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**UNCLASSIFIED**

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

**CARIBBEAN REGIONAL**

**PROJECT PAPER**

**ST. LUCIA AGRICULTURE  
STRUCTURAL ADJUSTMENT**

AID/LAC/P-129

Project Number: 538-0090

**UNCLASSIFIED**

<b>AGENCY FOR INTERNATIONAL DEVELOPMENT</b> <b>PROJECT DATA SHEET</b>	<b>1. TRANSACTION CODE</b> <input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete <span style="border: 1px solid black; padding: 2px;">A</span>	Amendment Number _____	<b>DOCUMENT CODE</b> 3
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<b>2. COUNTRY/ENTITY</b> ST. LUCIA	<b>3. PROJECT NUMBER</b> <span style="border: 1px solid black; padding: 2px;">538-0090</span>
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<b>4. BUREAU/OFFICE</b> Latin America/Caribbean LAC <span style="border: 1px solid black; padding: 2px;">05</span>	<b>5. PROJECT TITLE (maximum 60 characters)</b> ST. LUCIA AGRICULTURE STRUCTURAL ADJUSTMENT
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<b>6. PROJECT ASSISTANCE COMPLETION DATE (PACD)</b> MM DD YY <span style="border: 1px solid black; padding: 2px;">12</span> <span style="border: 1px solid black; padding: 2px;">31</span> <span style="border: 1px solid black; padding: 2px;">86</span>	<b>7. ESTIMATED DATE OF OBLIGATION</b> (Under "B." below, enter 1, 2, 3, or 4) A. Initial FY <span style="border: 1px solid black; padding: 2px;">83</span> B. Quarter <input checked="" type="checkbox"/> C. Final FY <span style="border: 1px solid black; padding: 2px;">83</span>
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8. COSTS (\$000 OR EQUIVALENT \$1 = )						
A. FUNDING SOURCE	FIRST FY 83			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	( 6,324 )	( 1,676 )	( 8,000 )	( 6,324 )	( 1,676 )	( 8,000 )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S.						
1.						
2.						
Host Country		70	70		2,800	2,800
Other Donor(s)						
<b>TOTALS</b>	6,324	1,746	8,070	6,324	4,476	10,800

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPRO- PRIATION	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)	223	199				8,000		8,000	
(2)									
(3)									
(4)									
<b>TOTALS</b>						8,000		8,000	

<b>10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)</b> 010      030      070	<b>11. SECONDARY PURPOSE CODE</b>
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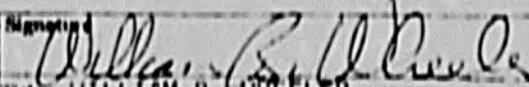
<b>12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)</b> A. Code      BF      INTR	
B. Amount	

**13. PROJECT PURPOSE (maximum 480 characters)**

To restructure critical agricultural sector markets so as to: (a) create a system permitting the more equitable and rational utilization of agricultural lands; (b) expand the income opportunities for farmers and traders through increased private sector capacity to produce and market high-value crops; and (c) achieve an immediate increase in the foreign exchange earnings from bananas.

<b>14. SCHEDULED EVALUATIONS</b> Interim MM YY <span style="border: 1px solid black; padding: 2px;">01</span> <span style="border: 1px solid black; padding: 2px;">85</span> MM YY    Final MM YY <span style="border: 1px solid black; padding: 2px;">01</span> <span style="border: 1px solid black; padding: 2px;">87</span>	<b>15. SOURCE/ORIGIN OF GOODS AND SERVICES</b> <input checked="" type="checkbox"/> 000 <input type="checkbox"/> 941 <input type="checkbox"/> Local <input type="checkbox"/> Other (Specify) _____
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**16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)**

<b>17. APPROVED BY</b>	Signature:  Title: WILLIAM B. WHEELER DIRECTOR, RDO/C	Date Signed MM DD YY <span style="border: 1px solid black; padding: 2px;">13</span> <span style="border: 1px solid black; padding: 2px;">17</span> <span style="border: 1px solid black; padding: 2px;">83</span>	<b>18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION</b> MM DD YY 
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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON D C 20523

PROJECT AUTHORIZATION

Name of Country: St. Lucia  
Name of Project: Agricultural Structural Adjustment  
Number of Project: 538-0090

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, and Title I, Chapter VI of P.L. 97-257, the Supplemental Appropriations Act, 1982, I hereby authorize the Agricultural Structural Adjustment project for St. Lucia (the "Grantee") involving planned obligations of not to exceed Eight Million United States Dollars (\$8,000,000) in grant funds ("Grant") until March 31, 1983, subject to the availability of funds in accordance with the AID OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is three years and nine months from the date of obligation.

2. The project ("Project") consists of assisting the Grantee in its program of agricultural diversification and growth by addressing constraints in the agricultural sector. This will include the financing of activities in the areas of banana replanting, land registration and titling, and market promotion.

3. The Project Agreement, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with AID regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as AID may deem appropriate:

a. Source and Origin of Commodities, Nationality of Services

Commodities financed by AID under the Project shall have their source and origin in St. Lucia or in the United States, except as AID may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have St. Lucia or the United States as their place of nationality, except as AID may otherwise agree in writing. Ocean shipping financed by AID under the Project shall, except as AID may otherwise agree in writing, be financed only on flag vessels of the United States.

b. Conditions Precedent

(1) Disbursement for Banana Replanting Support. Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance the Banana Replanting Support component of the Project, the

Grantee shall, except as AID may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

Evidence of the establishment of a loan fund, as well as the implementation procedures therefor, for use by the St. Lucia Banana Growers Association (BGA) in making available funds to farmers for the purchase of commodities eligible under such component.

(2) Disbursement for Land Registry and Titling Component Other Than Equipment. Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance the land registry and titling program component of the Project, other than for equipment, the Grantee shall, except as AID may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

(i) A copy of the signed contract for the technical service portion of this component of the Project; and

(ii) Evidence of passage of all necessary legislation necessary to carry out this component of the Project and promulgation of all decrees, regulations, etc. to implement this legislation. The necessary legislation shall include the Land Surveyors Act, the Adjudication Act, and the Land Registration Act.

(3) Disbursement for the Market Promotion Program Component Except Short-Term Technical Assistance and Diversification. Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement to finance the Market Promotion Program component of this Project, other than for short-term technical assistance and diversification, the Grantee shall, except as AID may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

A copy of the signed contract for long-term technical services for implementation of this component.

c. Covenants

(1) The Grantee shall covenant that, unless AID otherwise agrees in writing, it will:

(i) Avoid projects or activities which would cause or threaten serious injury to the production, marketing, or pricing of United States agricultural commodities or products. The Grantee further shall covenant that exports of agricultural commodities or products shall not be supported using Grant funds, if the issue of serious harm or threat thereof from such exports has been raised by AID, until the matter has been reviewed and discussed by AID and the Grantee. The Grantee shall keep AID informed of activities which appear to involve the potential for such harm; and

(ii) Obtain the prior written approval of AID before approving or financing the purchase of any pesticide with funds made available by AID for this Project.

d. Waivers

The requirement that commodities financed by AID under the Project have their source and origin in the United States is hereby waived in order to permit the procurement of 23 right-hand drive vehicles and spare parts therefor, in an amount not to exceed \$350,000, from countries included in AID Geographic Code 935. The provisions of Section 636(i) of the Foreign Assistance Act of 1961, as amended, also are hereby waived.

*Otto J. Reich*

\_\_\_\_\_  
Otto J. Reich  
Assistant Administrator  
Bureau for Latin America  
and the Caribbean

*3/23/83*

\_\_\_\_\_  
Date

Clearances:

GC/LAC:RBMeighan: *RM* date *3/11/83*  
LAC/CAR:RHechtman: *RH* date *3/11/83*  
LAC/DR:DBJohnson: *DB* date *3/16/83*

GC/LAC:GMWintery: *GMW* date *3/16/83*: x632-3272

## PROJECT ISSUES

The Project Identification Document for the project was reviewed on January 6, 1983. Issues raised by the DEAC were expressed in a guidance cable dated January 20, 1983 (see Annex B, exhibit 3). These issues are identified below along with a reference to the appropriate section of the Project Paper in which they are addressed.

<u>Issue</u>	<u>P.P. Reference</u>
1. Banana Replanting Component-	
-Market Security under Lome Convention	Annex D, Part E
-Demand for Inputs	Annex D, Part E
-Financial/Economic Feasibility	Annex C, Part D
-Reflows	Annex C, Part D
2. Land Component	
-Land Market	
--Supply and Demand	Annex C, Part C
--Financing Alternatives	Annex D, Part D
--Eligibility Criteria	Annex F, Part E
--Mortgage Reflows	Annex D, Part D
-Legal Reforms	Annex D, Part D
-Economic Feasibility	Section II, D1a
3. Marketing Promotion Component	
-Role of Public Sector	Annex C, Part C
-OSL Capacity to Implement	Section I, C1
4. Commodity Diversification	Annex F, Part A
5. Impact on U. S. Commodities thrust of the Project.	Project Altered
	Section VII

ST. LUCIA AGRICULTURE STRUCTURAL ADJUSTMENT

PROJECT PAPER

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Bulk Annex

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On file in LAC/DR/RD and RDO/C.

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## I. BACKGROUND AND PROJECT RATIONALE

### A. Summary

St. Lucia's agricultural sector is the largest single sector in the economy, accounting for nearly 17 percent of GDP, 40 percent of employment, and 53 percent of exports. For the last twenty years, bananas for export to Great Britain have dominated the sector. At least 10,000 acres, 14 percent of the total holdings, are under bananas. This figure understates the importance of the crop, however, since a high proportion of the land is unsuitable for cultivation, even under tree crops. Banana exports account for 85 percent of the agricultural exports and 67 percent of the total value of agricultural value added. The weekly "Geest check" provides the largest source of cash income for a large percentage of rural families.

This dependency on a single crop places both the agricultural sector and the national economy as a whole in a precarious position with respect to both long run stability and capacity for growth. In response to this problem, the Government of St. Lucia has begun a sector-wide program of agricultural diversification. This program will broaden the agricultural base to include a greater proportion of high value crops with long run potential for augmenting the income obtained from bananas (which are expected to remain the dominant crop for at least the next ten years).

In order to achieve this program goal, however, four key constraints to long-term investment in sector development must be addressed in conjunction with the diversification effort. Each of these constraints impedes the functioning of critical agricultural markets; together they prevent the market from operating effectively to call forth additional production in response to effective international demand. These constraints are: 1) the lack of secure land title for the large majority of the farmers, which restricts the effective functioning of both the land market and the market for long-term investments in land and agriculture; 2) the inadequacy of the agricultural marketing system, which does not generate sufficiently large and reliable effective demand at the farm level to stimulate greater production of cash crops, particularly the high value tree crops requiring a long-term investment, 3) the limitations of the plant propagation system supporting the diversification effort itself, which limits the farmers' ability to respond to market demand for tree-crop products, and 4) the current decline in banana income, which reduces the availability of resources for investment at the farm and national levels.

The overall strategy of the project is to introduce structural reforms into these key markets in order to relieve these constraints and promote the growth of the sector as a whole. The project will seek to achieve these adjustments through three components:

- a. a Land Registration and Tenure Individualization Component to provide all current landholders with a clear title and to inaugurate an experimental program providing holders of family land with an opportunity to consolidate ownership;

- b. a Market Promotion Component to strengthen the private sector marketing system while supporting the expansion of high value crops with strong market potential in the region and extra-regionally, and
- c. short-term support to banana production through a Banana Replanting Component to encourage greater replanting, which is critically needed to halt the decline in banana shipments and strengthen the agricultural income base in the short run.

B. Land Registration and Ownership Component

1. Background to the Land Problem

Like many of the other countries in the Eastern Caribbean, St. Lucia's land tenure situation is a complicated overlay of British common law and local traditions imported in part from Africa. In St. Lucia, the situation is further complicated by the survival of elements of the French civil code, which were retained when the British ejected the French from the island in the early part of the 19th century. In particular, the laws of intestate succession and inheritance have aggravated the complexity already inherent in the mixture of common and traditional law. Only a small proportion of the landholdings have been properly surveyed and registered, with the result that only the larger landholders and a few of the smallholders have a clear legal title to their land.

The lack of clear title, and the resulting patchwork of formal and informal claims against St. Lucia's agricultural holdings, presents a serious barrier to more rapid development of the agricultural sector. Without clear title, landholders are generally unable to get credit for either production or investment (except for bananas). Moreover, in this situation, farmers are generally unwilling to undertake long-term investments in tree crops, irrigation systems, terracing and other capital improvements needed to raise land productivity. The lack of clear title to agricultural land thus seriously inhibits the effective working of the markets for land and investment in agricultural production.

A further complication in St. Lucia's case is the issue of "family land," land jointly held by the members of an extended family. Each member of the family, which may number into the hundreds, has an undivided right to cultivate a portion of the land. Even when a single individual has been cultivating all or most of the land for an extended period, his or her right to continue to do so may be called into question at any time by a distant relative returning from overseas. This situation has naturally given rise to a long history of intra-familial land disputes, which often spill over into the civil and criminal courts of the island and serve as an additional barrier to more productive use of St. Lucia's extremely limited land base.

As the result of nearly twenty years of internal policy discussions seeking a resolution to these complex problems, a broad consensus has developed that the tenure problems can only be solved by a fundamental reform: the implementation of a new land registration and adjudication

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system. This solution has been implemented with considerable success on other islands of the Caribbean. In furtherance of this reform, the GOSL appointed a Land Reform Commission in 1979. This Commission's final report, issued in 1981, recommended that the new system be implemented as soon as possible and laid out the basic framework for such a system.

The new land registration system recommended by the Commission will constitute a major revision in the way that land is held in St. Lucia, beginning with revised land legislation and proceeding to the surveying and registration of every holding on the island. While there is general agreement that this is highly desirable (in fact, necessary), the high cost of such a program has thus far prevented the GOSL from moving to implement it. Nonetheless, substantial background work to support the necessary survey has been completed including much of the necessary mapping, draft legislation, and operational procedures.

## 2. Strategy for Assistance to Land Registry and Ownership

The project will implement two programs designed to overcome the land problems outlined above. First, it will address the basic tenure problem by implementing a new land registry system based on the draft laws now before the St. Lucian Cabinet. This project will provide for a complete survey of all land parcels outside the metropolitan Castries area and outside the central Forest Reserve. In addition to the survey itself, the project will assist the Government of St. Lucia to implement the new registry system that the survey and revised tenure code make possible.

Second, the project will establish an experimental Tenure Individualization Program (TIP) providing a financial mechanism whereby the cultivators of family lands who wish to buy out their relatives or partition their land may do so. The existence of this program is expected to strengthen the registry sub-component by providing a means of resolving disputes encountered during the survey process. No such financial mechanism for peaceful resolution of these disputes and individualization of family lands is currently functioning, leaving only informal credit, the courts, and a variety of extralegal means for resolving these problems. This program be enabled in part by the distribution of government-owned land to private farmer-entrepreneurs who are currently claimants to family land. Such a strategy is consistent with the GOSL's desire to turn over potentially productive agricultural land now in the public sector to individual farmers.

It is expected that this strategy will greatly encourage agricultural investment in land and will lead to a substantial benefit stream that more than justifies its costs. Overall sector productivity as a result of this component is expected to improve significantly as a result of the bringing into production of lands idled after reversion to the government for a variety of reasons, increased intensivity of cultivation, and the increased marketability of agricultural land leading towards its more efficient utilization.

## C. Market Promotion Component

### 1. Background to the Marketing Problem

The need for St. Lucia to diversify its agricultural production base beyond bananas is widely recognized. The current high dependence on a single crop aimed essentially at a single market does not provide the possibility for long-term growth and stability necessary to the welfare of St. Lucia's farmers and continued growth of the national economy.

At the same time, expansion into new crops confronts a range of problems. Central among these are doubts in the minds of farmers and others as to whether additional production of tree and other crops will in fact find market either in the region or outside of it, given the weakness of St. Lucia's agricultural marketing system. The domestic market is small and highly dependent on the vagaries of the tourist industry, but the international market for fresh produce is increasingly characterized by intense competition from a large number of producers and rigid quality standards. Potential opportunities for export of St. Lucian fresh produce exist, but each of these markets requires that the country meet strict requirements with regard to the type, quality, and timing of its supply.

The problem of high quality fruit for export in sufficient quantities begins at the farm level, where acreage in improved varieties is limited and overall production has still not recovered from the damage inflicted by Hurricane Allen in 1980. These problems are being addressed through a range of programs (most notably the diversification program of the Ministry of Agriculture, which has been proceeding with BDD assistance since 1980), but these programs themselves are hampered by a lack of critical inputs, particularly seedlings of the appropriate varieties.

A related problem is the lack of adequate pest management. Certain of the pesticides in use or proposed for tree crops have not been registered with WHO, which could prevent their exportation to important potential markets, including Canada.

Even where strong demand for St. Lucian produce can be established, the current private and public sector marketing system is not able to assemble, pack, and deliver sufficient quantities of produce with the desired quality and timeliness. The system is made up of numerous relatively small-scale traders who are only beginning to develop the capacity to trade effectively on the international markets. In many cases, necessary infrastructure (packing sheds, trucks, etc.) is lacking. The capital market has thus far not proven an effective source of investment capital to overcome these lacks, due both to the perceived high risk associated with such investments and the general shortage of loanable funds in St. Lucia at the present time.

GOSL policy-makers attach a very high priority to expanded marketing of high-value crops on the export markets. They view the private sector farmers and traders as central to achieving their goals in this area, although they do not believe that the private sector is sufficiently developed at this time to bear the full burden of developing St. Lucia's export markets

for these crops. At present, neither the public sector nor the private sector markets in fresh produce are very active. Government activity accounts for an extremely small portion of agricultural production and marketing. Private sector growers and traders account for more than 80 percent of the total shipments, but the volumes shipped are relatively small (on the order of 1000 tons per year, compared to the 45,000-50,000 tons of bananas exported annually).

The GOSL is currently reexamining its policies and programs with respect to the marketing of high value crops. Policy-makers are currently dissatisfied both with the performance of the public sector Marketing Board and with the trading activities of the private sector. The GOSL is actively exploring a range of policy tools in a search for a better and broader array of programs to promote market development. The GOSL's principal aim in this area is to foster the more rapid growth of a wholesale export sector geared to penetrating the highly competitive fresh produce markets.

Several alternative formulations for such market development programs are under consideration by the Government. While only the broad outlines of the program have as yet emerged, the following represent basic principles to which the GOSL leadership subscribe:

- a. Encouragement of the Private Sector. The government's stated policy over the long term is to reduce its direct involvement in trading and agricultural production, with a view to eliminating completely its production activities in the near term and to phasing out its involvement in marketing as the private trading sector develops in scope and reliability. The St. Lucian private trading sector, although limited at present, has the potential to grow rapidly and to handle greatly increased volumes, as shown by its performance during the 1970's (when extra-regional exports grew from essentially a zero base to over 1000 tons per year).
- b. Support to Farmer Associations. The record of private sector farmer associations such as the St. Lucia Agriculturists Association provides a recognized model for the future development of the sector, whether through associations of growers or similar organizations involving the traders themselves.
- c. A Strong Government Role in Promoting Market Development. The importance of the marketing system to the development of the agricultural sector as a whole mandates that the GOSL support the growth of this system actively and energetically.
- d. GOSL to Lead Market Development Where Necessary. In view of the generally low level of private sector activity in the near term, the GOSL is exploring ways to reorganize the public marketing function without inhibiting private sector development, as a means of speeding progress toward higher levels of marketing activity in the future.

- e. Joint Private/Public Control of the Marketing Board. As a response to the poor performance of the Marketing Board under public sector management, the GOSL is examining alternative formulations for bringing the private sector into the marketing board and reducing its own role to monitoring and regulation or to that of a minority shareholder in a joint marketing organization.

2. Strategy for Assistance

The component's overall approach is to provide immediate but very limited assistance to support the GOSL's development of a more effective marketing strategy for the country, with AID assistance over the life of the project focussing primarily on elements of this strategy that support private sector marketing. The project will assist the GOSL to overcome constraints to the growth of effective private sector markets for high value products and will provide in addition modest support to existing diversification programs in the areas of seedling production, registration of pesticide use, and pesticide management.

The project will focus on crops identified as having the greatest potential for regional and extra-regional markets: mangoes, citrus (including sweet oranges, limes, and, to a lesser degree, grapefruit), cocoa, bananas for the regional market, and plantains. Project marketing and seedling production activities will concentrate on these crops.

- D. Banana Replanting Component

1. Background to the Problem

A major constraint to increased productivity for St. Lucian banana plantings is the advanced age of many of the banana mats. As a "ratoon" crop, it is recommended that bananas be replanted at the end of the third ratoon harvest following the first or "plant" harvest to maintain economic levels of production. Nonetheless, banana replanting rates have been considerably below the recommended rate of 20 - 25% per year for the last three years. This shortfall has been due to the lingering effects of hurricane damage in 1980, uncertain availability of fertilizers and nematicides, and depressed grower prices due to unfavorable exchange rates and poor BGA management. A recent survey indicates that replanting and new planting picked up somewhat in 1982, reaching a rate of perhaps 15 percent. This activity indicates the farmers' willingness to undertake increased plantings, but considerably more replanting activity in 1983 and 1984 is needed to restore the banana plantings to full productivity.

In order for replanting to make economic sense, it must be accompanied by appropriate levels of fertilizer and other agricultural inputs to ensure that the new plantings reach full production quickly. At present, the poor condition of BGA finances makes it extremely unlikely that farmers will be able to get the fertilizer and other inputs that they need in order to sustain increased replanting. Without these inputs, farmers can be expected to choose not to replant, despite the increase in total production and the better timing of production (and higher seasonal prices) that they forego by not replanting.

At the same time, the growing use of agricultural chemicals brings with it greater danger of misuse, leading to decreased farmer incomes and serious health hazards for the farmers, their families, and others. More appropriate education programs for farmers and extension agents on the proper handling and application of these materials, are required.

## 2. Strategy for Assistance

The project's strategy for assistance to the banana industry centers on a one time infusion of critically needed agricultural inputs during the 1983 crop year in order to ensure that the short-term financial difficulties of the BGA do not undermine the necessary recovery in banana replanting. The project will finance approximately \$900,000 worth of fertilizers and other chemicals to be sold to farmers who agree to replant during the 1983 planting season.

Although BGA management is clearly a weak point in the banana subsector, the limited input to this sector planned for this project does not provide an appropriate entry point to tackle these management problems. In consequence, the project has not been designed to address the internal management problems of the BGA. Nonetheless, to protect the GOSL's loan of AID grant funds to the BGA, an extremely modest input of data-processing equipment is planned to support the BGA's monitoring of its grower accounts.

Finally, the project will finance a program in pesticide safety and management to be implemented by the BGA in cooperation with WINBAN and the Ministry of Health. This program will provide technical assistance, safety equipment, and training for extension agents, farmers, and others in the proper use and handling of pesticides and will also finance limited technical assistance to WINBAN to begin identification of pest control measures that are both safer and more economic than the current reliance on highly toxic chemicals such as paraquat (gramoxone).

## II. PROJECT DESCRIPTION

### A. Summary

The St. Lucian Agricultural Structural Adjustment Project (ASAP) will consist of three components, as follows:

#### 1. Land Registry and Ownership Component

This component will establish the basis for a more active and effective market for land, thus making possible greater investment in land and agriculture, by a) establishing clear title for all rural holdings by carrying out a survey to map and register the boundaries and ownership of existing holdings, outside metropolitan Castries, b) creating a new land registry to utilize this system and implement the revised tenure code, and c) establishing an experimental Tenure Individualization Program (TIP) based on a credit fund to finance conversion of family lands to individual ownership.

