5)	(581.6)	(201.1)	(250.0)	(262.8)	(613.1)	(2,281.1)
Percentage Increase in Deficit		0%	7%	38%	40%	29%	20%	17%
4. Cash Flow Deficit as projected assuming a 5% fall in the projected tonnage of banana exported.		(400.4)	(570.0)	(185.7)	(225.0)	(239.8)	(544.3)	(2,165.2)
Percentage Increase in Deficit		7%	9%	28%	26%	18%	6%	11%

^{1/} See Annex C , Exhibit 1 , for a full explanation of the assumptions made in the projected Cash Flow Statement which serves as the base case