#### 2. Market Promotion Component

This component will assist the GOSL to clarify and implement its strategy for the marketing of high-value crops by a) instituting a Market Promotion Program to assist private traders through technical advice, feasibility studies, and other services, b) creating a credit fund to implement necessary investments identified to increase private trading capacity, and c) upgrading the Ministry's plant propagation capacity to permit production of 90,000 seedlings annually, enabling farmers to respond to demand over the long term.

#### 3. Banana Replanting Component

This component will provide additional agricultural inputs to farmers agreeing to replant their fields during 1983. Repayments of the cost of these inputs by the farmers and the BGA will finance additional credit for market development, expansion of the Tenure Individualization Program (TIP) and other project purposes, as mutually agreed by AID and the GOSL.

### B. Statement of Project Goal

The goal of the prospect is to expand employment and increase the incomes of St. Lucia's rural farm families by supporting a structural adjustment of the agricultural sector that will lead to greater private sector investment and production.

### C. Statement of Project Purpose

The purpose of the ASAP is to promote the more rapid development of the St. Lucian agricultural sector by restructuring critical agricultural sector markets so as to:

- a. create a system permitting the more efficient, equitable, and rational utilization of agricultural and other lands.
- b. Diversify agricultural production and expand the income opportunities for farmers and traders through increased private sector capacity to produce and market high-value crops.
- c. achieve an immediate increase in the foreign exchange earnings from bananas to provide a strong financial base for the agricultural sector, which will allow market diversification to proceed more rapidly.

The sub-purpose and end-of-project status for each of the three components is as follows:

1. Land Registry and Ownership Component

The sub-purpose of this component is to establish a more active and effective market for agricultural land in order to improve small farmer access to land and secure property rights required for financially viable family farms. This will be accomplished by improving public sector policies and procedures for the management of the land market, by strengthening the market system for agricultural land, and by providing, through issuance of clear title, the necessary incentives for investment in land. Accomplishment of this purpose will be shown by an increased number of rural land transactions and an increased value and productivity of rural lands.

2. Market Promotion Component

The sub-purpose of the marketing component is to improve St. Lucian capacity to produce and market targeted crops and the nation's ability to continue to expand production and marketing activities within the private sector. By the end of the project, a greater number of existing and newly established St. Lucian private sector marketing agents will be exporting a quantity of fresh produce exceeding the level set prior to 1979 and will be providing more efficient and effective marketing services to local farmers and consumers in national, regional, and extra-regional markets. These improvements will encourage and support expanded production by enabling St. Lucian farmers to raise their output of these crops profitably and will also make St. Lucian products more competitive in regional and extra-regional markets, thereby promoting a larger market share for St. Lucia's agricultural sector.

3. Banana Replanting Component

The sub-purpose of this component is to increase banana yields significantly by the second year of the project, as the most practical means of increasing the availability of private funds for investment in agriculture, through increased replanting and input usage. As a result of this activity, exports in 1984 will be 20 percent above current levels and farmer income from bananas will be significantly greater than at present.

D. Project Outputs

1. Land Registry and Ownership Component

The Land Registry and Ownership component of the project will produce the following three outputs:

- a. A survey of all land outside the National Forest Reserve and the metropolitan area of Castries to demarcate the boundaries of existing holdings, identify the owners, and record this information;
- b. A new Land Registry System institutionalized on the basis of this survey and the new land tenure code embodied in the three draft laws now before the St. Lucian Cabinet, with the capacity to regulate and record private land transactions of all types; and
- c. A Tenure Individualization Program established within the St. Lucian Development Bank for the purpose of financing the conversion of family lands to individual ownership.

a) Land Registration Survey

The project will finance a formal survey of all rural land leaving out the Forest Reserve--and the urban area surrounding the capital city of Castries, the survey and registration of which will be completed by the GOSL after the end of this project, using non-project funds. Two teams, beginning at opposite ends of the island, will work progressively over the land area. They will organize their work by quarter (county) until all of St. Lucia's agricultural quarters are completed. One of the two teams will begin its work in Dennery Quarter, in order to provide maximum assistance to the Government's planned distribution of the Dennery Farmco state farm and to take advantage of the preliminary work done by the OAS-funded pilot project in Morne Parnache.

The teams will accomplish the following seven tasks in each area:

i. Preliminaries. The teams will establish contact with local officials, assess existing records, set the survey control network from which it will work, and conduct a publicity campaign to inform local residents of their role in the registration process and the information they must provide. Participation in the registration is legally required of all claimants to land; it is not voluntary.

ii. Demarcation. The teams will identify the boundaries on the ground with the help of the claimants to the parcel.

iii. Survey. The teams will then physically survey the boundaries of all parcels identified. In accomplishing this process, the team will use the "graphical" method used throughout the Caribbean, rather than the "instrumental" method more commonly used in the United States.

iv. Recording. The teams will then prepare an Adjudication Record for each parcel of land in which all registrable interests including ownership, leases, mortgages, etc., are listed.

v. Plotting. The teams then will prepare an Index Map for the area surveyed and calculate the areas surveyed.

vi. Adjudication. Specialized members of the team will then hear and settle disputes arising during the previous four tasks.

vii. Display. The resulting Index Maps and Adjudication Records will then be displayed for review by the public during a statutory period. Final petitions will be heard and resolved. There is no further appeal during the Registration process.

b) Land Registry System

The Survey outlined above will form the basis for a revised Land Registry System to replace the existing system as the survey is completed in each section of the country. The GOSL personnel who participate in the survey will provide the personnel to implement the new system, which will continue to record changes in the ownership and boundaries of parcels as originally surveyed, due to inheritance, sale, and other transfers.

This system will follow the specifications of three laws now under consideration by the St. Lucian Cabinet. These laws must be approved in order to implement the Land Registration Survey and create the new Land Registry, as outlined above. The GOSL has committed itself to passage of these laws by June 1983.

1. The Land Surveyors Act, which provides for the licensing of land surveyors, the proper conduct of surveys, and the preservation of survey works (corresponding Survey Regulations are also in draft form, as is an amendment to the current Survey Law).
- ii. The Land Adjudication Act, which provides for a process of systematic adjudication of rights to land, which, in turn, is a precondition to the registration of land parcels.
- iii. The Land Registration Act, which defines procedures for registration of the land and the guarantee of title to that land by the State.

A fourth piece of legislation, the Agricultural Small Holdings Act, has also been drafted. This act, while not strictly necessary for the creation of the new land registration system, provides further support to the principles embodied in the three laws described by better defining the relations between landlord and tenants in order to encourage greater productivity in holdings operated by tenants.

c) Tenure Individualization

The Survey and Registry outlined above will not by themselves overcome the family land problem, since parcels held as family lands may remain jointly held after the survey and be registered as such.

Given the serious problems caused by multiple ownership, the GOSL is pursuing a range of measures to promoting tenure individualization (conversion of family lands to individual ownership). It is seeking a solution based on the free operation of the land market and has ruled out coercive approaches or a blanket change through legislation, neither of which is desirable nor practicable.

To supplement these efforts, the GOSL has requested that USAID provide a limited amount of funding for the first year of a Tenure Individualization Program. Credit supplied through this program would permit a co-owner to buy out the shares of other co-owners and thus upgrade the tenure of the parcel to individual ownership. This program must be viewed as experimental in that seller response is difficult to predict, but there are few risks involved in the experiment and the market-oriented approach to solving the problem of multiple ownership is highly attractive. During the life of the project, the TIP will help to finance individualization of approximately 450 smallholdings.

The TIP financing program will operate through the St. Lucian Development Bank with an initial capitalization of \$100,000, an additional \$400,000 drawn from the reflows generated by the Banana Component and the equivalent of approximately US\$970,000 financed through GOSL debentures. The program will finance ten-year mortgages on holdings of up to \$20,000 in value. The mortgages will be issued at standard bank rates of interest for land mortgages (11-13 percent) for up to 80 percent of the value of the land. The farmer's share in the family land she/he is buying will be counted toward the 20 percent downpayment, and family shareholders will receive the value of their shares in cash and GOSL debentures.

2. Market Promotion Component

a. Development of Improved Marketing Systems for Targeted Crops

The project will provide near-term assistance to the GOSL to support the definition of a national strategy for development of the marketing system. This strategy will clarify the role of the private sector in agricultural marketing and establish the institutional framework in which public sector support to marketing will be placed.

Once agreement on this structure is determined within the GOSL, AID will provide assistance to establish a Market Promotion Unit (MPU) to promote the more rapid development of St. Lucian private sector marketing agents by assisting them to identify and adopt necessary changes in their operations. To accomplish this, the unit will provide ongoing market facilitation and technical services that together will help marketing firms to recognize existing problems and opportunities, discover cost-effective solutions, and then to implement the investments and other activities necessary to improve their operations and increase their capacity to market St. Lucian produce overseas.

During the life of the project, the unit will undertake the following activities:

i. Identification of constraints and unexploited economic opportunities surrounding the existing production systems for the targeted crops. This activity will start with an exploratory analysis of the existing marketing system for these crops within St. Lucia and a study of overseas demand, focussed on identifying the specific characteristics of the market that will determine St. Lucia's ability to increase its market share.

ii. Assistance to marketers and their financiers in directing and/or conducting prefeasibility and feasibility studies of specific firm-level investments necessary to expand or improve marketing activities.

iii. Ongoing assistance to marketers in overcoming existing constraints by, for example:

- Promoting the formation of formal and informal trade associations to address collectively problems facing traders (such as negotiations with Geest).
- Assisting efforts to obtain necessary inputs (boxes, etc.), whether locally or through importation.
- Developing trader-managed programs for quality control, product standardization, etc., including, if feasible, establishment of national or association brands for certain products.

The unit will focus initially on five markets identified as high priorities for expansion:

- the intra-regional market for bananas
- the intra-regional market for plantains
- the intra-regional market for oranges
- extra-regional and intra-regional markets for mangoes
- export market for fine-flavored cocoa

These five markets (further discussed in the Technical Analysis, Annex D) appear to present the best possibilities for immediate expansion of St. Lucian fresh produce exports, taking into consideration current production (to the extent it can be estimated), the current demand for fresh produce in the European, North American, and Caribbean markets, and competing suppliers. The selection of priority markets, together with the selection of target crops, will be re-examined periodically during the project to ensure that it remains responsive to market conditions and opportunities.

In carrying out the market promotion services outlined above, the MPU will draw on two sources of supplementary financing provided by the project: the Market Promotion Fund, a revolving credit fund to finance major investments and regular working capital (further described below), and the Market Opportunity Fund. This latter fund, initially established at \$50,000 with project monies, will be used to finance small experimental marketing activities. The funds will be controlled directly by the Technical Assistance Team and used in accordance with strict criteria outlined in the Implementation Plan for this component (Section IV-D). The funds will finance expenditures--such as a trial shipment of sweet oranges to the Trinidad market--that have an unusually high risk component for a trader and at the same time have the capacity to provide valuable information for future expansion of trading opportunities.

The unit will have a small staff including two professionals hired locally for training in the market promotion function in addition to the two-person long-term team. The duties of the staff will include:

- coordinating the establishment of grower and marketing committees for specific crops to provide a means for joint action on marketing problems, joint negotiation with potential buyers and transportation agents, creation of national or grower association standards for export commodities, investigation of national brand name establishment, bulk purchasing of inputs, etc.
  - identification of target markets within and outside the Eastern Caribbean region.
  - specification of buyer requirements (varieties, volumes, seasonality of market demand, etc.) by target market.
  - provision of information on current demand based on subscriptions to regular market intelligence systems for target crops.
  - provision of specialist assistance to overcome harvesting and post-harvesting problems through technical assistance, training courses, pilot testing of improved methods, etc.
  - completion of feasibility studies for investments to upgrade private sector facilities and public sector infrastructure to support expanded marketing and assistance in arranging credit and other support needed to implement the investments.
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At the termination of the project, it is expected that the Market Promotion Unit will have proven the value of its function to the trade and the GOSL by facilitating and accelerating the growth in export trade for the target crops. While it is anticipated that the MPU will continue after the project as a part of the marketing authority, several private sector formulations for the market promotion function and the unit itself may emerge during project implementation as preferable. These alternatives, to be explored during project implementation, include formation of a traders association with a promotion staff of its own, establishment of a private sector advisory or investment brokerage firm, and absorption of the unit's functions by one or more of the larger trading firms.

b) The Market Promotion Fund

As an important adjunct to the work of the MPU, the project will fund the establishment of a credit fund to finance needed investments in market infrastructure and working capital for private traders. This credit fund, initially capitalized at \$350,000 from project funds, will operate through the St. Lucian Development Bank, which will cooperate with personnel of the MPU in carrying out and reviewing feasibility studies. Project support for such feasibility studies will be provided through the MPU as outlined above.

The fund will make short- and medium-term loans in amounts up to \$50,000 at a rate of interest not below 12 percent. The traders may obtain the loans directly from the SLDB or, if they prefer to deal with one of the commercial banks, the SLDB will on-lend the funds to one of these banks at 8 percent for lending to the traders at 12 percent. Repayments of these loans will be segregated by the SLDB and used as a revolving fund for additional loans to traders.

c. Seedling Production

At present, the short supply of suitable seedlings of improved varieties of tree crops constitutes a serious barrier to accelerated expansion of the acreages in these high value crops. Seedling production, which is currently performed only by the government's three propagation facilities, is technically and managerially deficient. The plant propagation facilities are characterized by a range of problems including the use of non-virus-free grafting stock, non-sterilized potting soil, budding and stem cutting material of variable and uncertain quality, manual irrigation, poor drainage, inadequate provisions for hardening, holding areas on bare soil, and physical structures that preclude use of efficient methods of operation. As a result of these deficiencies, seedling production levels are uneven, with high losses of seedlings during the process and overall production insufficient to meet the demand of ongoing programs for orchard expansion.

In order to increase the capability of the Ministry of Agriculture to meet the growing demand for tree crop seedlings, the project will substantially upgrade the plant propagation units at Union, the main facility, and Bath, the principal station serving the southern region.

Project funded improvements will give the Plant Propagation Unit the capacity to produce 90,000 seedlings annually, or sufficient seedlings to plant approximately 900 acres annually over the next five years. The project will provide irrigation systems for Union and Bath stations, increased holding areas, improved soil handling capabilities and seed material storage facilities, improvements and repairs to existing buildings, training and safety equipment to improve pesticide management, and, in general, all facilities needed to produce a sufficient supply of high quality seedlings on a reliable basis.

### 3. Banana Replanting Component

The major outputs of the banana component of the ASAP are:

- a. the replanting of 2,000 acres (roughly 20 percent of the total) during the 1983 season.
- b. the application of agricultural inputs at the WINBAN recommended rates on these 2,000 acres.
- c. a program of improved extension and research in the area of pest management

These three outputs will accomplish the component's purpose, which is to raise banana yields and income by 20 percent in 1984 in order to provide increased net income to the farmers and the national economy to finance additional productive activities in other crops, and will also lay the groundwork for increased production and farmer incomes in the future.

The main project activity to accomplish this purpose will be the provision to the farmers of 1,800 tons of blended fertilizer, 360 tons of ammonium sulfate, 115 tons of furadan (a nematicide). These inputs will be provided in the following manner:

- a. AID will procure the inputs and deliver them to the GOSL on a grant basis as close as possible to the start of the 1983 replanting season (June).

- b. The GOSL will provide the inputs to the St. Lucia BGA as a loan repayable in 12 fixed monthly installments at 6 percent simple interest with a 15 month grace period.

- c. The BGA will distribute the inputs through its usual channels to selected growers certified by its agents as having prepared their land for replanting. Training will be provided in pesticide use to BGA and MOA agents and provisions will be made for providing information to the farmers on proper use of pesticides provided. Safety equipment will be provided to BGA personnel directly handling pesticides.

- d. The growers will apply the inputs and repay the BGA through automatic deductions from their weekly income from exported banana receipts payable in 12 monthly installments at 8 1/2 percent with a 12 month grace period.

e. The BGA payments will be automatically deducted from the BGA's Sales Revenues by the National Commercial Bank following a fixed schedule reflecting the BGA's expected sales volumes. These funds will be transferred by the NCB to the SLDB to be used to augment the Market Promotion Fund and the TIP, to finance part of the operating costs for the Land Survey, and for other project purposes as mutually agreed by AID and the GOSL.

To assist the BGA in monitoring repayments of these and other loans to farmers and to reinforce the BGA's internal management improvement program (now underway), the project will provide a mini-computer, together with the associated software and technical assistance necessary for its installation.

The third element of the banana component will be a program of extension and farmer training to improve pest management practices used by the banana farmers. This program will focus on a) improving the handling and application of potentially dangerous chemicals such as paraquat through education of the farmers and extension agents in proper handling techniques and b) providing safety equipment to warehousemen and others frequently exposed to chemicals, and c) assisting in regular monitoring of pesticide residue levels in the population.

#### E. Inputs

In order to produce the outputs described above, the project will provide technical assistance, participant training, commodities, construction, operating expenses, local governmental and non-governmental personnel, loan funds, and other expenses over a four-year period. AID will finance costs totalling US\$8 million of the project's total costs of US\$11.7 million, through a grant to the GOSL. The GOSL will finance the remaining US\$2.8 million through local currency, foreign exchange, and in-kind contributions, including \$900,000 financed by the BGA's repayment of the in-kind input loan.

##### 1. Technical Assistance

The project will fund long- and short-term technical assistance to the marketing authority, the Ministry of Finance and Planning, and other organizations involved in the marketing and land registration activities. Two long-term teams will be provided, one in the area of market promotion and another for the land registration survey. Long-term personnel for the marketing component will include a Market Systems Adviser (Market Promotion Team Leader, for two years) and an Investment Promotion Adviser (for one year).

The Land Registration component will require a relatively large team, consisting of a Team Leader and up to 13 expatriate technicians. For planning purposes, it has been assumed that six of these will be drawn from outside the region, while the remaining 8 technician positions will be filled by West Indians who have gained experience in the necessary techniques during previous land registration projects in other countries.

Short-term technical assistance will be provided to support the market promotion, seedling production, land survey, land registry, TIP, and banana components. Short-term technical assistance will be provided in

technical, economic, and managerial fields. As appropriate, additional short-term assistance in extension, tree crop production and research may be provided by drawing on existing regional and central projects.

## 2. Participant Training

Short-term participant training will be financed, including 12 months of specialized training in post-harvest technologies and seedling production techniques for Ministry of Agriculture personnel. Additional regional and in-country short-term training will be provided utilizing existing regional projects in extension and research.

## 3. Construction

AID-funded construction (other than private sector construction financed through the loan funds) will be limited to upgrading and expansion of the plant propagation and research facilities at two of the Ministry of Agriculture's three plant propagation and research stations. The GOSL will construct or renovate facilities suitable for housing the new land registry, including a fire-proof vault for safeguarding the land registers and index maps.

## 4. Commodities

Project funded commodities will include fertilizer and other agricultural chemicals for short-term support to banana replanting, equipment and supplies to support the plant propagation and land registration activities, and vehicles and other equipment needed by the various components (a total of 24 vehicles will be purchased, including a truck for the plant propagation units).

## 5. Loan Funds and Other Capital

The project will fund establishment of two loan funds totalling \$2.22 million: the Market Promotion Fund (\$750,000, including \$400,000 of AID funds and \$350,000 of banana reflows) and the Tenure Individualization Program fund (including \$100,000 of AID funds, \$400,000 of banana reflows, and \$970,000 of GOSL local-currency resources). These funds will finance expanded private sector marketing operations (both working capital and physical investments) and conversion of family lands to individual ownership.

## 6. Operating Expenses

Project operations will be funded from a mixture of AID and GOSL funds. In general, the GOSL will finance all operating expenses except those associated with experimental or transitory activities. Thus, AID funds will finance the operations of the Market Promotion Unit and the majority of costs associated with the land registration survey during the life of the project.

The land registration survey constitutes a one-time expenditure for which GOSL funds are not sufficient. The GOSL will finance 50 percent of the local labor costs of the survey in the areas outside Castries, and the operation of the Land Registry during the project and thereafter.

The Market Promotion Unit constitutes an experimental initiative in promotion of the St. Lucian private sector and, as such, full project funding of its operating costs (including office rental) for the first two years is justified.

The GOSL will provide operating expenses in support of ongoing government activities involved in the project at approximately current levels. These include the BGA extension program and other administrative operations associated with the replanting program; the current land survey and registry system; the marketing authority (SLMB or a successor agency); the extension, research, and plant propagation programs associated with the Ministry's ongoing diversification programs, and the Ministry of Finance and Planning's supervision of the project.

#### 7. GOSL Personnel

The GOSL will provide BGA extension agents, survey technicians, registry staff, and other GOSL personnel required for the implementation of the project, with the exception of staff for the Market Promotion Unit (which will be largely project funded). Nearly all of these staff will be provided by assigning existing personnel within the units in which the project will work, rather than through new government hires. The largest number of personnel required will be the technicians and administrative personnel needed to implement the land registration survey, some of whom will be seconded from the Survey Department and the current registry staff and who will make up the staff of the new combined survey and registry department once the project is completed.

#### 8. GOSL Facilities

The GOSL will make available to the project the current plant propagation facilities at Union and Bath, which will be upgraded with project funds. In the event that an alternative site is identified, the GOSL will make available the land and other facilities at that site necessary for development of a plant propagation facility. In addition, the GOSL will provide office facilities and other space as needed for GOSL staff cooperating in project implementation.

#### F. Administrative Structure

The project as a whole will be under the jurisdiction of the Deputy Director for Planning in the Ministry of Finance and Planning, as are the majority of donor funded projects in St. Lucia. The Deputy Director will serve as the senior counterpart of the Team Leaders for both the Market Promotion and Land Registration teams, with overall responsibility to AID and the GOSL for project implementation. He will assign full-time counterparts and administrative personnel from his staff as necessary during project implementation.

The project structure for the land registration component has been designed to be consistent with the structure of the Registry that will come into being as part of the project, rather than with the current administrative arrangement of the land survey and registry functions. At present, the Registry for all matters (including land) reports to the Attorney General's Office, while surveys are handled by the Lands Division of the Ministry of Agriculture. It is the intention of the GOSL to bring these two functions together under the Planning Division of the MOFP, in order to combine the administrative and planning activities related to land use in a single organization and the project structure follows this organization.

The Market Promotion Component will be implemented through the Ministry of Agriculture and the Development Bank. The technical assistance team will report to the Deputy Director for Planning. The activities of the component will be coordinated by a council consisting of representatives of the Ministry of Agriculture, the Ministry of Finance and Planning, and the Development Bank; and three private traders (initially to be nominated by the Minister of Agriculture).

The Banana Growers Association (BGA) will have primary responsibility for the Banana Component. AID will assist the BGA in the initial procurement of the inputs to be provided for replanting, but will not be involved in supervising their distribution or supporting the related extension activities.

In accordance with the request of the GOSL, all project loan funds will be administered through the St. Lucia Development Bank (SLDB), although other public and private sector banks may participate by on-lending these funds from the SLDB to eligible clients.

### III. COST ESTIMATE AND FINANCIAL PLAN

#### A. Summary of Sources and Uses of Project Funds

The Project involves an \$8.0 million dollar grant to the GOSL. More than sixty percent of AID's support will be in the form of technical assistance (e.g., Land Registry and Marketing Components) and commodities (e.g., Banana Replanting and Land Registry). For its part, the GOSL will provide significant in-kind support (approximately \$1.83 million), some \$970 thousands in GOSL bonds/debentures to support the Pilot Land Financing Program, as well as the program use of the Banana Input Loan repayments (approximately \$900 thousand dollars) for a total of \$3,700 million.

The length of the project is anticipated to be 45 months, from April 1983 to December of 1986. Expenditures will be heaviest in the early years of the project (i.e., 76% of the expenditures will take place by the end of FY-85).

The major expenditures, by type of input, are as follows:

Technical Assistance	\$3,420
Commodities	1,830
Credit Funds	550
Local Staff Support	510
Operational Support and Training	345
Total Inputs	\$6,655
Contingencies	\$1,345
Project Total	\$8,000

Table I summarizes project expenditures by major components. Table II details project expenditures by selected project objective (due to the cross-over effect among project activities, the allocation shown is an estimate). Table III shows project expenditures by fiscal year. And, Table IV arrays project expenditures by functional activity. It should be noted that the reflows or program use of the Banana Input Loan repayments are shown at \$900 thousand. This is the approximate value of the chemical inputs to be paid for by the SLBGA. In addition, interest income would accrue and would be available for program use at rate of 6% per annum against the outstanding balance. For sake of clarity these interest payments have not been shown; in practice, interest accruals would be allocated in the same manner as shown for loan principal repayments.

Detailed activity budgets are shown in Financial/Economic Analysis Section, Sub-section D. It should be noted that due to rounding adjustments, some elements within detailed activity budgets may not add back to the rounded totals shown in Tables I - IV.

TABLE 1  
SUMMARY PROJECT COST ESTIMATE  
(US\$000'S)

USES:	SOURCES:			AID			HOST COUNTRY <sup>1/</sup>			PROJECT
	FX	LC	TOTAL	FX	LC	OTHER <sup>2/</sup>	FX	LC	TOTAL	
Land Registry	3,365	785	4,150	\$210	500	150			5,010	
Pilot Land Financing	25	100	125	-	970 <sup>3/</sup>	400			1,495	
Marketing	\$ 740	\$ 440	\$1,180		\$ 550	\$350			\$ 2,080	
Banana Replanting	1,000	-	1,000	-	100	-			1,100	
Pesticide Safety	30	70	100	-	15	-			115	
Project Evaluation	100	-	100	-	-	-			100	
<b>SUB-TOTALS</b>	<b>\$5,265</b>	<b>\$1,395</b>	<b>\$6,655</b>	<b>\$210</b>	<b>\$2,135</b>	<b>900</b>			<b>\$9,900</b>	
Inflation Factor <sup>4/</sup>	-	-	740	20	215	-			975	
Contingency <sup>5/</sup>	-	-	605	20	200	-			825	
<b>TOTALS</b>	<b>-</b>	<b>-</b>	<b>\$8,000</b>	<b>\$250</b>	<b>\$2,550</b>	<b>\$900</b>			<b>\$11,700</b>	

<sup>1/</sup> Local currency costs are in-kind contribution: staff, office space, supplies, etc.

<sup>2/</sup> Allocation of principal repayments of Banana Input Loan.

<sup>3/</sup> Includes COSL debentures to finance land sales.

<sup>4/</sup> Inflation @ 8% per annum FY 84 and after, calculated against selected Project elements (e.g. Banana Replanting Inputs and Credit Funds not included).

<sup>5/</sup> Contingency @ 10% flat rate, calculated against selected project elements (e.g. Banana Replanting Inputs and Credit Funds not included).

**TABLE 2**  
**COSTING OF PROJECT OUTPUTS/INPUTS**

US\$000'S)

PROJECT INPUTS	PROJECT OUTPUTS <sup>1/</sup>					TOTAL <sup>2/</sup>	
	#1	#2	#3	#4	#5		
<u>AID Appropriated:</u>							
Dollars	\$1,000	\$1,050	\$ 130	\$4,150	\$ 125	\$6,455	
% of AID Total	15%	16%	2%	65%	2%		100%
<u>Host Country:</u>							
Dollars	\$ 100	\$ 250	\$ 300	\$ 710	\$ 970	\$2,330	
% of H.C. Total	4%	11%	13%	30%	42%		100%
<u>Other:</u>							
(Banana Input Loan Repayments)	-	\$ 350	-	\$ 150	\$ 400	\$ 900	
<u>TOTAL</u>							
Dollars	\$1,100	\$1,650	\$ 430	\$5,010	\$1,495	\$9,685	
% of Total	11%	17%	4%	52%	16%		100%

<sup>1/</sup> Project Outputs: #1: 2,000 acres of bananas replanted; #2: development of a private sector-oriented Market Promotion Program; #3: Expanded Tree Crop Propagation Program; #4: National Survey and Registry of all lands; and #5: functioning (pilot) Land Financing Program.

<sup>2/</sup> These totals are unadjusted for inflation or contingency. The difference between these amounts and those shown as "sub-totals" in Table I is the cost related to the Pesticide Safety and Project Evaluation elements of the Project.

TABLE 3

PROJECTION OF EXPENDITURES BY FISCAL YEAR  
(US\$000'S)

<u>Fiscal Year/Project Component</u>	<u>AID</u>	<u>Host Country</u>	<u>Total</u>
<u>FY 83:</u>	<u>\$1,870</u>	<u>\$ 70</u>	<u>\$ 1,940</u>
Land Registry	740	5	745
Marketing	130	20	150
Banana Replanting	1,000	45	1,045
<u>FY 84:</u>	<u>\$1,430</u>	<u>\$ 775</u>	<u>\$ 2,205</u>
Land Registry	1,175	240	1,415
Pilot Land Financing	115	310	425
Marketing	90	190	280
Banana Replanting	-	25	25
Pesticide Safety	50	10	60
<u>FY 85:</u>	<u>\$1,890</u>	<u>\$ 785</u>	<u>\$ 2,675</u>
Land Registry	1,230	225	1,455
Pilot Land Financing	5	370	375
Marketing	560	170	730
Banana Replanting	-	15	15
Pesticide Safety	45	5	50
Project Evaluation	50	-	50
<u>FY 86:</u>	<u>\$1,365</u>	<u>\$ 685</u>	<u>\$ 2,050</u>
Land Registry	1,105	210	1,315
Pilot Land Financing	5	290	295
Marketing	250	170	420
Banana Replanting	-	15	15
Pesticide Safety	5	-	5
<u>FY 87:</u>	<u>\$ 100</u>	<u>30</u>	<u>130</u>
Land Registry	50	30	80
Project Evaluation	50	-	50
<b>SUB-TOTALS</b>	<b>\$6,655</b>	<b>\$2,345</b>	<b>\$ 9,000</b>
Inflation @ 8 $\frac{1}{2}$ % <sup>1/</sup>	740	235	975
Contingency @ 10 $\frac{1}{2}$ % <sup>2/</sup>	605	220	825
<b>TOTAL INPUTS</b>	<b>\$8,000</b>	<b>\$2,800</b>	<b>\$10,800</b>
Use of Banana Repayments			900
<b>PROJECT TOTAL</b>			<b>\$11,700</b>

1/ Inflation calculated on a compound basis for FY 84 and after; the calculation does not apply to all project elements (e.g. Banana Inputs and Credit Funds not included).

2/ Contingency calculated on a flat rate prior to adjustments for inflation (Banana Inputs and Credit Funds were not included).

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TABLE 4

SUMMARY PROJECT COST ESTIMATES  
BY TYPE OF ACTIVITY

(US\$000'S)

SOURCE: ACTIVITY:	TOTAL AID	TOTAL HOST COUNTRY	TOTAL <sup>1/</sup> OTHER	PROJECT TOTAL
Land Registry:	\$4,150	\$710	\$150	\$ 5,010
Technical Asst.	2,800	-	-	2,800
Local Staff	465	465	-	930
Commodities	710	245	-	955
Operations	175	-	150	500
Pilot Land Financing:	\$ 125	\$970	\$400	\$ 1,495
Technical Asst.	25	-	-	25
Credit Funds	100	970	\$400	1,470
Marketing:	\$1,180	\$ 550	\$350	\$ 2,080
Technical Asst.	450	-	-	450
Participant				
Training	40	-	-	40
Local Staff	45	250	-	295
Construction/ Facilities	30	150	-	180
Credit Funds	450	-	350	800
Commodities	120	-	-	120
Operations	45	150	-	195
Banana Replanting:	\$1,000	\$ 100	=	\$ 1,100
Commodities	1,000	-	-	1,000
Operations	-	100	-	100
Pesticide Safety:	\$100	\$ 15	-	\$ 115
Technical Asst.	45	-	-	45
Participant				
Training	45	-	-	45
Operations	10	15	-	25
Project Evaluation	\$ 100	=	=	\$ 100
Input TOTAL	\$6,655	\$2,345	\$900	\$ 9,900
Inflation & Contingency	1,345	455	-	1,800
Project TOTALS	\$8,000	\$2,800	\$900	\$11,700

<sup>1/</sup> Utilization of Banana Input Loan Repayments

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**B. Issues Related to the Project's Financial Plan**

The financial plan for the Project has been developed with three constraints in mind: 1) the need to avoid introducing further subsidies into the St. Lucian economy, 2) the necessity of supporting GOSL efforts to hold the line on recurrent costs, and 3) the need to build the project's budget on the basis of realistic cost estimates so as to avoid serious budgetary problems during implementation. The following discussion of the project's financial plan will therefore address three issues:

1. the selection of appropriate interest rates for the project's loan funds and the pricing of inputs to the farmers
2. the implications of project activities for GOSL recurrent costs
3. the adequacy of the cost factors used to calculate the project's budget, including the funding of project activities from "banana reflows"

**1. Interest Rates and Prices**

The project has followed a policy of charging interest rates that reflect the current commercial rates. The commercial prime rate in St. Lucia is currently 12-14 percent, depending on the lending institution. The following policy will be followed in the case of project loan funds:

- a. The MPP will initially charge borrowers a rate of 12 percent. Lending at the lower end of commercial rates is necessary in view of the risky nature of the fresh produce business itself. As the traders establish themselves on firmer financial and business footing, it is expected that they will find no difficulty in repaying loans at the prime rate or slightly above it. The 12 percent rate will constitute a significant reduction in the subsidization of credit by the GOSL. The SLDB, which will administer the MPP, currently charges a rate of 8.5 percent on loans of up to three years.
- b. In the case of banana input credit, the rate will be 8 1/2 percent to the growers. This rate is in line with past SLDB practice and with the forthcoming CDB "Input Revolving Loan" Fund.
- c. The TIP mortgage loans for the Pilot Land Financing Program will be provided to the farmers at or near the prime rate.

**2. Recurrent Costs**

The project has been designed to hold recurrent cost implications to the absolute minimum. The GOSL has in the past year made a highly commendable effort to bring its expenditures more closely into line with its revenues, and AID recognizes the donors' obligation to support this effort through their projects. Consequently, all project activities have been developed based on the assumption that they would have to be staffed by currently available personnel operating with currently available or already

planned facilities, unless project-funded facilities were added. In the case of the propagation facilities, for example, the project will fund a substantial investment in upgrading of the existing capacity in order to increase the efficiency of the operation, raise employee productivity, and reduce losses during the plant propagation process.

The sole exception to this principal is the Market Promotion Unit, which will be funded during the life of the project primarily with project funds. This unusual measure is necessitated by the experimental nature of the unit.

The revised registry established as part of the land registration component is not expected to increase the drawdown on state resources. The financial analysis for this section indicates that the increased level of activity generated by the more active land market will be more than paid for by increased revenues from the unit's regular fees.

### 3. Cost Factors

#### a. General Considerations

The project's financial plan has been developed taking into consideration the best information available on the cost of the various inputs to be used. Allowances for inflation at 8 percent (compounded) and for contingencies (at 10 percent of the cost before inflation) have been added to all items.

The estimate for technical assistance and participant training costs are based on the experience of RDO/C and AID/W guidance and reflect the full cost including all overhead.

#### b. Use of Banana Reflows

The repayment schedule calls for the repayment of the input loan to the BGA to begin in November 1983 and be completed in October 1984. These funds (the "banana reflows") will be used to supplement the allocations in the AID grant for three purposes, as follows:

- the first \$150,000 in reflows will be utilized to defray part of the GOSL support costs for the Land Registry program.
- \$400,000 will be used to supplement the \$100,000 provided to capitalize the Pilot Land Financing Program.
- \$350,000 will be used to supplement the \$400,000 provided to establish the MPF for expansion of private sector trading activities

The financial mechanism set up for repayment by the BGA does not depend on farmer repayment, since BGA payments will be deducted directly from

the "Geest check" by the bank that handles the BGA's account. This procedure is felt to be sufficiently secure to ensure the additional financing of the three project components noted above.

#### IV. IMPLEMENTATION PLAN

The project will be implemented over a 45-month period commencing with the signature of the Grant Agreement with the GOSL in March 1983. The PACD will be December 31, 1986.

Implementation responsibilities will be shared among the GOSL, RDO/C, and the technical assistance contractors, with the St. Lucian private sector actively participating in all of the project's components

##### A. Procurement

Procurement activities and responsibilities may be summarized as follows:

##### 1. Technical assistance

Technical assistance will be provided through two principal contracts, supplemented by contracts for short-term personnel as follows:

##### a. Technical Assistance Contract (Marketing and Other Components)

The primary technical assistance contract will provide the two long-term advisers for the marketing component and short-term assistance for the banana pest management activities, the TIP, and the marketing component. The contract will be awarded through open competition to a U.S. firm or institution responding to an RFP issued by the GOSL. The contractor will be responsible for participant training, local logistical arrangements, financial matters related to the set-up and implementation of the TIP, the MPP, and the MOP, and will act as the procurement agent for the GOSL for all commodities related to the marketing component that follows arrival of the team leader in country. Following articulation of a national marketing strategy by the GOSL, the procurement process will be initiated with the team arriving in CY 1984.

##### b. Technical Assistance Contract (Land Registration Component)

The second contract will provide the technical assistance team for the Land Registration Component, including any short-term assistance associated with implementation of this activity. The contractor will provide a 14-person team consisting of a team leader for the component and 13 surveyors and adjudicators. This team will include, in addition to the project manager, two adjudicators, two survey party leaders, a cartographer, and eight survey technicians to lead the sixteen survey parties that will conduct the actual survey. It is estimated that the eight survey technicians will be hired in the West Indies (excluding St. Lucia) and the remainder will be from outside the region. The contractor will be responsible for all aspects of the survey and land registry component, excluding the TIP, including assistance to the GOSL in identifying, hiring, and training the additional members of the survey teams. In addition, the contractor will act as the procurement agent for the GOSL for commodities under this element of the project. This team is expected to be in place by late 1983, in order to complete the survey of areas financed by the project.

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c. Short-term Technical Assistance (Start-Up)

The following short-term technical assistance will be required for the project:

- (i) final design and construction supervision for the upgrading of seedling production facilities at Union and Bath;
- (ii) technical assistance to the GOSL for the development of a national strategy for development of agricultural marketing;
- (iii) technical assistance to the BGA for the installation of the mini-computer and for the initiation of the pest management program; and
- (iv) other short-term technical assistance needs arising prior to arrival of the technical assistance contractor for the marketing component, including short-term assistance in nursery management and in pesticide safety (the last may be contracted through the existing cooperating agreement with the University of California).

It is anticipated that the GOSL will contract for engineering services ((i) above). For the other areas, RDO/C expects to use its contracting authority to effect the procurements given the short duration of the assistance, the need to move rapidly to initiate the assistance and the probability that at least one of the areas (pesticide/safety) could be contracted under existing AID agreements.

d. Evaluation

A contract will be let to provide for technical assistance for the mid-term and final evaluations. This contract should be let to a single organization to provide for continuity of personnel between the two evaluations. RDO/C expects to use AID direct contracting procedures.

2. Commodities

To the maximum extent practicable, the two long-term contractors will act as procurement agents for the GOSL in the procurement of equipment and materials related to their particular areas of responsibility (land survey and registry and marketing). However, to facilitate the procurement of fertilizer and other agricultural inputs for the banana replanting component, RDO/C proposes to use AID-direct contracting through SER/COM. It is expected that fertilizer will be shipped in June and be of U.S. source. Therefore, the requirements of AID Handbook 1, Supplement B, Chapter 4C8 will be followed.

All procurement will follow standard AID procurement guidelines. However, a waiver is requested to permit the procurement of the 23 all-terrain vehicles for the land survey (22) and marketing (1) elements of the project based on the need to provide right-hand drive vehicles. RDO/C has

concluded that U.S. made vehicles are not suitable for the project for the following reasons:

(1) Traffic flows on the left, thus requiring right-hand drive vehicles. Left-hand drive vehicles are permissible, but their intensive use, as is envisioned under the project, could be hazardous. St. Lucia is mountainous with narrow, winding roads which present less than optimal driving conditions.

(2) The availability of spare parts is generally inadequate for proper service of American-made vehicles. Dealerships are exclusively tied to British, German, and Japanese vehicles. This is particularly relevant for Ministry mechanics, since most vehicles in public use are of British origin. Because of poor road construction, particularly in rural areas, the RDO/C feels that the lack of adequate maintenance capability for American made vehicles could be a major impediment to the implementation of the project.

For the above reasons, and under the special circumstances cited in Handbook 1B, Chapter 4c 2d, it is requested that a waiver of the source/origin requirements of Section 636(i) of the PAA be approved to allow procurement of up to twenty-three vehicles and spare parts from countries included in AID Geographic Code 935 for a total estimated cost of \$345,000.

### 3. Construction

Construction associated with upgrading the GOSL plant propagation facilities will be contracted through a local private sector construction firm in accordance with standard GOSL practices and in conformity with host country contracting guidelines. No other construction from AID funds is anticipated. The GOSL is preparing plans for the construction of a combined Land Registry and Survey Department, which they will construct as part of their contribution to the project.

### 4. Participant Training and Other

The technical assistance contractor for the marketing component will be responsible for handling the participant training activities and for all logistical arrangements associated with the implementation of activities other than the land registration survey (rental of offices, local and international travel, etc.). The land registration contractor will be responsible for all logistical arrangements, etc., associated with completion of the survey.

## B. Project Operation

### 1. AID Responsibilities

AID's responsibilities will be involvement in the procurement processes outlined above, monitoring project operations through its offices in Barbados and regular field visits, and participating in the mid-project and final evaluation. AID's monitoring and support function will be filled by a project officer to be assigned from the Office of Agricultural Development. That officer will be supported by a 25 percent of the time of an Assistant Project Development Officer, and assistance from the Regional Legal

Advisor and Mission Controller. With the filling of the newly created position within the Office of Agricultural Development, RDO/C will be able to manage the project effectively.

The heaviest implementation load on the RDO/C is expected to fall during the first year of project implementation, during which procurement of goods and services must be completed. Following arrival of the two technical assistance contractors, the implementation burden on the RDO/C will be reduced.

## 2. GOSL Responsibilities

The main branches of the GOSL to be involved in the project are the Ministry of Agriculture, the Ministry of Finance and Planning, and several parastatal agencies (principally the public-sector banks and the BGA). Other agencies will be involved in particular activities from time to time.

### a. Ministry of Finance and Planning

The MOFP will have overall responsibility for the project. The team leaders of both long-term teams will report regularly to the designated official in the Ministry (the Deputy Director of Planning). To assist the Deputy Director a full time accountant/administrative assistant will be assigned to help monitor the overall project. If, as planned, the Land Registry function is transferred from the MOA to the MOFP during the forthcoming reorganization of the MOA, then the MOFP will have operational authority over the Land Registration component. In the event that this transferral does not take place, the MOA will have day-to-day responsibility for this component.

### b. The Ministry of Agriculture

The MOA will be responsible for the upgrading of the plant propagation facilities, which are under its jurisdiction, and will support the operation of the MPU by providing an extension agent in the area of post-harvest handling of perishables. The Minister of Agriculture will play the key role in the implementation of the marketing component as a whole.

### c. Other GOSL

Three other organizations forming part of the St. Lucia government will be directly involved in project implementation. These are the St. Lucian Development Bank, the National Commercial Bank, and the Banana Growers' Association.

#### i. SLDB

The SLDB will serve as the principal financial institution for the project and will hold the funds for the land market fund (TIP) and the market promotion fund (MPF). Other project accounts will be held in this or the Commercial Bank, as convenient. The SLDB will assign an

additional loan officer to handle the TIP and will assign the loan portfolio for the MPF to its existing staff. This staff will work closely with the MPU staff to develop and process bankable loans in fresh produce marketing.

ii. NCB

The NCB, the bank serving the BGA, will provide the necessary financial services for the banana component and will serve as an alternate channel for traders using the MPF. It will in particular handle many of the working capital revolving accounts, since these are not handled by the SLDB.

iii. BGA

The BGA will be primarily responsible for the banana component, including technical advice to farmers on replanting, certification of readiness and need to replant, etc.

d. St. Lucian Private Sector

St. Lucian private sector traders, marketers, farmers, and suppliers will be active participants in the project. They will be the main participants and beneficiaries in the banana and marketing activities of the project, and will cooperate as well in the land registry activities.

Wherever possible, private sector associations of farmers and traders will be utilized to carry out project activities including the St. Lucian Agriculturists Association. Other private associations, such as the St. Lucian Association of of Farmers' Cooperatives (STAFCO) and the Chamber of Commerce, will also participate, as will individual private traders and growers. At this time there is no association of private traders, but formation of such associations will be a principal aim of MPU activities.

C. Implementation Schedule

The following table summarizes the main events in project implementation.

CRITICAL POINTS IN PROJECT IMPLEMENTATION SCHEDULE

<u>Event</u>	<u>Date</u> <u>1983</u>
Signature of Grant Agreement	March
Host Country Procurement Initiated for Long-term TA Contracts	April
AID-direct Procurement Initiated for Short-term TA in Marketing Strategy	April
AID Procurement Begins for Agricultural Inputs	April
Final Design for Seedling Facility Completed	June
New Land Legislation Adopted	June
Arrival of Banana Inputs	June
Arrival of Land Registry Team	October
Land Survey Begins and TIP Made Operational	November
Land Survey Commodities Contracted	November
Construction Initiated at Seedling Facilities	September
Agreement on Marketing Strategy Reached	September
End of 1983 Banana Replanting Season	October
Construction at Seedling Facilities Completed	December
	<u>1984</u>
Equipment Installed at Seedling Facilities	January
All eight survey teams operational	February
Short-term Technical Assistance in Nurseries	February
Marketing Technical Assistance Team Leader Arrives	March
Survey Pilot Area Completed and on Display	April
MPU Established	August
Market Promotion Adviser Arrives	October
Banana Reflows Begin	November
First TIP Loans Made	November
First MPU Loans Made	November
	<u>1985</u>
Mid-term Evaluation	January
All Funds Fully Capitalized (Banana Reflows Completed)	October
Market Promotion Adviser Departs	September
	<u>1986</u>
Final Evaluation	August
Land Survey Completed (Display Period and Final Adjudication for All Areas Outside Countries)	December
Team Leaders for Land and Marketing Depart	December

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D. Specific Operational Considerations Relating to the Main Components

Each of the three main components will be implemented essentially in isolation from the others, with the MOFP and AID providing coordination across components as necessary. Specific considerations with regard to each of the three main components are discussed below.

1. Land Registration and Ownership

The implementation of the land registration survey and the TIP are designed to be mutually supportive and therefore must proceed in parallel. Consequently, the TIP must be in place by the end of 1983 as the survey team moves into operation, so as to permit the survey team to present the TIP alternative to holders of family land as an option for resolution of their tenure problems. The financial plan for the project and the direct RDO/C procurement of short-term assistance for establishment of the TIP, referred to above, have been incorporated into the project design in order to ensure that the TIP is in place at the appropriate time.

Implementation of the land registration will proceed on an area-by-area basis. In each area, the process will involve the survey and registration of all parcels and the use of the TIP fund to individualize family lands on a voluntary basis.

The legislation must be in place prior to the beginning of the first phase and will therefore be a condition precedent to disbursement for the entire land registration and ownership component. Procurement of the technical assistance contract for the survey team must begin immediately, however, so that the contract is ready for signing by the GOSL and the contractor as soon as possible after meeting of this condition precedent.

2. The Market Promotion Component

The implementation of the market promotion component must be carried out in coordination with the realization of the other elements of the GOSL's market development strategy, including its decisions regarding the role of the public sector in marketing as reflected in possible restructuring of the Marketing Board, creation of a new marketing authority, etc. The intensive internal review of a sound marketing policy now occurring within the GOSL presents AID with a unique opportunity to expand our policy dialogue in terms of facilitating the GOSL's shift from direct public sector marketing activities to stimulating private sector marketing. To accomplish this, the project first will provide short-term assistance to facilitate the articulation of a new GOSL marketing strategy. Second, with a fully developed and sound policy framework in place, the project will move to a full-scale private sector marketing promotion program. This will include: a Market Promotion Unit (MPU), a Market Opportunity Fund (MOF), and a Market Promotion Fund (MPF). In addition, a Coordinating Council will be established as discussed below.

a. The Marketing Promotion Unit

The MPU will be established as a clearly-defined unit with responsibility for promotion of private sector marketing activities. The staff of the unit will consist of the following:

- the members of the technical assistance team for marketing (the Market Systems Adviser and the Market Promotion Adviser)
- two locally-hired professional employees who will be financed by the project and trained by the technical assistance team in the development of agricultural marketing systems
- an extension agent with expertise in post-harvest technologies
- a loan officer assigned by the SLDB (on a part-time or liaison basis)
- clerical and administrative personnel (two are included in the project budget)

b. The Coordinating Council

A Coordinating Council will be established consisting of representatives of the Ministry of Agriculture, the Ministry of Finance, the SLDB, and at least three private sector traders.

The Council will meet on at least a quarterly basis to review the work of the MPU, approve loans as necessary, and take other actions necessary to coordinate the work of the MPU with other components in the project or the sector.

c. Regulations Governing the Credit Funds

Regulations governing the operation of the Market Promotion Fund and the Market Opportunity Fund will be finalized with the advice of the Market Systems Adviser. Guidelines for these regulations are as follows:

i. The Market Opportunity Fund

The MPU will be empowered to release funds from the MOP. These funds will be made available to traders and others as necessary on a grant basis to accelerate the development of the fresh produce marketing system. They will be used to finance small, high-risk activities with a high potential to contribute to releasing a major barrier to expansion of the fresh produce trade. MOP monies may be used to finance activities falling into one of the following four categories:

- a. trial shipments of fresh produce to new markets or of new types of produce to existing markets
- b. experimental purchases of inputs or other measures that support the search for solutions to technological problems constraining market development (such as the high perishability of plantains)

- c. part-funding of market development visits by St. Lucian traders to export markets, trade fairs, etc.
- d. on-island training courses for private sector traders or their staffs.

A specific request for MOP funds must pertain:

- a. to the trading of priority produce (or processed derivatives) showing strong export market potential
- b. to products produced in St. Lucia
- c. to bona fide commercial grower/traders of St. Lucian nationality (or companies whose ownership is at least 50 percent St. Lucian) who request the funds for the purpose of expanding exports of fresh produce

The rationale, description, and size of the grant must be documented by the Market Systems Adviser and the Director of the MPU. The MPU may award a grant of up to \$2000 without recourse to the MPU Coordinating Council. No grant may exceed \$4000 nor may total grants to a single individual exceed \$4000 over the life of the project without Coordinating Council approval.

The Coordinating Council and AID will receive quarterly reports on all uses of the MOP for their review.

#### 11. The Market Promotion Fund

The Market Promotion Fund will be made available to traders on a loan basis through the SLDB or another cooperating financial institution. In the latter case, the bank making the loan will borrow the funds from the SLDB at 8 percent for onlending at 12 percent. Loans from the SLDB directly to traders will be at 12 percent for terms of three to five years.

The eligibility criteria for the loan funds will be essentially the same as those outlined for the MOP, with the following additions:

- a. Each loan must be assessed for financial feasibility by the MPU in cooperation with the SLDB.
- b. A limit of US\$50,000 or 80 percent of the total cost of the investment will be set, with loans over US\$25,000 requiring the approval of the Coordinating Council .

Loans may be made for the following purposes:

- a. Establishment or expansion of packing facilities and equipment for such facilities, including cold stores, warehouses, etc.
- b. Purchase of trucks equipment to be used in transporting fresh produce

- c. Working capital to finance export of fresh produce or grading, packing, and processing of such produce
- d. Other investments promoting the development of the fresh produce export trade.

3. Short-Term Support to Bananas

Upon formal authorization, the following arrangements will be concluded:

a. GOSL/AID/BGA

The GOSL will agree to loan the CIF value of inputs (approximately \$900,000 million) to the BGA at 6% interest with a 15 month grace period from date of importation. The BGA will in turn agree to allow the NCB to automatically transfer an amount equivalent on average to 1/12 of the loan each month for 12 months to the GOSL/AID "Agricultural Development Fund" account, following the fifteen month grace period. This deduction will be made directly from the BGA account in which its weekly export proceeds check is deposited prior to any withdrawal by the BGA. Since checks for export sales are deposited weekly (or bi-weekly dependent upon export shipments) the NCB will deduct an estimated pro rata amount from each check deposited; a final transfer will be made each month to assure that the scheduled amount for that month plus accrued interest has been transferred to the GOSL/AID account.

In addition, the BGA will agree to the monitoring of its activities related to this account by representatives of the GOSL's Development Bank (SLDB) and AID.

b. GOSL/SLDB

Subject to approval by AID, the GOSL and SLDB will establish procedures and a schedule for monitoring BGA's receipt, storage and distribution of inputs to eligible growers. The BGA will inform AID on a semi-monthly basis of draw-downs by growers of input stocks.

c. Distribution of Inputs

In order for the desired impact on production and replanting to be achieved, these replanting inputs be made available to a large number of growers on a timely basis. Simple and enforceable criteria must be used to determine who will be eligible for the inputs if planned production and repayment are to be realized.

These criteria will be developed by the BGA for approval by AID prior to distribution of the inputs. It may be appropriate, for example, to limit replanting support to definable areas between 1/2 and 10 acres. This would prevent inputs being used for supplying random replacement of individual mats and would benefit most growers. At a 20% replanting rate, these limits would include banana farms between 2.4 to 50 acres in size.

Further, eligibility to purchase replanting inputs will be restricted to growers who had prepared their fields in accordance with

recommended practices and who had sufficient planting materials to replant the area in question. This preparation (grower investment) would be certified by a BGA/MOA extension agent. In addition, the grower would have to meet credit conditions as established by the BGA (e.g., growers with over-extended lines of credit with the BGA would be excluded).

Careful monitoring of the guidelines established will be necessary to assure inputs are made available to those growers who can appropriately utilize, and repay, input assistance. These guidelines must be followed strictly by BGA/MOA extension agents and SLDB representatives.

It is important that recommended practices be carefully followed. This may require adaptation of current WINBAN recommendations to reflect current costs of inputs (e.g. expanded use of direct placement of fertilizer in the soil rather than broadcast application around the banana mat or planting).

d. Procedures for Grower Repayment

It will be important that the BGA establish understandable and enforceable repayment procedures for growers receiving inputs on credit. Subject to approval by the GOSL and AID, BGA will establish: (a) an automatic input cost (deduction from weekly production sales), or (b) a monthly repayment schedule. The precise procedures will depend upon the larger issue of how the BGA plans to rationalize existing grower accounts and repayment procedures. Past experience indicates that specific grower repayment procedures should be an integral part of the GOSL/BGA Loan Agreement, to assure BGA enforcement of individual grower repayment requirements.

e. Receipt and Storage of Inputs

The BGA will be responsible for the receipt and proper storage of GOSL/AID inputs separate from other commodities. The GOSL/AID, acting through the SLDB, will have access to commodities and records to assure proper handling.

f. Breakdown and Distribution of Inputs

The BGA will be responsible for the distribution of inputs to eligible growers for replanting definable areas (not "supplying" of individual mats) in accordance with agreed upon procedures. The GOSL acting through the SLDB will have access to distribution records and will spot check growers' replanting to monitor implementation.

The BGA will report to GOSL/AID semi-monthly on the status of grower draw-downs of inputs and replanting activities.

g. Monitoring of Input Inventory

The SLDB, acting for the GOSL/AID, will monitor storage and distribution of input inventory. The SLDB will report semi-monthly to GOSL/AID as to status of, and any discrepancies in, this activity.

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h. Grower Replanting

Depending upon the weather, replanting typically takes place during the months of June to September. If growers are to replant at the level envisioned in this Project, fields must be prepared and inputs ready no later than July.

i. Procurement of Computer Capability

The BGA will procure from its own resources local technical assistance to analyze its computer needs to maintain up-to-date cumulative grower accounts. Subject to AID's internal review process, an appropriate mini-computer will be purchased with AID funds for the BGA. In addition, appropriate software and programming and installation assistance will be required. Prior to the procurement, the Office of Data Management will be consulted as required under AID procurement rules. It is expected that the computer and software will be procured by AID for the BGA.

The BGA will provide AID with monthly progress reports indicating the status of the computer capability. It is essential that growers' records be current and computer procedures be operational by the time (month 13) monitoring of grower repayments is to begin.

j. Survey of Replanting Activities

The BGA and SLDB will survey replanting activities to monitor field practices and to estimate probable month(s) of the "plant" (first) crop harvest. Reports will be made available to the GOSL and AID. Typically, the plant crop will be harvested between the tenth and twelfth month after replanting.

k. Repayments to the BGA

Starting approximately eleven months after replanting, the growers will begin to receive proceeds from the plant crop harvest. This will trigger regular repayments to the BGA. Repayments will continue for twelve months on a cess deduction, or flat monthly repayment basis. This schedule will allow the grower to repay the initial input costs from the proceeds of the harvest.

The BGA will provide the GOSL and AID with monthly reports on the status of grower repayments and will identify any delinquency issues faced by the BGA.

1. BGA Repayments

Beginning with the 16th month after receipt of inputs, BGA will begin to repay the loan at the rate of 1/12 a month on average plus accrued interest. This repayment will be by automatic deductions from BGA export receipts at the NCB in accordance with a schedule to be agreed upon, transferred to the "GOSL/AID Agricultural Development Account" at the NCB.

As proceeds from BGA automatic repayments of the Loan accumulate in the "GOSL/AID Agricultural Development Account" (month 16 through 28). These funds will be jointly programmed by GOSL and AID.

m. Planting Survey

The BGA and SLDB will survey grower plantings (first plant crop and first ratoon crop) to monitor status of grower practices and estimates of production yields. The first ratoon harvest will take place approximately eight to ten months after the plant crop harvest. Reports will be made available to AID.

The following chart illustrates these activities on a calendar month basis.

V. PROJECT ANALYSES

The economic, technical, financial, administrative, and social analyses completed for each project component are presented in Annexes C through F. Finally, Annex G presents the Environmental Assessment carried out for the project. It is the overall conclusion of these analyses that the project is feasible and will be of significant benefit to the economy and people of St. Lucia.

These analyses are summarized in the following sections.

A. Economic and Financial Analysis

St. Lucia's economy rests heavily on the agricultural sector. The future expansion of this sector will depend on farmers being able to produce high value crops with a realistic potential of export and on the ability of the marketing sector to bring these generally highly-perishable crops to export markets in good condition. The small size of the domestic market and the high factor cost structure of the St. Lucian economy preclude any other strategy for development of the island's agricultural economy. The project addresses the set of constraints that currently prevent St. Lucia from expanding its production of high-value, high-perishability crops. These constraints include poor incentives to make long-term investments in land due to insecure tenure and the absence of adequate production credit; low acreages in tree crops of the appropriate varieties for export and limited possibilities for expanding these acreages due to insufficient planting material, and a weak and underdeveloped external marketing system.

In view of the concerns regarding project benefits raised during the PID review and the importance of the project's components to the future development of St. Lucian agriculture, an attempt has been made to quantify the benefits expected from the project in order to provide an estimate of the project's return to the St. Lucian economy and the financial return expected for the private farmers and entrepreneurs participating in project activities. Despite the very limited data base upon which to build an appropriate cost-benefit analysis of the project, economic analyses of the project and of the two main markets that it will affect have been undertaken to address the following three issues:

1. The return to the St. Lucian economy expected from the land registration and tenure individualization activities, based on the anticipated increase in the productivity of agricultural land, the demand for agricultural land, and the expected response of the land and investment capital markets to increased availability of credit for the purchase of land and to provision of secure title to such land.
2. The profitability of expanded production and marketing of the crops targeted in the marketing component for the traders and farmers participating in these markets and for the St. Lucian economy as a whole, when compared to the cost of capital in St. Lucia, and the existence of opportunities for market expansion that are likely to yield a return sufficient to justify investment in them.
3. The profitability of increased replanting of bananas from the point of view of the farmers and the probability that they will

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respond to the replanting program so as to bring about the desired increase in production and foreign exchange earnings over the short term.

The overall conclusion of these analyses is that under plausible assumptions, the project activities have an internal rate of return on the order of 10 percent for the St. Lucian economy as a whole and that they are sufficiently profitable for private-sector participants to induce them to participate. The conclusions with respect to the three activities are as follows:

1. The Land Registration and Tenure Individualization Components

The economic analysis completed for the land registration and tenure individualization (TIP) activities of the project shows that this activity can probably be justified on the basis of its contribution to the St. Lucian economy. The analysis was conducted on the basis of estimates of the benefits based on two sources of increased agricultural production:

- a. Increased production from lands presently not in production because the owners are unknown: These lands would be identified and sold by the GOSL as a result of the survey, bringing them back into productive use. Experience elsewhere in the Caribbean indicates that such "found land" will amount to approximately one percent of the total agricultural land area, or 700 acres. The market value of such land is assumed to represent the capitalized value of its future production.
- b. Increased production on family lands converted to individual ownership through the registration and TIP process: The increase in agricultural output as a result of this process is estimated on the basis of relative rudimentary investments, such as improved drainage and switching to higher value tree crops.

The financial analysis of this component also examined the St. Lucian land market with a view to estimating the probable response of buyers and sellers to the clarification of land title and the TIP element. The conclusions of this analysis are that: a) the current land market is seriously restricted by the tenure situation as well as by other factors such as the present liquidity crisis in the banking system, b) there is substantial "latent demand" for land for agricultural (and other) purposes that would become effective demand if the tenure problem were resolved, and c) farmers taking out mortgages through the TIP fund will be able to repay their mortgages from the production of their land.

The current liquidity crisis in St. Lucia has reinforced the long-standing unwillingness of the St. Lucian banking community to provide credit for land purchase or agricultural production, unless it is secured by a clear land title or other collateral. Extremely few loans have been made over

the past year in either of these areas, although there is general agreement in the banking community that there would be considerable demand for such loans were money available. There is considerable activity in the land market for properties where clear title exists, but the unavailability of secure title for most farm land introduces long delays (6-12 months) into the process and generally limits loan activity to purchases involving larger parcels.

The strong demand for land is demonstrated by the high prices quoted for recent sales of agricultural land (as opposed to urban land or land with potential for touristic development). This demand remains strong even in the face of current low prices for St. Lucia's agricultural produce (especially bananas), which suggests that the response to greater mortgage availability would be substantial. This remains an untested hypothesis, however, which can only be verified through experimentation once the Survey has removed the barrier posed by lack of clear title.

## 2. The Market Promotion Component

The economic and financial analysis of the production and trading of high-value crops indicates that the return to the St. Lucian economy and the farmers and traders is sufficient to justify the investments involved. This analysis was completed by estimating the current profitability of trading and production operations for the five target crops. These estimates were then used to calculate the projected return from expanded operations, based on the increase in total production projected on the basis of current planting programs, and the potential expansion in trade in these goods, based on the existence of regional and extraregional markets as well as the current level of operations in these markets. Although these estimates necessarily involve considerable extrapolation from available data, they indicate returns for the farmers and traders are highly variable (in the range of 12 to 80 percent), but which on balance are expected to be sufficient to call forth the investments projected, even allowing a considerable margin for error.

Although the current liquidity crisis has prevented the formal lending institutions from making any loans for expansion of trading and production activities, there is strong anecdotal evidence that private entrepreneurs are interested in expanding their operations and, in fact, are actively seeking financing to do so, but are unable to find resources to borrow commercially. To date, these operations have had to be self-financed, which has hindered their growth, but substantial profits are nonetheless reported in several instances. Most of the traders, however, remain small and are judged by the bankers to be too risky to merit aggressive marketing of credit on the latter's part. Provision of credit through the marketing promotion fund is therefore expected to be an important factor in stimulating the growth of these enterprises.

## 3. Support to Banana Production

The analysis of the profitability of increased banana replanting indicates that it produces a significantly higher income for the farmers than replanting at the current low rate. Since concrete data on average yields on the third and higher ratoons are not available, WINBAN and design team estimates of the rate of decline in average yield were used to estimate the return to the farmers of alternative replanting strategies. These estimates

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support WINBAN recommendations to replant after the second ratoon. The highest net income is obtained by the growers on the second ratoon crop. The net income declines progressively from this point until, by the fifth ratoon the yield is not sufficient to cover the grower's full costs, including inputs, labor, and land.

The analysis of optimal replanting rates shows that a farmer who has just harvested the third ratoon who replants after this and the subsequent third ratoon can expect to receive a cash flow with a discounted value of approximately \$2,860 over five years (at a 13 percent discount rate) compared to a net discounted cash flow of approximately \$1,840 if he or she does not replant until the fourth ratoon.

The economic analysis demonstrates that the assistance to replanting produces a return to the St. Lucian economy sufficient to justify the investment. Assuming a current average replanting rate of 11 percent per year, the discounted net income to the growers from the 2000 acres affected by the project would be approximately \$2.0 million without the project, compared to \$6.6 million if replanting is sustained at the 20 percent annual rate and \$5.0 million if replanting declines to a 14 percent annual rate (assuming a four year time horizon and a 15 percent rate of discount in all cases).

#### B. Technical Analysis

The project as designed is technically sound and does not pose serious technical difficulties that call into question the feasibility of implementing the project as designed. The following technical issues received particular consideration during design and merit brief discussion here. They are further discussed in the Technical Annex covering the various components.

##### Land Registration Component

#### 1. Description of the Operation of the Land Adjudication Act and the Land Registration Act in the Context of St. Lucia

Under the Project the enactment of a series of land laws will be a condition precedent to the disbursement of funds. These laws are the Land Registration Act, the Land Adjudication Act and the Land Surveyors Act. They are critical elements to the establishment of a Land Registration and Adjudication System which the Project proposes to accomplish. The land is first aerial mapped, then surveyed using a "general" boundaries concept, and then formally registered. Grievances, complaints, and disputes which arise during this process are resolved according to precise guidelines established under this system.

#### 2. The Tenure Individualization Fund; the Need for its Existence and the Way in Which it Will Operate

The problem of "Family Lands", (where if a property owner dies not having made a will, his property is inherited in undivided shares by all of his heirs), is critical to the eventual development of the agricultural sector of St. Lucia. Through the use of a small amount of seed capital, the Project proposes to leverage other Government and private sector monies to provide land purchase credit to small farmers who wish to buy out other family members. It is predicted, and indeed proven in the financial analysis to this

Paper, that the clarification of the family land issue will lead to increased investments in the land, and therefore, increased production and productivity. It should be emphasized that the process will be entirely voluntary with no coercive measures used to influence decisions regarding buying or selling.

#### Market Promotion Component

##### 1. The Role of the Market Promotion Component in Facilitating Fresh Produce Market Development

Exports of fresh produce, other than bananas, from St. Lucia has been typically sporadic and of relatively low volume. This less than successful export performance can be attributable, in part, to a lack of coordination between the domestic production and marketing sectors and the absence of an effective export marketing system for fresh produce.

Yet strong evidence indicates that there is encouraging potential for the marketing of project-assisted crops and for other established commodities grown in St. Lucia. The conclusion is drawn that if export marketing systems are not put in place for tree crops and other fresh produce, then successful market penetration and sustained increases in export volumes will certainly never be attained. The three-pronged marketing program: establishment of a trade oriented Marketing Development Unit, a Marketing Opportunity Fund, and a Marketing Promotion Fund, will establish the minimum catalytic structure which is essential if the GOSL's diversification program is to be successful in the long-run.

##### 2. The Rationale for Selection of Key Crops for Market Development Assistance

Mangoes, oranges, plantains and regionally traded bananas have been selected by the Project Paper design team for market development assistance under the Project. This selection was the result of extensive market research by experts both within, and outside of, the Region and was based on an analysis of both future and present market potential for these crops. Also considered was St. Lucia's ability, through project support and guidance, to produce acceptable fruit for these markets in terms of quality, quantity and timeliness of delivery.

Under this activity of the Project, the Ministry of Agriculture's tree crop propagation facilities will be rehabilitated and limited technical assistance will be provided in propagation management. This will be performed in order to cut the mortality rates of the planting stock being produced, facilitate more stable production levels, and expand the production volume of the combined facilities to, at least, 90,000 seedlings annually.

#### C. Administrative and Institutional Analysis

##### 1. Overview

With the exception of the Market Promotion Unit and the Land Registration Survey, the activities supported by the project represent fairly modest expansions of activities already being carried out by the institutions

involved. For this reason, implementation of the project is not expected to pose serious difficulties for the institutions involved.

## 2. The Land Survey and Registry Element

The Survey, which does represent a new activity for the GOSL, is essentially a one-time operation that is set up and administered as a special unit. Since the duties of the GOSL organization responsible for land registration will not be increased by the Survey or by the system that succeeds the current land registration system, institutional considerations are not expected to pose a barrier to this reform. The personnel who will staff the new system will be trained as part of the Survey process itself, which will thus leave in place the institutional capacity to continue the system.

## 3. The Market Promotion Component

### a. The Marketing Promotion Unit (MPU)

The MPU will be established initially on an experimental basis, with its own staff and facilities. It will thus not draw on resources of the GOSL and will be institutionally and administratively self-contained.

Institutionally, this approach has both important advantages and disadvantages. On the positive side, it provides the MPU with an opportunity to prove itself and to establish an institutional identity as a service organization for the private sector traders. Its independence will assist it in establishing the initial atmosphere of trust with the private traders without which the unit cannot operate.

This very independence, however, makes it difficult to predict how and in what form the functions of the MPU will be carried on after the project. While we are confident that at least some of its key functions will continue, its future institutional structure and financial base cannot be clearly defined at this time.

Despite this and other problems discussed in the Technical Analysis, it has been concluded during the design process that an independent MPU was the best available alternative and that as an entity, the MPU had a critical role to play in expanding private sector marketing. The expansion of the marketing subsector requires that the promotion function be filled in order to bridge the gap between the farmers, the traders, and the overseas markets. Until such time as the private sector becomes sufficiently developed to make these linkages itself, there is a critical need for this support to be provided.

### b. The Marketing Promotion Fund (MPF)

Private banks at present do not provide credit to the private marketing sector; which they view as too risky and small-scale to merit advancing funds. The only bank currently providing working capital to this group is the state-owned National Commercial Bank. No bank has made a loan for capital improvements to a marketer's operations during the past year. The private banks nonetheless expressed some interest in managing such a fund if an adequate interest rate spread were established.

This alternative, however, was not totally acceptable to the GOSL. It requested that the fund be placed in the SLDB, rather than the NCB. The SLDB has greatly improved its financial position since it was established two years ago by merging two insolvent public banks. Through aggressive loan collection, a moratorium on further loans, infusions of GOSL capital, and substantial internal cost-cutting measures it has returned to a position of financial solvency. While it cannot be considered to have reached full financial health, it is certainly much further along the road than it was a year ago. Provision will be made, however, for private bank participation. They will be able to borrow from the MPF of the SLDB for on-lending to the trader-clients.

#### 4. Banana Replanting Component

The two agencies involved in the replanting program are the Banana Growers Association and the National Commercial Bank. As discussed in the administrative analysis annex, these two organizations have the capacity to carry out the tasks assigned to them for the implementation of this component. In both cases, the activities funded by the project constitute a continuation of their current programs and, therefore, their respective staffs and organizational procedures have in place the capabilities needed for this program.

The National Commercial Bank currently handles the banking operations of the BGA, including processing the weekly payments of banana exports to the U.K.. The minor changes in their current procedures necessary to make the programmed deductions for repayment are not expected to create any problems for this organization. AID will closely monitor the deduction procedure, however, to ensure that the NCB is not coming under undue political pressure to modify the deduction program.

The input program will require the BGA to distribute and monitor the use of fertilizers, using its existing extension, logistical, and financial management staff. The specific tasks required for the distribution and monitoring activities are expected to fit into the existing programs of the departments involved. The expanded computer facilities provided by the project should improve the BGA's capacity to monitor its financial affairs, leading to a net improvement in the BGA's management of its existing operations as a result of the project. The SLBGA and MOA staff of Banana Extension Specialist (approximately 18 in number) will have the responsibility of certifying that each eligible grower has properly prepared his field for replanting. During the three month replanting season, this will be a major activity for the extension specialists and may temporarily defer other routine duties. Once replanting has taken place, the extension agents are only expected to monitor grower response to the program on a "spot check" basis, this ongoing additional workload involved is not expected to pose a problem for the organization.

#### D. Social Soundness Analysis

The social soundness analysis completed for the project covers four topics:

-- the family land problem and the project's impact on it

- the relationship of the MPU, the Marketing Board and other elements of the GOSL's marketing strategy to the small-scale traders ("hucksters") and others in the marketing system
- the equity impact and acceptability to the farmers of the replanting program for bananas
- the role of women in the agricultural sector, including the marketing subsector

### 1. Land Registration and Tenure Individualization Component

The most difficult problem facing the land registration and tenure individualization efforts is family land. The large number of parcels held in such tenure will greatly complicate the work of the land adjudication teams. How the claimants of family lands will react to the opportunity to clarify and simplify title that is presented by the project is largely unknown, although the legal framework and adjudication process is so designed as to encourage such clarification in as simple a way as possible and not to force upon rural residents a system alien to the interests and desires of the people involved.

The tenure individualization program is envisaged as a voluntary mechanism for facilitating the formation of viable economic units out of the family land holdings. That program should be of considerable benefit in speeding the adjudication process.

### 2. Marketing

The problems of marketing fresh produce derive from the paralysis of the current Marketing Board and the inability of the private hucksters and traders to offer stable and assured markets for local production. The possible solutions to these marketing bottlenecks are numerous, but are constrained by a lack of resources in the public and private sectors and by uncertainty regarding the wisdom of committing the resources that do exist for this purpose. The small size of the country and the instability of world trading patterns combine to paralyze or at least limit even the most adventurous.

From the point of view of the producers, the absence of organized marketing (inadequate prices, lack of buyers, and lack of transport) is a serious constraint on their decisions about investments in the farm. The project's aim of developing a strategy for reducing these constraints is critical to the achievement of the goals of the land registration component.

### 3. Banana Replanting Component

This project will provide the small and large scale farmer with what they say they need: input resources to accelerate the replanting of their banana fields. The project also will provide an opportunity for growers to make a clear market place choice as to the extent of their replanting investment.

As a result of ongoing WINDIAN research and SLBCA extension efforts, the basics of modern production are known (if not always followed) by

the St. Lucian growers. The project will accelerate the rate of adoption (and some extent, foster relevant adaptation) of WINBAN recommended practices. The availability of adequate inputs will benefit small and large grower alike. If any one group takes added advantage of this scheme it will be more aggressive (typically medium size) growers who understand and want to improve economic productivity.

While the project does not conflict in a farming-practice sense with tradition, it does offer a change in the business-practice of farming. Historically, input credit has been financed by a "cess" deductions from each grower's export sales. Unfortunately these cess deductions are often at a low rate and over such a long period of time that the economic link between input cost and output returns is lost. This combined with a mixed history of enforcement of "cess" accounts has led to cumulative indebtedness by growers, often long after the economic returns have been received by the inputs.

This project will provide growers with a clear market choice. He or she will have the opportunity to purchase on credit all necessary inputs to replant bananas according to WINBAN recommendations. The inputs will be at full costs plus 8 1/2 interest. More to the point, repayment will be over a fixed time period not burried in a tangle of "cess" deductions. This clarity about "purchasing credit" will help growers make individual economic judgements about the amount to replant, and will skew the program towards the more aggressive farmer who is prepared to incur debt to strengthen their production potential and productivity.

#### 4. The Role of Women in St. Lucian Agriculture

The project as designed takes into consideration the central role in St. Lucian agriculture played by women. Women have traditionally been involved in all aspects of agricultural production in St. Lucia, and the importance of their contribution has increased in recent years as greater numbers of men left agriculture for jobs in the urban areas or overseas. At present 40 percent of the agricultural labor force are women.

Women have also traditionally taken the lead in the marketing of agricultural products. The majority of the hucksters, small-scale traders who market fresh produce domestically and within the region, are women. This group includes both women who work as hucksters on a full-time basis and women farmers who engage in huckster trade as a supplement to their income.

Several project activities are expected to involve these women in the implementation of project-funded programs, although no project component has been designed specifically as a "women in development" activity. In particular, efforts will be made to ensure that women hucksters and traders are involved in the market promotion activity to give those traders who desire to expand their operations an opportunity to do so through the project.

Women also constitute a significant (but unknown) percentage of government employees and will therefore be involved directly in implementing project activities. Many of the technical personnel employed at the seedling production units, for example, are women.

E. Environmental Assessment

An Environmental Assessment has been prepared for the project and is available as a background document to this project paper on file with LAC/DR/RD.

The Assessment examined potential primary and secondary environmental impacts from project activities. Primary impacts include effects on the natural/physical environment and effects on the human environments. A detailed report on pesticide use in the project was prepared as part of this assessment and is included as Appendix 3 to the Environmental Assessment. This report makes specific recommendations regarding pesticide use, which have been incorporated into the design of the project. These activities are expected to improve pesticide management capabilities in St. Lucia, through the following outputs:

1. Improved understanding of safe pesticide handling and application techniques among those farmers replanting bananas under the project, through participation by extension agents in training workshops and through provision of support to these agents in the form of materials produced by the Extension Communications Unit of the MOA.
2. Assurance that personnel handling pesticides funded by the project will be protected by including them in the workshops, providing protective supplies, and facilitating the monitoring of their health.
3. Petitioning of pesticide manufacturers' assistance in gaining WHO registration of the use of their products on the tree crops being promoted by this project with the assistance of S&T/AGR.
4. Strengthened capabilities of the GOSL to regulate and monitor pesticide use by providing formal training for key GOSL personnel in the University of Miami pesticide program or a similar program.

These outputs will be produced through the project, working in cooperation with the St. Lucia Pesticide Control Board, as part of project activities in the Market Promotion and Banana Support Components. The St. Lucia Pesticide Control Board was created in 1982 following adoption of the Pesticide Control Act by the St. Lucia House of Assembly in 1975. This act makes provisions for the control of the manufacture, importation, sale, storage, and use of pesticides, but was not officially proclaimed until late in 1982. The Board has now been established to develop regulations and enforcement procedures. Progress has been slow, however, due to a lack of resources and personnel.

The project will thus afford an opportunity to stimulate activities provided for by the Pesticide Control Act through training of enforcement personnel and the provision of technical assistance and supplies. To reinforce the project's support of the Board, the project will coordinate its pesticide management activities through the GOSL designee on the Board.

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## VI. MONITORING PLAN

The overall guiding philosophy of the monitoring plan is that it serve as a management tool for project implementors and administrators. It should not be seen primarily as having a policing or control function, but rather as an integral part of the project itself allowing managers and staff alike access to information on the day to day progress of the project's activities. As such the Monitoring Plan, together with the Evaluation Plan, are tied together into an information system for overall project management.

An additional element of the monitoring plan which is critical to its proper functioning is that it be designed to carry information in both directions; that is to say, from project staff and intended beneficiaries to the managers, and from the managers back again. This last element is most important in identifying, in a timely fashion, any bottlenecks, problems, or possible solutions from all participants in the implementation process.

In summary fashion the individual data requirements for such a system are presented for each component below:

### A. Tenure Individualization Element

As an experimental program outflows from this fund will have to be monitored carefully. Since the fund is proposed to be located in the SLDB, they will have primary responsibility for this task. Recommended monitoring activities should include but not be limited to the following:

- 1) Within three months of the receipt of USAID allocations to this fund, and every three months thereafter, the SLDB will submit a report to the GOSL and USAID on the status of: a) the number and size of family land parcels surveyed by the Land Registration component; b) the number of statutory trusts and trusts for sale which have been, or are being, created with their respective land area; c) the number, size and value of parcels of family lands which have received, or have requested financing under the provisions of this component; and d) the status of requests pending financing.
- 2) For those land transfer activities which have financed under this project the SLDB will also inform USAID and the GOSL, on a quarterly basis, the terms and conditions of those mortgages, specifying in summary form: a) acreage financed; b) source and amount of down payments applied; c) source and form of payments to co-heirs or other sellers; d) interest rates charged by source of financing; e) the value of principal amounts outstanding; f) amounts and application of mortgage payments received; g) any payments in arrears.

Project management will also be responsible for monitoring the need and effectiveness of short-term technical assistance in support of the fund and overall sub-component activities.

### B. Land Registry and Adjudication Element

The implementation of this system is a fairly straightforward and pragmatic series of activities which are explained in detail in the Technical Annex and Implementation Plan for this component.

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Nevertheless, it must be monitored carefully to insure that all of these activities are, in fact, performed in proper sequence and in a timely fashion. It is therefore proposed that in addition to the normally accepted and utilized evaluation and reporting exercises expected in a project of this type, a less formal "management by exception" principal be adopted. That is to say, that there be a complete and total exchange of information between the Field Survey Teams up through the Party Team Leaders to the Registration Project Manager and back again. This exchange of information, in the absence of problems or bottlenecks, would normally be through the formal reporting requirements established by the project. Nevertheless, when problems or special cases arise an informal system of information flow must also be in place which will allow for their speedy and efficient resolution.

In terms of overall component management the Monitoring Plan should require monthly reporting to the Registration Project Manager and quarterly reporting to the Ministry of Finance and Planning as to: a) parcels and acres surveyed; b) conflicts received; and, c) conflicts resolved. Progress reports will be prepared by Adjudication Area and by Section within each Area on a monthly basis and will describe: a) the Areas and Sections declared as being subject to the Land Adjudication Act; and, b) the date when work on each phase of each section is started, completed, finalized and sent to the Registry.

Primary responsibility for monitoring will be vested in the Survey Party Leaders who will make daily checks on each Survey Crew and who will take immediate remedial action to rectify deficiencies. Serious problems will be reported by the Survey Party Leaders to the Adjudication Officers and, when appropriate, by the Adjudication Officers to the Registration Project Manager for remedial action.

### C. Market Promotion Component

Monitoring activities for this component will be divided into those activities which are to take place at the propagation facilities, and those which are to involve market promotion.

The propagation activities should be monitored quarterly as to the actual state of the nurseries, number and condition of seedlings by variety in inventory, and the number of seedlings by variety distributed to farmers. Operating costs of the nurseries should also be reported quarterly. Additionally, monitoring activities should be carried out concerning farmer care of the seedlings once they leave the nursery, planting rates on farmer lands, and husbandry practices.

The market promotion activities would be monitored in relation to the usage of the two funds and the promotion activities themselves. Concerning the former, data should be collected dealing with the selection criteria for the granting of the loans and grants, the actual usage of the monies by traders, the profitability of the trading ventures engaged in, and the actual liquidity of the funds in terms of outflows and inflows.

Concerning the latter, information should be collected weekly dealing in exported perishable commodities by type, volume and price. Trader margins between export and farmer prices should also be monitored. Additionally, since the Promotion Unit will be collecting data on marketing

opportunities as well as providing other marketing services to traders, periodic monitoring of the timeliness and appropriateness of these services should be performed.

D. Banana Replanting Component

The critical monitoring issues for this component are three: 1) farmer willingness to receive credit for inputs under the terms of the project; 2) actual usage of the inputs on replantings of bananas, and 3) farmer repayments through the additional deductions on their individual export receipt accounts.

Responsibility for the carrying out of these activities will lie with the extension agents of the SLDB in the case of farmer usage of inputs, the SLBGA as to the progress of farmer repayments, and the NCB as to the status of the SLBGA deductions and the accumulated balance in the "Agricultural Development" account.

As described in the Implementation Plan, the specific data points to be collected as well as the responsible institutions are as follows:

- 1) On behalf of the GOSL, the SLDB would monitor: receipts, storage, and security of inputs, distribution of inputs to eligible growers, and the proper utilization of inputs by growers as well as the status of the new mats (estimated date and yield of harvest);
- 2) The SLBGA would report to the GOSL and AID as to the progress towards the implementation of the computer capability to up-date and keep timely records of grower credit transactions;
- 3) The SLBGA would report on a monthly basis the status of grower repayments, as well as any delinquent account problems; and
- 4) The National Commercial Bank would report monthly to the GOSL and USAID the status of the SLBGA deductions and the accumulated balance in the Agricultural Development Account (i.e. Banana Reflow Account).

E. Regular Independent Audits

Project management will engage the services of an independent public accounting firm to monitor the delivery and receipt of all commodities as well as to conduct a semi-annual audit of each component and a close-out audit for the project upon completion.

In summary, the monitoring function of the project will be vested principally with the overall project management, and in turn with the various agencies and managers responsible for component implementation. It is critical facet of project implementation, and has been requested time and again by the GOSL.

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VII. CONDITIONS PRECEDENT & COVENANTS

The following Conditions shall apply for the Project and shall be incorporated in the Project Agreement:

A. Source and Origin of Commodities, Nationality of services

Commodities financed by A.I.D. under the Project shall have their source and origin in the Cooperating Country or in the United States except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the Cooperating Country or the United States as their place of nationality except as A.I.D. may otherwise agree in writing.

Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of United States.

B. Conditions Precedent

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

- (a) An opinion of counsel acceptable to A.I.D. 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) A statement of the name of the person holding or acting in the office of the Grantee specified in Section 8.2., and of any additional representatives, together with a specimen signature of each person specified in such statement;

Disbursement for Banana Replanting Support. Prior to any disbursement under the Grant, or to issuance by A.I.D. of documentation pursuant to which disbursement will be made for the Banana Replanting Support component of the Project, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence of establishment of a loan fund and implementation procedures hereunder, for use by the St. Lucia Banana Growers Association (BCA) in making available funds to farmers for the purchase of commodities eligible under this component. The terms to the BCA shall not be less than 6 percent per annum simple interest repayable in 12 monthly installments with a 15 month grace period for repayment of principal and interest. The terms by BCA to the farmer shall be not less than 8-1/2 percent per annum, repayable in 12 monthly installments with a 12 month grace period for the repayment of principal and interest;

(b) Evidence that the Grantee and the BCA have established a repayment system for the farmers' repayment to BCA based upon "check off" procedures with regard to the "Geest Check" to include (1) formal, written instruction by

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the BGA for the National Commercial Bank to deduct planned reflow payment from sales receipts prior to deposit in BGA account; and (2) formal agreement between BGA and the Grantee that the BGA will carry out its responsibilities in accordance with the requirements of the AID Project Grant Agreement;

• (c) Evidence that the BGA has appropriate authority and responsibility to implement this Project component and that the Grantee will monitor BGA performance under this component; and

(d) Such other information and materials as A.I.D. may reasonably require.

Disbursement for Land Registry and Titling

Component Except Equipment. Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the land registry and ownership program component of the Project, the Grantee will except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

• (a) A contract, acceptable to A.I.D., for the technical service portion of this component of the Project;

• (b) Evidence that the Grantee has designated the Ministry and the Project Manager responsible for implementation of the component;

• (c) Evidence of passage of all necessary legislation necessary to carry out this component of the Project and promulgation of all decrees, regulations, etc. to implement this legislation. The necessary legislation shall include the Land Surveyors Act, the Land Adjudication Act, and the Land Registration Act.

(d) A commitment to furnish within 18 months the physical facility for a land registry office for carrying out the component of the Project including vault space and commitment to include specification of an actual physical facility acceptable to A.I.D.;

(e) Such other information and materials as A.I.D. may reasonably require.

Disbursement For The Pilot Land Financing Component Except

For Technical Assistance. Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the Pilot Land Financing Component except for technical assistance, the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

• (a) Evidence of procedures to establish and operate a fund operating through the SLDB;

(b) Legislation pertinent to the offering of debentures or other suitable financing instruments.

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Disbursement For the Market Promotion Program  
Component Except Short-Term Technical Assistance and  
Diversification.

Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the Market Promotion Program Component of this Project, except short-term Technical Assistance and Diversification the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.;

• (a) Evidence of a long-term contract for technical services, acceptable to A.I.D. for implementation of the component;

(b) Evidence of adoption of a National Agricultural Marketing Development Strategy. The adopted strategy shall clearly specify the intended role of the Private Sector in agricultural marketing and define the institutional framework in which public sector support to marketing will be placed, including the Market Promotion Unit financed in this Project.

Disbursement For The Marketing Promotion Fund And  
Marketing Opportunity Fund To Be Established As  
Part Of The Marketing Promotion Component.

Prior to any disbursement under the Grant or the issuance by A.I.D. of documentation pursuant to which disbursements will be made to establish the Marketing Promotion Fund or the Marketing Opportunity Fund, the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

• (a) Evidence of establishment of (1) procedures to establish and operate a Marketing Promotion Fund, operating through the St. Lucian Development Bank to provide loans to traders for capital investments and working capital to establish or expand their operations and (2) procedures to establish and operate a Marketing Opportunity Fund to be initially established in the amount of \$50,000 to finance small experimental marketing activities.

C. Special Covenants.

• Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

(a) evaluation of progress toward attainment of the objectives of the Project;

(b) identification and evaluation of problem areas or constraints which may inhibit such attainment;

(c) assessment of how such information may be used to help overcome such problems; and

(d) evaluation, to the degree feasible, of the overall development impact of the Project.

• Agricultural Activities. The Grantee covenants that in carrying out project activities under this Agreement, the Grantee avoid projects or activities which would cause or threaten serious injury to the production, marketing, or pricing of United States agricultural commodities or products. Exports of agricultural commodities or products should not be supported using such funds, if the issue of serious harm or threat thereof from such exports has been raised by AID, until the matter has been reviewed and discussed by AID and the Grantee. Both AID and the Grantee should keep each other informed of activities which appear to involve the potential for such harm.

Marketing and Diversification Component. The Grantee covenants to encourage private trading activities in the selected commodities being dealt with under this component and to fully support the current private sector thrust of the Project.

Land Registration and Ownership Program Component. The Grantee covenants that the Land Market Fund will not be used for the purchase of lands owned in part or in full by the Cooperating Country or Agencies thereof.

• Pesticides. The Grantee covenants to obtain the prior written approval of A.I.D. before approving or financing the purchase of any pesticide with funds made available by A.I.D. for this Project.

• Utilization Of Funds Created By Repayment For Commodities Loaned to BGA. The Grantee covenants to obtain prior written approval of A.I.D. before committing or expending any funds collected from the BGA for commodities made available by A.I.D. under the Banana Replanting Support Component of this Project.

\*\*\*\* ASTERISKED ITEMS ARE THE PROVISIONS WHICH WILL APPEAR IN THE PROJECT AUTHORIZATION. THE OTHER PROVISIONS ABOVE WILL BE NEGOTIATED AND THEIR BASIC SUBSTANCE INCLUDED IN THE AGREEMENT.

### VIII. EVALUATION ARRANGEMENTS

The following discussion sets forth a plan for project evaluation that is closely linked to the monitoring function described above. Overall project evaluation will be performed primarily by outside contractors not associated with actual project implementation, with the active support and involvement of the GOSL and RDO/C. In completing the project's two evaluations, they will rely heavily on data generated and provided through the monitoring function described above.

Two comprehensive evaluations will be performed during the life of the project; the first at approximately the mid-point (18 months), and the second upon completion of the project (36 months).

Of these two the mid-point evaluation will be, by far, the most critical to the needs of the GOSL and the Mission. By mid-point all project activities will have reached the point of full operation and their respective strong and weak points in their implementation methodologies should be apparent. The purpose of the mid-point evaluation will be to identify these and recommend actions to either reinforce or correct the methodology as needed during the second half of the project. The final evaluation will serve to provide guidance to the GOSL on the continuation or expansion of the activities funded, in particular the Market Promotion Unit and the land registration survey. It will also provide guidance to AID in developing further programs of assistance to agricultural development in St. Lucia.

Presented below are component-specific evaluation issues that pertain directly to those identified in the monitoring plan and that should also be used as guidelines in the establishment of the evaluation methodology.

#### A. Land Registry and Adjudication Element

Other than the elements raised in the Monitoring Plan such as the number of parcels per month surveyed and registered, the establishment of the Registry Office and the adjudication of cases under dispute, the critical evaluation issue will be the examination of the critical assumption for the justification of the project component itself. That is to say, will the Land Registry and Adjudication System result in a measurable increase in agricultural investment, and therefore productivity? This question can only be fully answered over the long-term; a final judgment on this issue cannot be realistically obtained during the life of this project. Nevertheless, the establishment of a specific set of baseline data describing the current situation (land value, level of investment, production and productivity by crop mix, etc.) among a sample population would be indispensable to future evaluators and should be considered a necessary part of the monitoring/evaluation activities of this component.

#### B. Tenure Individualization Fund Element

The key evaluation issue to be measured under this component will be the efficiency of the financial mechanisms used to capitalize the fund as well as the actual demand for the credit available from the fund. As designed, this component is an experimental attempt at resolving the family land problem. If the monitoring and evaluation process shows the demand to be high, other mechanisms for its recapitalization will have to be sought. If, on the other hand, demand is slow to materialize, modifications in the operation of the fund will be necessary.

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C. Market Promotion Component

The MPP will function as an integrated activity but its three sub-components will be evaluated separately as follows:

1. Market Promotion Unit

This unit is designed to stimulate and promote the development of private sector marketing initiatives and should be evaluated as to its success in achieving that goal. Fairly accurate statistics presently exist as to amounts of fresh produce exported by commodity by the larger traders and growers, at least (figures for regional exports by hucksters are believed to be unreliable). Over the life of the project these figures will be monitored and will serve as the best indicator as to the success of the unit's progress. A second issue of critical importance which will have to be evaluated is the placement of the unit within the Marketing Board or its successor organization. The mid-term evaluation should carefully examine the institutional arrangements of the unit and recommend appropriate solutions if problems are apparent.

2. Market Promotion Fund

This fund will provide venture capital to private sector traders interested in attempting the commercialization of agricultural commodities. The key evaluation issues of this sub-component will therefore be the actual utilization rate of the fund, the types of loans which are made, the selection criteria for loan approvals, and the economic and financial viability of these ventures once funded. Should monitoring activities show that the fund is not being used the mid-term evaluation should carefully analyze alternative uses for its monies. Conversely, should the fund be near depletion by the mid-term evaluation, it should consider alternative funding for its replenishment.

3. Market Opportunity Fund

This fund will operate in a similar fashion to the market promotion fund with the exception that monies will be utilized on a grant basis rather than loaned. The evaluation process should consider similar criteria as for the MPP above.

4. Seedling Production Activities

This rather small sub-component to upgrade the GOSL's tree crop propagation facilities should be evaluated in relation to their ability to meet farmer demand as to the quality, variety and number of seedlings required by those desiring to participate in the program. Farmer acceptance of these seedlings will therefore be the key variable for consideration. Actual success of the seedlings once they are planted, and as they come into bearing, will be beyond the scope of project evaluation activities, since it will not occur until several years after project termination.

D. Banana Replanting Component

In addition to the specific issues for this component identified in the Monitoring Plan the critical questions to be asked during the evaluations will be:

1. Was the original component rationale of combating the "downward production cycle" with an infusion of critical production inputs correct? In other words, was the ensuing production response to the input infusion sufficient to cover the costs of sustaining these higher input levels, and therefore to reverse the downward production cycle?
2. Is the financial mechanism of collecting the input loan reflows from the "Geest Check" at the National Commercial Bank a viable one? Since two of the other components will be relying on these reflows for the capitalization of revolving funds it is critical that this mechanism be evaluated as to its effectiveness.

As described, the evaluation plan relies heavily on the appropriateness and timeliness of the data generated by the monitoring activities of each component of the project. As such the plan should be seen as a logical extension and integration of the monitoring effort with the first, mid-term evaluation serving as a reorientation point for further project activities, and the final evaluation serving as a policy guideline statement for future USAID involvement in the agricultural sector of St. Lucia.



OFFICE OF THE PRIME MINISTER

GOVERNMENT BUILDINGS  
CASTRIES,  
SAINT LUCIA, WEST INDIES.

Communications on this subject should be addressed to:—  
**THE PRIME MINISTER**  
and the following Number quoted:

ANNEX A

EXHIBIT I

PAGE A-1-1

1 March 1983

The Ambassador of the United States of America  
American Embassy  
Bridgetown  
BARBADOS W.I.

Sir

This is in reference to possible USAID assistance to the Government of St. Lucia in a program to stimulate the productivity and efficiency of the agricultural sector. Following detailed review and discussions with you and members of your staff, a program of assistance in the areas of agricultural marketing and diversification, banana replanting, and land registration and titling are of the highest and most immediate priority. The proposed program is an integrated and coordinated effort to:

- (a) stimulate employment, income and foreign exchange earnings in the short-term by increasing substantially banana exports and
- (b) to begin the structural transformation of the agricultural sector over the medium term by facilitating crop diversification, improving marketing and providing secure tenure to producers.

The Government of St. Lucia hereby requests a grant from USAID in the amount US \$8.0 million to undertake a program including the following:

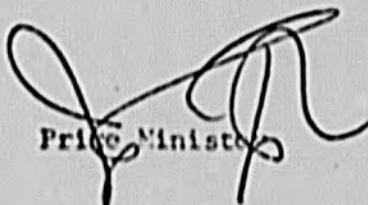
- (a) **Agricultural Diversification and Marketing:** Assistance is requested in defining an overall national agriculture marketing strategy and finance an initial effort to stimulate marketing by the private sector. In addition, help is required to increase tree crop seedling production to support our diversification effort.
- (b) **Banana Replanting:** A program to finance fertilizer and other inputs for the replanting of up to 2,000 acres is urgently needed to stimulate banana exports.
- (c) **Land Registration:** A fundamental step in the process of nation-building and to support agricultural development is to establish a standard system for registration and titling of land in St. Lucia. Assistance is requested to register all lands outside the Castries metropolitan area. Assistance also is requested to initiate a pilot project in land financing aimed at resolving the family land problem.
- (d) **Environment:** Assistance is requested to reduce the problems caused by the unsafe handling of toxic agricultural chemicals.

The Government of St. Lucia will provide in-kind support and other resources totalling approximately US \$2.3 million. In addition, reflows from repayment of credit for banana replanting will be programmed for promotion of private sector marketing and the pilot land purchase program.

In conclusion, I wish to stress two aspects of the proposed program which is designed to comprehensively address major problems in our agricultural sector. First, the land registration and financing elements of the project are a high priority of my Government. While the proposed program is costly, it also is essential if individual St. Lucian farmers are to be encouraged to make investments on their land and seek to diversify into tree crops. To this end we are prepared to make certain public agricultural lands available for sale to small private farmers. In addition we must find a way to permit the individualization of family lands on a strictly voluntary basis so that this important segment of producers can enjoy the benefits of secure title.

Secondly, we are seeking your assistance to help define practical and workable alternatives to the marketing of agricultural produce. In particular, approaches must be found to get the private sector moving in marketing for the benefit of producers and the economy in general.

Sincerely yours

  
Prime Minister

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1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Agricultural Structural Adjustment Project for St. Lucia involving planned obligations of not to exceed \$8,000,000 in grant funds over a 1 year period from date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is 3 years and 9 months from the date of initial obligation.

2. The project will assist the Grantee in its program of agricultural diversification and growth by addressing constraints in the agricultural sector. The assistance will include the financing of activities in the following areas: (1) support to banana replanting; (2) land registration and titling program; and (3) market promotion program.

3. The Project Agreement which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of services

Commodities financed by A.I.D. under the Project shall have their source and origin in the Cooperating Country or in the United States except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the Cooperating Country or the United States as their place of nationality except as A.I.D. may otherwise agree in writing.

Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of United States.

b. Conditions Precedent to Disbursement

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

(a) An opinion of counsel acceptable to A.I.D. 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) A statement of the name of the person holding or acting in the office of the Grantee specified in Section 8.2., and of any additional representatives, together with a specimen signature of each person specified in such statement;

Disbursement for Banana Replanting Support. Prior to any disbursement under the Grant, or to issuance by A.I.D. of documentation pursuant to which disbursement will be made for the Banana Replanting Support component of the Project, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence of establishment of a loan fund and implementation procedures hereunder, for use by the St. Lucia Banana Growers Association (BGA) in making available funds to farmers for the purchase of commodities eligible under this component. The terms to the BGA shall not be less than 6 percent per annum simple interest repayable in 12 monthly installments with a 15 month grace period for repayment of principal and interest. The terms by BGA to the farmer shall be not less than 8-1/2 percent per annum, repayable in 12 monthly installments with a 12 month grace period for the repayment of principal and interest;

(b) Evidence that the BGA has appropriate authority and responsibility to implement this Project component and that the Grantee will monitor BGA performance under this component.

Disbursement for Land Registry and Titling Component. Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the land registry and ownership program component of the Project, the Grantee will except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) A contract, acceptable to A.I.D., for the technical service portion of this component of the Project;

(b) Evidence that the Grantee has designated the Ministry and the Project Manager responsible for implementation of the component;

(c) Evidence of passage of all necessary legislation necessary to carry out this component of the Project and promulgation of all decrees, regulations, etc. to implement this legislation. The necessary legislation shall include the Land Surveyors Act, the Land Adjudication Act, and the Land Registration Act.

(d) A commitment to furnish within 18 months the physical facility for a land registry office for carrying out the component of the Project including vault space and commitment to include specification of an actual physical facility acceptable to A.I.D.;

(e) Such other information and materials as A.I.D. may reasonably require.

Disbursement For The Pilot Land Financing Component Except For Technical Assistance. Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the Pilot Land Financing Component except for technical assistance, the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence of procedures to establish and operate a fund operating through the SLDB;

Disbursement For the Market Promotion Program

Component Except Short-Term Technical Assistance. Prior to any disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made for the Market Promotion Program Component of this Project, except short-term Technical Assistance the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence of a long-term contract for technical services, acceptable to A.I.D. for implementation of the component;

(b) Evidence of adoption of a National Agricultural Marketing Development Strategy. The adopted strategy shall clearly specify the intended role of the Private Sector in agricultural marketing and define the institutional framework in which public sector support to marketing will be placed, including the Market Promotion Unit financed in this Project.

Disbursement For The Marketing Promotion Fund And Marketing Opportunity Fund To Be Established As

Part Of The Marketing Promotion Component. Prior to any disbursement under the Grant or the issuance by A.I.D. of documentation pursuant to which disbursements will be made to establish the Marketing Promotion Fund or the Marketing Opportunity Fund, the Grantee will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence of establishment of (1) procedures to establish and operate a Marketing Promotion Fund, operating through the St. Lucian Development Bank to provide loans to traders for capital investments and working capital to establish or expand their operations and (2) procedures to establish and operate a Marketing Opportunity Fund to be initially established in the amount of \$100,000 to finance small experimental marketing activities.

Special Covenants.

Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

(a) evaluation of progress toward attainment of the objectives of the Project;

(b) identification and evaluation of problem areas or constraints which may inhibit such attainment;

(c) assessment of how such information may be used to help overcome such problems; and

(d) evaluation, to the degree feasible, of the overall development impact of the Project.

Agricultural Activities. The Grantee covenants that in carrying out project activities under this Agreement, the Grantee avoid projects or activities which would cause or threaten serious injury to the production, marketing, or pricing of United States agricultural commodities or products. Exports of agricultural commodities or products should not be supported using such funds, if the issue of serious harm or threat thereof from such exports has been raised by AID, until the matter has been reviewed and discussed by AID and the Grantee. Both AID and the Grantee should keep each other informed of activities which appear to involve the potential for such harm.

Marketing and Diversification Component. The Grantee covenants to encourage private trading activities in the selected commodities being dealt with under this component and to fully support the current private sector thrust of the Project.

Land Registration and Ownership Program Component. The Grantee covenants that the Land Market Fund will not be used for the purchase of lands owned in part or in full by the Cooperating Country or Agencies thereof.

Pesticides. The Grantee covenants to obtain the prior written approval of A.I.D. before approving or financing the purchase of any pesticide with funds made available by A.I.D. for this Project.

Utilization Of Funds Created By Repayment For Commodities Loaned to BGA. The Grantee covenants to obtain prior written approval of A.I.D. before committing or expending any funds collected from the BGA for commodities made available by A.I.D. under the Banana Replanting Support Component of this Project"

## 5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

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

A Congressional Notification for the Project has been submitted to Congress.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,00, will there be

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(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?

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?

Legislation relative to land registry component of Project is pending before St. Lucia Cabinet, passage is a Condition Precedent to disbursement. The Prime Minister has personally given his support for passage, and given that his government controls 14 of 17 seats parliament, passage is reasonably assured.

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? (See AID Handbook 3 for new guidelines.)

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.
- Project is bilateral Agriculture Structural Adjustment under CBI 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 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.
- Project is designed to increase production of export crops, increase private sector participation in agricultural marketing and diversify production. It will utilize local producers' associations and local financial institutions.
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).
- Increased production and trade opportunities will result from Project activities, improvements in marketing systems will allow greater interface with U.S. private enterprises.

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. Government of St. Lucia will be  
contributing \$2.8 million in the form  
of staffing office space, and sale  
of debentures to finance land  
purchase.
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? Increased production will not have  
negative effect on U.S. producers.  
Project support to banana production  
will not lead to surplus, since  
St. Lucia has guaranteed market in the  
U.K.
13. FAA 118(c) and (d).  
Does the project comply  
with the environmental  
procedures set forth in  
AID Regulation 16? Does Yes

the project or program take into consideration the problem of the destruction of tropical forests?

- 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

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 251(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

N.A.

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 (functional account) being used?

N.A.

c. FAA Sec. 107. Is 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)?

N.A.

d. FAA Sec. 110(a). Will 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)?

N.A.

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"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character."

f. FAA Sec. 122(b). Does 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?

N.A.

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. Economic Support Fund  
Project Criteria

Yes

a. FAA Sec. 531(a). Will  
this assistance promote  
economic or political

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stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

No

c. FAA Sec. 534. Will ESP 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?

No

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?

Special local accounts will be established and reflows from banana input sales will be earmarked for land financing, and credit for diversification production and marketing.

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully? No
  
2. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government? No

3. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No
4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Libya, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver? No
5. ISDCA of 1981 Secs. 724, 727 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727 and 730 of the ISDCA of 1981. N.A.
6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No

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7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? St. Lucia has several arrangements with U.S. firms under OPIC's aegis.
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? No
- (b) If so, has any deduction required by the Fishermen's Protective Act been made?
9. FAA Sec. 620(q); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill appropriates funds? No
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into St. Lucia maintains only a police force. No military equipment is purchased except minimal operative replacements for the police. Since independence, St. Lucia has not purchased any military equipment.

Consideration" memo:  
 "Yes, taken into account  
 by the Administrator at  
 time of approval of  
 Agency OYB." This  
 approval by the  
 Administrator of the  
 Operational Year Budget  
 can be the basis for an  
 affirmative answer during  
 the fiscal year unless  
 significant changes in  
 circumstances occur.)

11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? \_\_\_\_\_ No
12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) St. Lucia is not in arrears in its U.N. obligations
13. FAA Sec. 620A; FY 1982 Appropriation Act Sec. 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or \_\_\_\_\_ No

abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime?

14. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No
15. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) No
16. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Session of the General Assembly of the U.N. of Sept. 25 and 28, 1981, and filed St. Lucia was not present at this meeting and has indicated that it does not support the communique in question.

to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

17. ISDCA of 1981 Sec. 721.  
See special requirements for assistance to Haiti.

N.A.

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria.

a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

N.A.

2. Economic Support Fund Country Criteria

No

a. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

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b. ISDCA of 1981, Sec. 725(b). If ESP is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.?

N.A.

c. ISDCA of 1981, Sec. 726(b). If ESP assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile has made significant progress in human rights; (2) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier?

N.A.

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? Yes
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? Yes
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be Yes

financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

5. FAA Sec. 604(c) . Will construction or engineering services be procured from firms of countries otherwise - eligible under Code 941, but which have attained a competitive capability in international markets in one or these areas? N.A.
6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates? Yes
7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Yes

Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes
9. FY 1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used? N.A
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? Yes

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP)? N.A.

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? N.A.
2. FAA SEC. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N.A.
3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes
4. Will arrangements preclude use of financing:
- a. FAA Sec. 104(f); FY 1982 APPROPRIATION ACT Sec. 525: (1) To pay for performance of abortions as a method of family Yes

planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes

c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

d. FAA Sec. 662. For CIA activities? Yes

e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or Yes

adjusted service  
compensation for military  
personnel?

g. FY 1982 Appropriation  
Act, Sec. 505. To pay  
U.N. assessments,  
arrearages or dues? yes

h. FY 1982 Appropriation  
Act, Sec. 506. To carry  
out provisions of FAA  
section 209(d) (Transfer  
of FAA funds to  
multilateral  
organizations for  
lending)? Yes

i. FY 1982 Appropriation  
Act, Sec. 510. To  
finance the export of  
nuclear equipment, fuel,  
or technology or to train  
foreign nationals in  
nuclear fields? Yes

j. FY 1982 Appropriation  
Act, Sec. 511. Will  
assistance be provided  
for the purpose of aiding  
the efforts of the  
government of such  
country to repress the  
legitimate rights of the  
population of such  
country contrary to the  
Universal Declaration of  
Human Rights? Yes

k. FY 1982 Appropriation  
Act, Sec. 515. To be  
used for publicity or  
propaganda purposes  
within U.S. not  
authorized by Congress? Yes

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

LIFE OF PROJECT  
FROM FY TO FY  
TOTAL U.S. FUNDING  
DATE PREPARED

PROJECT TITLE & NUMBER: ST. LUCIA AGRICULTURE STRUCTURAL ADJUSTMENT PROJECT

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>The Structural Adjustment of the St. Lucian Agricultural sector allowing for expanded employment and increased incomes for rural farm families.</p>	/	/	<p><u>Assumptions for Achieving Goal Targets:</u></p> <p>Government will support private sector initiative in expanding agriculture activities</p>
<p><u>Project Purpose</u></p> <ul style="list-style-type: none"> <li>- To increase the foreign exchange earnings from banana cultivation to provide a strong financial base for the agriculture sector which will allow a crop diversification program to be developed.</li> <li>- To decrease the dependency on banana production and expand the income opportunities of farmers and private sector lenders through market promotion activities among diversified crops.</li> <li>- To create a more efficient, equitable and rational utilization of rural lands.</li> </ul>	<p><u>Conditions That Will Indicate Purpose Has Been Achieved: End of Project Status</u></p> <p>/</p>	/	<p><u>Assumptions for Achieving Purpose</u></p> <ul style="list-style-type: none"> <li>- Private sector will respond to marketing promotion programs.</li> <li>- Markets will be found for diversified commodities produced.</li> <li>- Current protected market for bananas in U.K. will continue for medium term.</li> </ul>
<p><u>Outputs</u></p> <p>/</p>	<p><u>Magnitude of Outputs: by 1986</u></p> <p>/</p>	/	<p><u>Assumptions for Achieving Outputs</u></p> <p>/</p>
<p><u>Inputs</u></p> <p>/</p>	<p><u>Implementation targets (type and quantity)</u></p> <p>/</p>	/	<p><u>Assumptions for Providing Inputs</u></p> <p>/</p>
<p>/ See relevant component sub-log frame</p>			

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EXHIBIT 1  
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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

LIFE OF PROJECT  
FROM FY TO FY  
TOTAL U.S. FUNDING  
DATE PREPARED

PROJECT TITLE & NUMBER: ST. LUCIA AGRICULTURE STRUCTURAL ADJUSTMENT PROJECT

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<p><u>Outputs</u></p> <p>/</p>	<p><u>Magnitude of Outputs: by 1986</u></p> <p>/</p>	/	<p><u>Assumptions for Achieving Outputs</u></p> <p>/</p>
<p><u>Inputs</u></p> <p>/</p>	<p><u>Implementation targets (type and quantity)</u></p> <p>/</p>	/	<p><u>Assumptions for Providing Inputs</u></p> <p>/</p>
<p>/ See relevant component sub-log frame</p>			

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EXHIBIT 1  
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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

LIFE OF PROJECT:  
FROM FY TO FY  
TOTAL U.S. FUNDING:  
DATE PREPARED:

PROJECT TITLE & NUMBER: MARKET PROMOTION COMPONENT

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program of Sector Goal:</u> To decrease the dependency on banana receipt and expand the income opportunities of farmers through market promotion activities in the private sector</p>	<p><u>Measures of Goal Achievement:</u></p> <ul style="list-style-type: none"> <li>- Increased revenue paid to farmers as a result of expanded markets for their diversified crops.</li> <li>- An increased number of viable private sector traders in business.</li> </ul>	<ul style="list-style-type: none"> <li>- Annual statistical data of St. Lucian Government.</li> <li>- Project monitoring activities</li> </ul>	<p><u>Assumptions for Achieving Goal Targets</u></p> <ul style="list-style-type: none"> <li>- The Government continues to pursue a diversification program.</li> <li>- Private sector traders are willing to invest in these activities.</li> </ul>
<p><u>Project Purposes:</u></p> <ul style="list-style-type: none"> <li>- To improve St. Lucia's capacity to produce and market targeted crops and the nation's ability to continue to expand production and marketing activities within the private sector.</li> </ul>	<p><u>Conditions That Will Indicate Purpose has Been Achieved: End of Project Status</u></p> <ul style="list-style-type: none"> <li>- Existence of St. Lucia private sector traders providing more efficient and effective marketing services to local farmers and consumers in national, regional and extra-regional markets.</li> </ul>	<ul style="list-style-type: none"> <li>- NDA data</li> <li>- Export data for targeted crops; volume and value.</li> </ul>	<p><u>Assumptions for Achieving Purpose:</u></p> <ul style="list-style-type: none"> <li>- Expansion of markets for tropical tree fruits.</li> <li>- Continuation of BDD three crop diversification project.</li> </ul>
<p><u>Outputs:</u></p> <ul style="list-style-type: none"> <li>- An expanded tree crop seedling propagation program to promote the establishment of increased acreages of citrus and mangoes, resulting in increased high-quality production.</li> <li>- Development of a Market Promotion Program to facilitate the growth and development of private sector marketing of the targeted crops through credit funds and other activities.</li> </ul>	<p><u>Magnitude of Outputs: by 1986</u></p> <ul style="list-style-type: none"> <li>- 90,000 mango and citrus seedlings produced per year.</li> <li>- Establishment of improved market systems for mangoes, citrus, regional bananas, plantain and cacao.</li> <li>- Expanded number of economically viable agricultural traders functioning in St. Lucia</li> </ul>		<ul style="list-style-type: none"> <li>- Reflows from Banana component will be forthcoming.</li> </ul>
<p><u>Inputs: (US\$000)*</u></p> <ul style="list-style-type: none"> <li>- Technical Assistance 150</li> <li>- Participant Training 40</li> <li>- Local Staff 45</li> <li>- Construction 30</li> <li>- Credit Funds 150</li> <li>- Commodities 120</li> <li>- Operations 45</li> </ul> <p style="text-align: right;"><u>1,180</u></p>		<ul style="list-style-type: none"> <li>- GOSL Records</li> <li>- AID disbursement records</li> </ul>	<ul style="list-style-type: none"> <li>- AID funds available</li> </ul>

\* Does not include inflation or contingencies

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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

PROJECT TITLE & NUMBER: BANANA COMPONENT

LIFE OF PROJECT: FROM FY TO FY  
TOTAL U.S. FUNDING:  
DATE PREPARED:

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Goal</u> To increase the economic viability of banana cultivation To increase foreign exchange earnings from bananas to provide a strong financial base for the agricultural sector</p>	<ul style="list-style-type: none"> <li>- Increase in foreign exchange earnings from the sale of bananas.</li> <li>- Crop diversification efforts underway and supported by increased banana earnings</li> </ul>	<ul style="list-style-type: none"> <li>- Ministry of Planning; national income accounts and plans.</li> <li>- Same</li> </ul>	<ul style="list-style-type: none"> <li>- London price for bananas remains the same or increases.</li> <li>- EC dollar exchange rate will remain constant or increase in relation to the pound sterling.</li> </ul>
<p><u>Purpose</u> To significantly increase banana yields per acre by the second year of the project, through increased replanting and input usage.</p>	<ul style="list-style-type: none"> <li>- Volume of bananas exported is increased.</li> </ul>	<ul style="list-style-type: none"> <li>- SLBGA, Geest records</li> </ul>	<ul style="list-style-type: none"> <li>- There will be a significant production response to increased replanting and input usage on bananas.</li> </ul>
<p><u>Outputs</u></p> <ul style="list-style-type: none"> <li>- 2,000 acres of banana land replanted</li> <li>- WINBAN technical recommendations being followed.</li> </ul>	<ul style="list-style-type: none"> <li>- New plantings of bananas begin to increase average yield per acre.</li> <li>- Increase in input usage.</li> </ul>	<ul style="list-style-type: none"> <li>- SLBGA records.</li> <li>- Site visits to selected farmers.</li> </ul>	
<p><u>Inputs</u></p> <ul style="list-style-type: none"> <li>- \$1,000,000 worth of inputs supplied.</li> <li>- No inflation or contingencies applied</li> </ul>		<ul style="list-style-type: none"> <li>- GOSL, BGA, NCB records</li> <li>- USAID disbursement records</li> </ul>	

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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

PROJECT TITLE & NUMBER: LAND REGISTRY AND TENURE INDIVIDUALIZATION FUND

LIFE OF PROJECT:  
FROM FY: \_\_\_\_\_ TO FY: \_\_\_\_\_  
TOTAL U.S. FUNDING  
DATE PREPARED: \_\_\_\_\_

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><b>Goal:</b> A more efficient, equitable and rational utilization of rural lands</p>	<ul style="list-style-type: none"> <li>- Cadastral data being utilized in national planning activities.</li> <li>- Agricultural lands being exploited more efficiently and rationally.</li> </ul>	<ul style="list-style-type: none"> <li>- Ministry of Finance and Planning</li> <li>- Next agricultural census</li> </ul>	<ul style="list-style-type: none"> <li>- Individual Ownership</li> <li>- Parcipitates Greater Investment</li> </ul>
<p><b>Purpose:</b></p> <ul style="list-style-type: none"> <li>- To improve small farmer access to adequate land and secure, in-embodied property rights required for financially viable family farms.</li> <li>- To provide, through the issuance of clear title, the necessary incentives for capital investment in land.</li> <li>- To improve public sector policies protection and management of public and private rural lands.</li> </ul>	<ul style="list-style-type: none"> <li>- Number of rural land transactions increased.</li> <li>- Increased value and productivity of rural lands through on-farm investment.</li> </ul>	<ul style="list-style-type: none"> <li>- Land Registry Office</li> <li>- Banking sector: increased borrowing for capital improvements.</li> </ul>	<ul style="list-style-type: none"> <li>- Credit availability for agricultural investment.</li> </ul>
<p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>- Functioning tenure individualization fund for the resolution of family land disputes.</li> <li>- National cadaster of all rural lands.</li> <li>- Legal reforms re: land titling, registration, surveying and regulation.</li> <li>- Comprehensive agriculture lands registry.</li> <li>- Institutionalize capacity to identify, protect, manage all rural non-private lands.</li> </ul>	<ul style="list-style-type: none"> <li>- Fund established and lending monies.</li> <li>- Existence of cadaster.</li> <li>- Existence of approved laws</li> <li>- Functioning Registry</li> </ul>	<ul style="list-style-type: none"> <li>- St. Lucia National Development Bank</li> </ul>	<ul style="list-style-type: none"> <li>- Small farmer beneficiaries will have access to adequate short and medium term credit.</li> <li>- Small farmers will utilize new titling and registration procedures, once instituted.</li> </ul>
<p><b>Inputs:</b></p> <ul style="list-style-type: none"> <li>- Land Registry: US\$4,250</li> <li>- Tenure Individualization Fund US\$100</li> </ul> <p><small>*Does not include inflation or contingencies</small></p>		<ul style="list-style-type: none"> <li>- GOSL Records</li> <li>- USAID disbursement records</li> </ul>	<ul style="list-style-type: none"> <li>- GOSL counterpart inputs will be forthcoming.</li> <li>- Monies from banana reflows are not delayed by Natural Disasters</li> </ul>

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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

LIFE OF PROJECT:  
FROM FY TO FY  
TOTAL U.S. FUNDING:  
DATE PREPARED:

PROJECT TITLE & NUMBER: MARKET PROMOTION COMPONENT

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program of Sector Goal:</u> To decrease the dependency on banana receipt and expand the income opportunities of farmers through market promotion activities in the private sector</p>	<p><u>Measures of Goal Achievement:</u></p> <ul style="list-style-type: none"> <li>- Increased revenue paid to farmers as a result of expanded markets for their diversified crops.</li> <li>- An increased number of viable private sector traders in business.</li> </ul>	<ul style="list-style-type: none"> <li>- Annual statistical data of St. Lucian Government.</li> <li>- Project monitoring activities</li> </ul>	<p><u>Assumptions for Achieving Goal Targets</u></p> <ul style="list-style-type: none"> <li>- The Government continues to pursue a diversification program.</li> <li>- Private sector traders are willing to invest in these activities.</li> </ul>
<p><u>Project Purposes:</u></p> <ul style="list-style-type: none"> <li>- To improve St. Lucia's capacity to produce and market targeted crops and the nation's ability to continue to expand production and marketing activities within the private sector.</li> </ul>	<p><u>Conditions That Will Indicate Purpose has Been Achieved: End of Project Status</u></p> <ul style="list-style-type: none"> <li>- Existence of St. Lucia private sector traders providing more efficient and effective marketing services to local farmers and consumers in national, regional and extra-regional markets.</li> </ul>	<ul style="list-style-type: none"> <li>- NDA data</li> <li>- Export data for targeted crops; volume and value.</li> </ul>	<p><u>Assumptions for Achieving Purpose:</u></p> <ul style="list-style-type: none"> <li>- Expansion of markets for tropical tree fruits.</li> <li>- Continuation of BDD three crop diversification project.</li> </ul>
<p><u>Outputs:</u></p> <ul style="list-style-type: none"> <li>- An expanded tree crop seedling propagation program to promote the establishment of increased acreages of citrus and mangoes, resulting in increased high-quality production.</li> <li>- Development of a Market Promotion Program to facilitate the growth and development of private sector marketing of the targeted crops through credit funds and other activities.</li> </ul>	<p><u>Magnitude of Outputs: by 1986</u></p> <ul style="list-style-type: none"> <li>- 90,000 mango and citrus seedlings produced per year.</li> <li>- Establishment of improved market systems for mangoes, citrus, regional bananas, plantain and cacao.</li> <li>- Expanded number of economically viable agricultural traders functioning in St. Lucia</li> </ul>		<ul style="list-style-type: none"> <li>- Reflows from Banana component will be forthcoming.</li> </ul>
<p><u>Inputs: (US\$000)*</u></p> <ul style="list-style-type: none"> <li>- Technical Assistance 150</li> <li>- Participant Training 40</li> <li>- Local Staff 45</li> <li>- Construction 30</li> <li>- Credit Funds 150</li> <li>- Commodities 120</li> <li>- Operations 45</li> </ul> <p style="text-align: right;"><u>1,180</u></p> <p>* Does not include inflation or contingencies</p>		<ul style="list-style-type: none"> <li>- GOSL Records</li> <li>- AID disbursement records</li> </ul>	<ul style="list-style-type: none"> <li>- AID funds available</li> </ul>

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PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

PROJECT TITLE & NUMBER: BANANA COMPONENT

LIFE OF PROJECT: FROM FY TO FY  
TOTAL U.S. FUNDING:  
DATE PREPARED:

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Goal</u> To increase the economic viability of banana cultivation To increase foreign exchange earnings from bananas to provide a strong financial base for the agricultural sector</p>	<ul style="list-style-type: none"> <li>- Increase in foreign exchange earnings from the sale of bananas.</li> <li>- Crop diversification efforts underway and supported by increased banana earnings</li> </ul>	<ul style="list-style-type: none"> <li>- Ministry of Planning; national income accounts and plans.</li> <li>- Same</li> </ul>	<ul style="list-style-type: none"> <li>- London price for bananas remains the same or increases.</li> <li>- EC dollar exchange rate will remain constant or increase in relation to the pound sterling.</li> </ul>
<p><u>Purpose</u> To significantly increase banana yields per acre by the second year of the project, through increased replanting and input usage.</p>	<ul style="list-style-type: none"> <li>- Volume of bananas exported is increased.</li> </ul>	<ul style="list-style-type: none"> <li>- SLBGA, Geest records</li> </ul>	<ul style="list-style-type: none"> <li>- There will be a significant production response to increased replanting and input usage on bananas.</li> </ul>
<p><u>Outputs</u></p> <ul style="list-style-type: none"> <li>- 2,000 acres of banana land replanted</li> <li>- WINBAN technical recommendations being followed.</li> </ul>	<ul style="list-style-type: none"> <li>- New plantings of bananas begin to increase average yield per acre.</li> <li>- Increase in input usage.</li> </ul>	<ul style="list-style-type: none"> <li>- SLBGA records.</li> <li>- Site visits to selected farmers.</li> </ul>	
<p><u>Inputs</u></p> <ul style="list-style-type: none"> <li>- \$1,000,000 worth of inputs supplied.</li> <li>- No inflation or contingencies applied</li> </ul>		<ul style="list-style-type: none"> <li>- GOSL, BGA, NCB records</li> <li>- USAID disbursement records</li> </ul>	

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ACT: AID INFO: AME DCM CERON

JAN 21 1983

ANNEX B

EXHIBIT 2

PAGE B-2-1

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TACS:

SUBJECT: DAEC REVIEW OF ST. LUCIA STRUCTURAL ADJUSTMENT  
PID

1. DAEC REVIEW OF SUBJECT PID HELD ON JANUARY 6, 1983.  
PID APPROVAL IS HEREBY GRANTED AND MISSION MAY PROCEED  
WITH INTENSIVE REVIEW OF PROJECT, TAKING INTO ACCOUNT  
AID/W CONCERNS OUTLINED BELOW:

2. BANANA REPLANTING:

--A. LOME AGREEMENT: SINCE PROFITABILITY OF BANANA  
PRODUCTION IN ST. LUCIA DEPENDS TO LARGE EXTENT ON  
PREFERENTIAL SELLING PRICES ESTABLISHED UNDER LOME  
AGREEMENT, RDO/C MUST OBTAIN ASSURANCES THAT THIS  
AGREEMENT OR SIMILAR INSTRUMENT WILL CONTINUE IN FORCE  
OVER FORSEEABLE FUTURE TO HELP ASSURE PROFITABILITY OF  
BANANA PRODUCTION.

--B. EFFECTIVE DEMAND FOR INPUTS: BUREAU CONCERNED THAT  
FALL IN EXCHANGE VALUE OF BRITISH POUND HAS SQUEEZED  
BANANA PROFITS MAKING PURCHASE OF INPUTS, DENOMINATED IN  
EC DOLLARS, MORE DIFFICULT. MISSION SHOULD EXAMINE THIS  
QUESTION CLOSELY DURING INTENSIVE REVIEW TO ENSURE THAT,

PRODUCTION INPUTS. SUCH PRICING INFORMATION, ALONG WITH  
EXAMINATION OF OTHER FACTORS OF PRODUCTION AND ANALYSIS  
OF BANANA YIELDS RESULTING FROM EXPECTED IMPROVEMENTS IN  
LAND FERTILITY, MUST DEMONSTRATE SUFFICIENT RETURNS TO  
WARRANT A.I.D. SUPPORT FOR THIS ACTIVITY.

--C. FINANCIAL AND ECONOMIC FEASIBILITY: CONCERN WAS  
EXPRESSED THAT THE LACK OF MORE ACTIVE EXPLOITATION OF  
SOME BANANA REHABILITATION TECHNOLOGIES MIGHT INDICATE  
THAT BANANA CULTIVATION IS, AT BEST MARGINALLY FEASIBLE  
UNDER PRESENT AND EXPECTED FUTURE OUTPUT, INPUT, AND  
FACTOR PRICES, EVEN USING IMPROVED TECHNOLOGIES. THE  
ECONOMIC ANALYSIS IN THE PP SHOULD EXAMINE CLOSELY THE  
NATURE OF THE PRODUCTION FUNCTION, THE DETERMINANTS OF  
FACTOR PRICES, AND THE SENSITIVITY OF FARM-LEVEL  
PROFITABILITY TO CHANGES IN OUTPUT, INPUT, AND FACTOR  
PRICES.

--E. WE UNDERSTAND THAT MISSION INTENTION IS TO USE REPAYMENTS IN A SPECIAL AGRICULTURAL FUND AS A LAND MARKETING MECHANISM. THIS SHOULD BE SET FORTH IN DETAIL DURING PP DEVELOPMENT.

### 3. LAND TENURE PROGRAM:

#### --A. LAND MARKET:

---(1). PP ANALYSIS MUST DEMONSTRATE THAT POTENTIAL EFFECTIVE SUPPLY OF AND DEMAND FOR AGRICULTURAL LAND IS SUFFICIENT TO WARRANT THE ESTABLISHMENT OF A LAND FINANCING MECHANISM.

---(2). WHILE PID PROPOSES ESTABLISHMENT OF A LAND MARKET MECHANISM TO HELP FACILITATE FARM SALES INVOLVING SMALL FARMERS, MISSION SHOULD EXAMINE ALTERNATIVES TO HAVING SELLERS INITIATE THE PROCESS IN ALL CASES. ALSO, IN ORDER TO MINIMIZE THE NEED FOR USING AID-FURNISHED FINANCIAL RESOURCES, THE MISSION SHOULD EXAMINE WHETHER SELLERS ARE WILLING TO ACCEPT THE GOVERNMENT'S GUARANTEE OF BUYERS' MORTGAGES, AND/OR GOVERNMENT'S OWN BONDS, IN RETURN FOR LAND THAT THEY DIVEST. MISSION SHOULD IDENTIFY THE CONSTRAINTS THAT PREVENT THE MONETARY SYSTEM FROM ALLOCATING OR EXPANDING CREDIT TO FINANCE THE CASH COMPONENT (IF ANY) OF LAND TRANSACTIONS. IF THE MISSION IS FINALLY FORCED TO CHOOSE A METHOD THAT SIMPLY ON-LEND'S AID'S FUNDS TO FINANCE PORTIONS OF THE PRINCIPAL AMOUNTS OF LAND TRANSACTIONS, THE PP SHOULD DISCUSS THE ALTERNATIVES FOUND NOT TO BE PRACTICAL.

---(3). LAND TRANSACTIONS SUPPORTED UNDER PROJECT SHOULD MEET SPECIFIED CRITERIA CONCERNING, INTER ALIA, LAND SIZE, LAND UTILIZATION, AND ELIGIBILITY OF BUYERS AND SELLERS. SUCH CRITERIA SHOULD BE ACCEPTABLE TO GOSL AND SET FORTH IN PP.

---(4). PP AND GRANT AGREEMENT SHOULD STIPULATE HOW REFLUX PAYMENTS, MADE BY BUYERS OF LAND UNDER THIS PROGRAM ACTIVITY, WOULD BE USED.

--I. LEGAL REFORMS: THE PROPOSED ASSISTANCE FOR THIS PROJECT COMPONENT IS PREDICATED UPON THE ENACTMENT OF LEGISLATION THAT WOULD LAY THE BASIS FOR LAND TENURE TITLING AND REGISTRY REFORM. MISSION SHOULD OBTAIN REASONABLE ASSURANCES FROM GOSL PRIOR TO INITIATING INTENSIVE REVIEW THAT APPROPRIATE LEGAL REFORMS WILL BE ENACTED WITHIN THE NEAR FUTURE. MOREOVER, PASSAGE OF THE NECESSARY LEGISLATION SHOULD BE ESTABLISHED AS A CONDITION PRECEDENT TO DISBURSEMENT OF A.I.D. FUNDS FOR THIS COMPONENT OF THE PROJECT.

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--C. ECONOMIC FEASIBILITY: THE COSTS ASSOCIATED WITH THE CADASTER AND RELATED LAND REGISTRY SYSTEM ARE ESTIMATED AT \$4 MILLION. ADDITIONAL COSTS WILL BE INCURRED OVER TIME FOR COMPLETING THE CADASTER AND MAINTAINING ACCURATE, UP-TO-DATE RECORDS ON LAND OWNERSHIP, LOCATION, DESCRIPTION, BOUNDARY, DELINEATION, AND SO FORTH. MEASURED ON EITHER A PER CAPITA OR A PER ACRE BASIS, THIS SYSTEM IS EXTREMELY EXPENSIVE. THE PP MUST DEMONSTRATE THAT THE BENEFITS TO BE EXPECTED EXCEED THE COSTS OF THIS SYSTEM. WHILE A WIDE VARIETY OF TYPES OF POSSIBLE BENEFITS WERE ENUMERATED IN THE PID REVIEW, THESE ARE DEPENDENT ON THE USES TO WHICH THE COSL INTENDS TO PUT THE CADASTER. THE PP MUST CLEARLY INDICATE THE GOVERNMENT'S COMMITMENTS TO THESE USES. ALSO, IT IS NOT CLEAR THAT THE ASSIGNMENT OF REASONABLE VALUES TO ANY OF THESE BENEFITS WOULD RESULT IN AN ECONOMICALLY FEASIBLE ACTIVITY. WHERE SOME CATEGORIES OF BENEFITS (E.G. THE USE OF A CADASTER IN ADMINISTRATION OF A LAND TAX) ARE UNCERTAIN, THE PP SHOULD EXAMINE THE EFFECT ON PROJECT FEASIBILITY OF A VARIETY OF POSSIBLE SCENARIOS (SCENARIOS SHOULD INCLUDE DIFFERENCES IN TIMING, FOR EXAMPLE OF A LAND TAX).

#### 4. MARKETING DEVELOPMENT:

--A. ROLE OF PUBLIC SECTOR: ALTHOUGH PID INDICATES THE MARKETING ACTIVITIES CONTEMPLATED FOR FINANCING UNDER PROJECT ARE CLEARLY TO FACILITATING PRIVATE TRADING OPERATIONS IN THE AGRICULTURAL SECTOR, THE PUBLIC SECTOR OPERATING THROUGH THE ST. LUCIA MARKETING BOARD, HAS BEEN DIRECTLY ENGAGED IN OPEN MARKET TRADING. THE MISSION SHOULD REACH AN UNDERSTANDING, IN PRINCIPLE, WITH THE COSL ON RESPECTIVE ROLES OF THE PUBLIC AND PRIVATE SECTORS IN THE MARKETING OF AGRICULTURAL PRODUCTS AND SET FORTH THIS UNDERSTANDING IN PP.

--B. CAPACITY OF COSL TO IMPLEMENT PROPOSED MARKETING ACTIVITIES: THIS PROJECT COMPONENT SEEMS TO (1) IDENTIFY COMMODITIES (MAINLY FOR EXPORT) SUITABLE FOR PROMOTION, (2) ESTABLISH APPROPRIATE GRADES AND STANDARDS, AND (3) DETERMINE AND CONSTRUCT NECESSARY MARKETING FACILITIES. BUREAU CONCERNED THAT NATURE AND SCOPE OF THESE ACTIVITIES COULD OVERWHELM COSL'S CAPACITY FOR CARRYING THEM OUT EFFECTIVELY WITHIN THE PROJECT'S THREE YEAR TIMEFRAME. MISSION SHOULD CAREFULLY ASSESS CAPACITY OF COSL TO UNDERTAKE THESE ACTIVITIES AND DESIGN SUCH ACTIVITIES ACCORDINGLY.

5. COMMODITY DIVERSIFICATION: MISSION SHOULD ASSESS THE PROSPECTIVE ECONOMIC FEASIBILITY OF GROWING THE VARIOUS CROPS CONTEMPLATED FOR PROMOTION UNDER THIS PROJECT COMPONENT. SUCH ASSESSMENTS SHOULD BE PRESENTED IN PP.

6. IMPACT ON U.S. AGRICULTURAL COMMODITIES: SINCE PROJECT IS TO BE FINANCED WITH ECONOMIC SUPPORT FUNDS UNDER THE CFI SUPPLEMENT, COSL WILL BE EXPECTED TO COVENANT THAT IN USING DOLLAR FUNDS OR LOCAL CURRENCY RESOURCES UNDER THE PROJECT, THE COSL WILL AVOID PROJECT

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OF ACTIVITIES WHICH WOULD CAUSE OR THREATEN SERIOUS INJURY TO THE PRODUCTION, MARKETING, OR PRICING OF U.S. AGRICULTURAL COMMODITIES OR PRODUCTS. MISSION SHOULD CONSULT WITH RLA OR GC/LAC FOR ADDITIONAL INFORMATION ON THIS SUBJECT.

7. PP PRESENTATION: SINCE PROJECTS FINANCED UNDER CBI SUPPLEMENTAL MUST BE OBLIGATED BY MARCH 31, 1983, MISSION SHOULD SUBMIT PP TO BUREAU, ALONG WITH INFORMATION FOR INCLUSION IN CONGRESSIONAL NOTIFICATION, NLT MARCH 4. SEULTZ FT #7197

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## ANNEX C

### FINANCIAL AND ECONOMIC ANALYSES

This Annex summarizes the economic and financial analyses performed for the project's three main components ( land registration and ownership, market promotion, and banana replanting) and provides additional information on the detailed financial plans for each component. Discussion of the financial and economic analyses will be combined because of the high degree of overlap between the two topics in this case, due to the assumed equivalence between the economic ("shadow") prices and financial ("market") prices for the main inputs and outputs under consideration (this issue is further discussed below).

The economic and financial analyses for each of the main components address three issues that cut across the components, as follows:

- the overall return to the St. Lucian economy;
- the financial return to project participants; and
- the project's impact on GOSL finances and recurrent costs.

The results of the analyses in these three areas may be summarized as follows:

#### A. Summary of Results

##### 1. Overall Return to the Economy

Cost-benefit analyses were performed for each of the three main components, using available data supplemented where necessary by AID/design team estimates. These analyses were completed taking into account both project costs (AID and GOSL, including contingency allowances) and costs to other project participants (farmers and traders). These costs were then compared to project benefits from the following sources: a) increased production on unowned land identified through the land registration activity and sold by the GOSL, b) increased production on family lands converted to individual ownership through the registration and TIP activities, c) increased banana production, and d) increased export of high-value crops as a result of the marketing and diversification activities.

These analyses show that the project's main components yield substantial net benefits to the St. Lucian economy at a 15 percent discount rate, with internal rates of return on the order of 20 percent or higher for all three components.

In addition to these direct benefits from the project, the economy will also be strengthened over the long term by project-funded activities, particularly the land registration and marketing components. Project activities will increase the effectiveness of major markets (agricultural lands and fresh produce) that greatly influence the productivity of St. Lucian

factors of production. This increased market effectiveness is expected to be an important enabling factor promoting the future development of the agricultural sector over the long term.

## 2. Financial Return to Project Participants

The financial analyses performed at the level of the farmers and traders who will participate in the project-funded activities show that these activities provide them with a financial return sufficient to justify their participation. The net returns to the production and trading of high-value crops would permit farmers to repay pro-forma loans for the full investment cost of their expanded orchards at a 15 percent rate of interest within 10 years of planting and provide a return to the traders, sufficient to moderate their expansion and trading activities.

## 3. Impact on GOSL Recurrent Costs and Revenues

The project is not expected to have a significant impact on the recurrent costs of the GOSL. The principal programs that will continue after the project are the Marketing Promotion Unit and the Land Registry.

### B. Land Registration and Tenure Individualization Program

The economic importance of secure tenure in facilitating investment is widely recognized. Tenure security has this effect through the unwillingness of producers, in the absence of secure tenure, to undertake investments which come to be embodied in land, through the difficulty which producers have in securing long-term credit in the absence of a mortgageable title, and through the increased efficiency of land use made possible by the improved operation of the land market. The level of investment which will come as a result of the provision of secure title in a particular time and place is difficult to estimate. It depends on the production opportunities available, their profitability, and the degree to which their exploitation involves investments which become embodied in land or depend on the availability of mortgage credit. Similarly, the improved efficiency to be expected through the improved operation of the land market depends on the degree to which lack of an efficient land market is an obstacle to efficient resource allocation. Clearly, these matters involve questions of fact and cannot be resolved a priori.

The specific circumstances of St. Lucian agriculture are somewhat obscure. This makes it rather difficult to estimate with any precision the increased production which will result from the operation of the project. The facts which appear to be generally agreed upon are: (1) 55 percent of the cultivated area of St. Lucia is on lands for which there is reasonably secure title, title sufficiently secure to be adequate to obtain a mortgage; (2) of the remaining land, approximately 25 percent of the total is in "family lands" in which the active claims of non-resident co-owners represent a particularly serious obstacle.

Just how serious is the absence of secure tenure? The evidence on this point is scattered and not particularly conclusive. The vast majority of producers cultivate bananas as their principal or sole crop. There is strong reason to believe that the absence of secure title is not a critical obstacle to the improved cultivation of bananas. Credit is available for purchased inputs without a mortgage and the claim which non-resident co-owners can raise with respect to other tree crops does not extend to bananas. The fact that producers with and without title choose to cultivate bananas suggests that titling will not lead to an immediate and substantial movement toward crop diversification. Nonetheless, evidence reported elsewhere in the PP suggests that, to the extent that non-banana tree crops are grown, they are grown on titled land. Therefore, one would expect some movement toward improved land use efficiency as a result of titling. In addition, some permanent improvements to banana land such as improved drainage, appear not to be undertaken in the absence of secure title.

Although it is not clear that absence of secure title is, at present, the sole binding constraint to the cultivation of higher value crops, the purpose of the present project is to encourage diversification away from the current dependence on the somewhat precarious St. Lucian access to the U.K. market. The principal characteristic of the possible substitute crops is that they are either tree crops or require a significant permanent investment to make their cultivation feasible. Thus, while improved tenure is clearly not a sufficient condition for substantially improved agricultural production, it may well be a necessary condition. In evaluating the economic feasibility of the proposed project, one is left with a judgment that the increase in production will be relatively small in the short run; will be considerably more significant in the medium term as profitable export opportunities are identified; but is, in any case, extremely difficult to quantify.

Faced with this situation, it is still possible to estimate the rough magnitude and timing of improvements in net farm income as a result of titling and the influence of various factors on project feasibility. The attached Tables C-1 through C-5 attempt to do this under a variety of plausible assumptions about the pattern of increase in net farm income, the amount of uncultivated "found land" to be uncovered by the titling process, the proportion of family land which will be converted to individual ownership, and project cost.

Table C-1 presents what can be taken to be the basic projection. The table estimates two categories of benefits. The first is "found land," that is land which is not at present being cultivated because there is no one who has any kind of legal title to it. This was estimated by the project development team to be equal to two percent of total cultivated land based on the experience of similar titling activities in other countries of the region. The value of the benefit is the estimated market price of the land which is entered in the year in which the land is titled. There are two quite valid objections to this procedure. First, the market value of the land represents the capitalized value of the stream of future benefits is capitalized is unknown but will almost certainly differ from the discount rate to be applied to public sector projects. Second, a fundamental premise of the project is that the lack of

tenure produces distortions in the market for agricultural land. To then proceed to use a market price to measure the value of benefits seems rather inconsistent. The decision to employ this measure despite these objections is quite simply that it is the only reasonably firm measure of land value that we have.

The second category of benefits is the increased production estimated as a result of the provision of secure title. This is estimated on a per acre basis for two categories of land. First are those individual holdings which do not have secure (i.e., mortgageable) title at present. This was estimated at 20 percent of the total land area. The second category of land consists of those family holdings which are converted to individual ownership as a result of titling and subsequent intra-family negotiations. This was estimated at 20 percent of family holdings titled.<sup>1</sup> These estimates of newly titled individual holdings are applied to a stream of per acre benefits which are essentially arbitrary. The basic estimate is that the reported net income per acre (U.S. \$988) will increase by 5 percent per year over a five-year period. While there is no empirical basis for this estimate, it appears to be within the range of net income improvements which could be expected from such improvements as improved drainage of bananas or a shift to higher value tree crops without a major improvement in the level of agricultural technology.

Based on these assumptions, the project shows a net present value of \$1.7 million at a 10 percent discount rate and has an internal rate of return of 14.2 percent.

Table C-2 is based on essentially the same set of estimates except that the 5 percent net income increase is phased in over a ten year period. In this case, the net present value is reduced to \$493 thousand and the IRR to 11.1 percent.

Table C-3 returns to the 5 year phase-in period but reduces the projected gain in net income to four percent. In this case, the net present value is reduced to \$598 thousand and the IRR to 11.6 percent. Clearly, the level of the ultimate gain in net income is a crucial variable while the rapidity with which it is achieved is less so.

Tables C-4 and C-5 consider the effect of alternative assumptions about the amount of "found land" and the amount of family land converted to individual ownership. In both cases, the effect of altering these assumptions is minor.

<sup>1</sup> On the basis of survey results that 40 percent of owners in residence expressed interest in such conversion and guessing that half of those who express interest would be able to conclude an agreement.

TABLE (C-1)

ST. LUCIA AGRICULTURAL ADJUSTMENT PROJECT  
 Five Percent Increase in Net Farm Income Over 5 Years  
 (thousands of U.S. dollars)

	0	1	2	3	4	5	6	7	8	10-25
<b>"FOUND LAND"</b>										
acres			280	700	420					
price/acre			0.926	0.926	0.926					
value			259	648	389					
<b>INCREASED PROD.</b>										
(income stream/acr	0	10	20	30	40	49	49	49	49	49
Acres titled		7500	45000	22500						
of which untitled		3375	20250	10125						
undiv. land titled		1500	9000	4500						
family land titled & divided		375	2250	1125						
Tot. Income net		0	19	148	333	519	704	871	926	926
PROJ. COSTS	745	1415	1455	1315	80					
Plus Contingency	820	1557	1501	1447	88					
PROJ. NET BEN.	-820	-1557	-1323	-650	634	519	704	871	926	926
<b>NET PRESENT VALUE</b>										
discount rate	0.10	0.12	0.15							
Net Present Value	1682	759	-215							
IRR	14.2									

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TABLE C-2

ST. LUCIA AGRICULTURAL ADJUSTMENT PROJECT  
 Five Percent Increase in Net Farm Income Over 5 Years  
 (thousands of U.S. dollars)

	0	1	2	3	4	5	6	7	8	10-25
<b>"FOUND LAND"</b>										
acres			280	700	420					
price/acre			0.926	0.926	0.926					
value			259	648	389					
<b>INCREASED PROD.</b>										
(income stream/acr	0	5	10	15	20	25	30	35	40	44 49
Acres titled		7500	45000	22500						
of which untitled		3375	20250	10125						
undiv. land titled		1500	9000	4500						
family land titled & divided		375	2250	1125						
Tot. Income net		0	9	74	167	259	352	445	537	630 722
PROJ. COSTS	745	1415	1455	1315	80					
Plus Contingency	820	1557	1601	1447	88					
PROJ. NET BEN.	-820	-1557	-1332	-724	468	259	352	445	537	630 722
<b>NET PRESENT VALUE</b>										
discount rate	0.10	0.12	0.15							
Net Present Value	493	-294	-1098							
IRR	11.1									

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TABLE C-3

ST. LUCIA AGRICULTURAL ADJUSTMENT PROJECT  
 Five Percent Increase in Net Farm Income Over 5 Years  
 (thousands of U.S. dollars)

	0	1	2	3	4	5	6	7	8	10-25
<b>"FOUND LAND"</b>										
acres			280	700	420					
price/acre			0.926	0.926	0.926					
value			259	648	389					
<b>INCREASED PROD.</b>										
(income stream/acr	0	8	16	24	32	40	40	40	40	40
Acres titled		7500	45000	22500						
of which untitled		3375	20250	10125						
undiv. land titled		1500	9000	4500						
family land titled & divided		375	2250	1125						
Tot. Income net		0	15	119	267	415	563	697	741	741
PROJ. COSTS	745	1415	1455	1315	80					
Plus Contingency	820	1557	1601	1447	88					
PROJ. NET BEN.	-820	-1557	-1326	-680	568	415	563	697	741	741
<b>NET PRESENT VALUE</b>										
discount rate	0.10	0.12	0.15							
Net Present Value	598	-124	-880							
IRR	11.6									

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TABLE C-4

ST. LUCIA AGRICULTURAL ADJUSTMENT PROJECT  
 Five Percent Increase in Net Farm Income Over Ten Years:  
 "Found Land" equal to one percent of area  
 (thousands of U.S. dollars)

	0	1	2	3	4	5	6	7	8	10-25
<b>"FOUND LAND"</b>										
acres			140	350	210					
price/acre			0.926	0.926	0.926					
value			130	324	194					
<b>INCREASED PROD.</b>										
(income stream/acr	0	8	16	24	32	40	40	40	40	40
Acres titled		7500	45000	22500						
of which untitled		3375	20250	10125						
undiv. land titled		1500	9000	4500						
family land titled & divided		375	2250	1125						
Tot. Income net		0	15	119	267	415	563	697	741	741
PROJ. COSTS	745	1415	1455	1315	80					
Plus Contingency	820	1557	1601	1447	88					
PROJ. NET BEN.	-820	-1557	-1462	-1048	273	259	352	445	537	630
NET PRESENT VALUE										
discount rate	0.10	0.12	0.15							
Net Present Value	9	-752	-1520							
IRR	10.5									

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TABLE (C-5)

ST. LUCIA AGRICULTURAL ADJUSTMENT PROJECT  
 Five Percent Increase in Net Farm Income Over Ten Years:  
 Only 10 percent of family land c  
 (thousands of U.S. dollars)

	0	1	2	3	4	5	6	7	8	10-25
<b>"FOUND LAND"</b>										
acres			280	700	420					
price/acre			0.926	0.926	0.926					
value			259	648	389					
<b>INCREASED PROD.</b>										
(income stream/acr	0	8	16	24	32	40	40	40	40	40
Acres titled		7500	45000	22500						
of which untitled		3375	20250	10125						
undiv. land titled		1500	9000	4500						
family land titled & divided		188	1125	563						
Tot. Income net		0	8	67	150	233	317	400	484	567 650
PROJ. COSTS	745	1415	1455	1315	80					
Plus Contingency	820	1557	1601	1447	88					
PROJ. NET BEN.	-820	-1557	-1333	-732	451	233	317	400	484	567 650
<b>NET PRESENT VALUE</b>										
discount rate	0.10	0.12	0.15							
Net Present Value	70	-630	-1342							
IRR	10.2									

C. Economic and Financial Analysis of Market Promotion Component

1. Methodology Used in the Analyses

Economic and financial analyses were performed on the market promotion component in order to answer the following three questions:

- a. Are the activities funded by this component economically justifiable from the point of view of the St. Lucian economy as a whole?
- b. Do the financial benefits obtainable by the traders who make investments using the Market Promotion Fund (MPF) provide them sufficient return to ensure that the traders will be motivated to make the investments and will be able to repay the fund?
- c. Do the crops included in the program provide sufficient return to the farmers to ensure that they will respond by increasing their plantings of these crops and producing the quantities necessary for expanded trading?

In answering these questions, the following methodology was used to estimate the project's return from the standpoint of the various participants:

- a. A financial analysis was first performed from the point of view of the farmers and traders, estimating their net returns from the various crops based on current market prices. These returns are summarized in Table C-1.

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- ii. A "base case" analysis using financial prices was then completed based on the net benefits obtained in the previous analysis and the component's costs, including contingency allowances. In this analysis, conservative estimates were used for the relevant variables, including the potential tonnages that could be produced and exported over the next 15 years. These values are shown in Table C-2. This analysis provides an estimate of the financial return to the economy.
- iii. An economic analysis was performed based on this analysis, but using shadow prices for foreign exchange costs and earnings (assuming the EC dollar is overvalued by 10%) and for labor prices (assuming the current wage is twice the economic wage and that wages account for 20 percent of the costs of both traders and growers).
- iv. The financial analysis for the returns to trading operations was then used to formulate a "composite financial analysis" for the private sector traders, to ascertain whether the proposed level of investment (including their contribution) could be sustained by the projected level of trading.

These analyses took into consideration the full cost of the marketing component (including the investment in the seedling production units, both AID and the GOSL contributions, and the 10 percent contingency allowance). In addition, it was assumed that the traders would make an investment from their own resources equal to 25 percent of the amount provided by the project. The banana reflows allocated to the MPF were also included as a cost.

Grower and trader margins were calculated on a crop-by-crop basis, using current market prices for outputs and inputs. FOB prices (dockside Castries) were used for the four marketed crops, while the costs of operation were calculated on the basis of available crop budgets (primarily those completed for the BDD diversification project), a study of regional marketing of bananas completed for the RDO/C, and available data on the cost of trading operations obtained from traders interviewed and others.

The FOB value was first disaggregated to obtain an estimate of the total import component (fertilizer, boxing material, etc.). The resulting estimate of domestic value-added was divided into the grower's share (consisting of the market value of the domestic resources required for the production of the crop and a net return calculated as a residual) and the trader's share (also divided into a cost estimate and an estimated return).

Table C-1

Financial Returns to Traders  
(EC\$/tonne)

Crop	Total Value FOB	Imported Component	Growers			Traders			Total Net
			Total Value Added	Domestic Resource Cost	Net	Total Value Added	Domestic Resource Cost	Net	
Bananas	507	200	154	--	154	153	87	66	220
Oranges	1212	242	529	463	66	441	331	110	154
Mangoes	1652	220	639	507	132	793	440	353	485
Plantains	706	88	309	265	44	309	199	110	154

Table C-2

Projected Tonnages of Tropical Fruit Exports

('000 Long Tons)

A. Base Case

Product	1970's Peak			1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	Reg.	Eur.	Total										
Bananas	154	--	154	520	1000	1560	1560	-----	-----	-----	-----	-----	-----
Oranges	46	18	64			50	75	115	300	500	620	755	-----
Mangoes	235	223	458	53	100	150	200	245	600	1200	1500	1750	-----
Plantains	101	203	304		200	300	400	500	600	-----	-----	-----	-----

B. Pessimistic Case

Bananas	500	750	1000	1500	-----	-----	-----	-----	-----	-----	-----	-----	-----
Oranges				30	40	60	100	160	200	250	-----	-----	-----
Mangoes	30	50	70	140	250	440	650	900	1000	-----	-----	-----	-----
Plantains	200	250	300	400	500	-----	-----	-----	-----	-----	-----	-----	-----

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- v. Sensitivity analyses were performed on the base case financial analysis, the economic analysis, and the composite trader analysis to measure the impact on project returns of reduced trading volumes. These "pessimistic case" volumes are also shown in Table C-2.

## 2. Results of the Analyses

### a. The Base Case Financial Analysis

The analysis of the base case for the economy as a whole indicates that the project provides an internal rate of return on the order of 10 percent. The undiscounted value of the net cash flow, taking into account all project costs and trader investment, is EC\$5.6 million, yielding a discounted cash flow at 10 percent over 15 years of EC\$ (-62 thousand).

This rate of return, while modest compared to the rates of return estimated for the land and banana-support components, is nonetheless sufficient to merit inclusion of these activities in the project. This analysis does not take into consideration the increased economic security to be obtained by diversifying the agricultural export base nor other unquantifiable benefits, such as protection against failure of the banana crop or termination of the U.S. preferences. In view of these factors, the high cost of expatriate technical assistance (which amounts to nearly half of the cost of AID's contribution to the marketing component), and the high cost structure of the St. Lucian economy as a whole, a rate of return of 10 percent should be regarded as satisfactory.

### b. The Economic Analysis

The evaluation of the return to the project's marketing activities applying shadow prices to foreign exchange and domestic wages provides an estimated rate of return well in excess of 15 percent. The undiscounted net benefit stream making these corrections amounts to EC\$11.9 million over the 15-year time horizon used for this analysis, while the discounted net benefit streams at 10 and 15 percent are EC\$2.4 million and EC\$500,000 respectively. These results further support the conclusion reached in the financial analysis that the marketing component is beneficial to the St. Lucian economy.

### c. The Composite Trader Analysis

Regardless of the return to be expected to the economy as a whole (evaluated either at market or shadow prices), the return to the individuals participating in the project must be sufficiently high to make their participation worthwhile and to call forth the expected production of goods and services. The analysis of the returns to the trading and production of tropical fruits suggest that these activities are highly profitable and should provide sufficient inducement for St. Lucian farmers and entrepreneurs to engage in project-supported activities at the expected levels.

Since the project activities place most emphasis on expanding trading rather than on the increased production of the tree-crops per se, the financial analysis focussed primarily on the return to the traders from the increased export of plantains, oranges, mangoes and bananas to the regional

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and extra-regional markets. At the same time, however, it was considered prudent to consider the return to the growers from greater production of these crops, since current production would not support the levels of trade planned.

The results of these analyses indicate that:

- i. income from the production of crops included in the project will allow the farmers to increase their net incomes, even without taking into consideration the subsidies currently provided to farmers who plant tree crops. This increased income would be more than sufficient for the farmers to repay loans covering the full cost of establishing their orchards (at an assumed 15 percent rate of interest) within ten years after planting the trees (five years after they begin to produce fruit).
- ii. The traders whose expand their operations to handle the project's volume of trading can anticipate a return on their total investment (debt plus equity) in excess of 15 percent. Even assuming that the entire investment must be financed with trader equity, positive cash flows are obtained from the fourth year of operation.

d. Sensitivity Analyses

The results outlined above were tested by performing a sensitivity analysis to examine the impact of trading volumes lower than those projected. This analysis concludes that lower trade volumes would indeed lower the returns from project activities for both the St. Lucian economy and the individual traders. The more modest increases in export volumes shown in the "pessimistic case" in Table C-2 reduce the returns expected to roughly 8 percent for the economy as a whole (with shadow-pricing) and to a similar level for the traders.

It should be emphasized, however, that the lower rate was calculated assuming that the traders invested the full amount of the loan fund and an additional 25 percent from their own resources. In the event that trading volumes did not expand as rapidly as projected above, it is of course more likely that the traders would reduce their investment levels to something below this amount. Their financial profit on a reduced investment was not calculated, but it would naturally be higher than the 8-9 percent return at the full investment level.

3. Demand for Market Promotion Funds

The financial analysis for this component also took into consideration the likely demand for investment credit for expansion of marketing activities. Table C-3 and the notes to it provide an illustrative listing of the investments that may be made with this fund, using both the initial allocation of \$400,000 and the allocation of \$350,000 (total \$750,000). These estimates indicate a potential demand of at least \$1 million.

**TABLE C-3**  
**ILLUSTRATIVE LISTING OF INVESTMENTS TO BE MADE**  
**THROUGH THE MARKETING PROMOTION FUND<sup>1/</sup>**

TYPE OF INVESTMENT	NO. TO BE FINANCED	COST PER INVESTMENT	TOTAL INVESTMENT	FUND UTILIZATION <sup>2/</sup>
1. Cold Storage	4	\$ 25,000	\$ 100,000	\$ 80,000
2. Ships for Intra-regional Trade	2	90,000	180,000	100,000
3. Additional Boxing Plant Facilities for Regional Bananas	1	50,000	50,000	40,000
4. Packing Sheds	7	30,000	210,000	168,000
5. Grading and Packing Equipment (sets)	8	10,000	80,000	64,000
6. Refrigerated Trucks	5	35,000	175,000	140,000
7. Other Trucks & Transportation Equipment	5	25,000	125,000	100,000
8. Processing Plants	1	120,000	120,000	50,000
9. Warehouses	2	50,000	100,000	80,000
10. Working Capital (Large Firms)	3	50,000	150,000	150,000
11. Working Capital (Small Firms)	<u>5</u>	15,000		
<b>TOTAL</b>	<b>43</b>		<b>\$1,365,000</b>	<b>\$1,047,000</b>

<sup>1/</sup> Footnotes on following pages.

<sup>2/</sup> The lesser of \$50,000 or 80 percent of total investment cost (except the revolving funds for working capital, which would be funded at the levels shown).

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FOOTNOTES TO TABLE C-3

1. Cold Stores

Given that there are no private cold stores on St. Lucia, with the exception of a small facility operated by STAFCO and facilities used by various retail traders, it seems reasonable to assume that up to four such facilities could be financed to handle the fresh produce to be marketed regionally and extra-regionally. Possible loan clients include STAFCO (which has expressed its interest in building a facility to replace the existing one, which is rented), the SLAA (which desires to build a new facility on its ten acre site at Cul de Sac), current traders, and current growers.

2. Ships

The lack of refrigerated shipping capacity is a constraint to the intra-regional trade. At least one St. Lucian trader has been identified with serious plans to purchase such a ship as an extension of his current operations on St. Lucia. Given the expansion of activities planned through CATCO, a second ship should be economically viable.

3. Boxing Plant Facilities

A feasibility study has been completed for AID demonstrating the financial viability of expanding the BGA's current facilities in order to permit "reject" bananas to be processed for shipment to the intra-regional market. The cost included in this study is as shown.

4. Packing Sheds

Only one private packing shed for fresh produce was identified by the team during field work for the design of this project. Additional sheds will clearly be necessary if trade is to be expanded. In view of the substantial profits shown by the financial analysis of current trading operations in fresh produce, the financial viability of this investment appears strong.

5. Grading and Packing Equipment

Such equipment might be financed to upgrade existing facilities (or convert them to fresh produce handling) or to equip new sheds. In the short-term, the expansion of cocoa production expected in response to the newly guaranteed price will require an upgrading of cocoa processing equipment. Additional equipment might be financed for packing and grading of mangoes, oranges, avocados, and/or plantains for the export markets (regional and extra-regional).

6. Refrigerated Trucks

Rapid chilling of perishable produce is a critical factor in prolonging the quality of the product. If chilling can be maintained all the way to

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the final customer, the life of tropical crops such as mangoes can be significantly expanded by chilling immediately following picking or, at least, following the grading and packing operations. Trucks with refrigeration capability, virtually non-existent on St. Lucia at present, would be justifiable if cold stores at the docks were constructed, or if direct delivery to Geest or another refrigerated ship were established.

7. Non-refrigerated Trucks

Additional trucks for transport of fresh produce by traders (or on a service-for-hire basis serving traders and growers) will be necessary to bring the expected increased quantities to market. As the packing and marketing system develops, a demand for such service is expected to arise. Currently, most produce is transported in multi-purpose vehicles that also transport passengers and a wide range of goods at the same time, contributing to high losses before the produce reaches the port. A few traders have trucks of their own, but these are insufficient to carry expanded volumes

8. Processing Plants

Although the project is not intended to finance agro-processing per se, it is reasonable to assume that the increased production of fresh fruits may induce an investor or set up a processing facility for juice extraction, fruit drying, manufacture of jam or mango paste, etc. A further possibility is the construction of a processing facility to handle the revival of cocoa production in response to the recently guaranteed price (by a major international buyer).

9. Warehouse

Additional warehouse facilities may be constructed to handle produce and/or to store inputs used in the production and marketing of such crops. The SLAA has indicated its intention to build a new warehouse for the storage of cocoa, since its old warehouses have been converted to other uses.

10. Working Capital (Large and Small Firms)

The need for working capital to finance shipments is obvious, particularly in view of the relatively long delays that may be experienced in receiving payment from overseas markets and the high risks of shipping perishable products. The only loans currently made by St. Lucian banks to the trading sector are for working capital, but the amounts are extremely small and would be by no means adequate to finance a medium- or large-scale shipper.

## D. Economic and Financial Analysis of Short-Term Support to Bananas

### 1. Financial Analysis

The proposed provision of chemical inputs to support the replanting of some 2,000 acres of old banana mats is designed to increase production and grower income. If, as is estimated, the average rate of replanting for the past several years has been around 10 - 12%, the age of producing banana mats is the 4th ratoon. If the average rate of replanting over the past several years is nearer 14%, the average age of banana mats is the 3rd ratoon. This proposal would stimulate a return to the recommended 20% replanting cycle; such a schedule would result in an average age for banana mats of the 2nd ratoon (typically, a peak production harvest).

Table C-4 on page C24, compares the production yields and financial returns to the grower for different aged banana mats. There are no hard data for the "average" St. Lucian grower. The Table is based upon reasonable estimates. For the sake of consistency it has been assumed that each crop receives all WINBAN recommended inputs and practice. The Table indicates an average export yield of 10.6 long tons/acre; this is twice the average of 1982 (4.3 long tons/acre), but will under the demonstrated 15 - 20 tons/acre many growers achieve.

The Table indicates that were the average age of banana mats shifted from the 4th ratoon to the 2nd ratoon crop, through accelerated replanting, average production would increase 55% and the return to the grower would increase by more than 300%. If the average age of banana mats is the 4th ratoon, a shift to an average age of the 2nd ratoon, would increase production by 21% and profit by 51%. Growers understand the trade-offs; when resources are available and affordable, growers have "supplied" their fields (replace individual mats) or replanted whole sections. When sale prices are depressed or inputs scarce growers tend to hold producing mats well beyond their optimum production level. This happens because some maintenance costs are disguised to the grower, higher input costs for the first plant crop, and longer harvest time (10 - 12 months for a plant crop as compared to 8 - 10 months for a ratoon crop).

The real world of the St. Lucian grower is somewhat different than the model one-acre farm used for comparison. As noted earlier, average yields are not as high because inputs are not always available and not all recommended practices are followed. However, the general trend of the comparison is valid. Indeed, two factors could increase the growers return beyond those shown: (i) replanting provides the ability to schedule harvest for peak market prices, and (ii) increased production generally would lower SLBGA unit costs and increase price to growers.

Whatever the long-term advantage of reducing the average age of his banana plantings, in the short-run the grower is faced with trade-offs between the returns on existing mats and the additional cost of replanting. Table C-4 illustrates the financial gain of replanting after say the 4th ratoon harvest. This trade-off is complicated, however, by the fact that the replanting crop will take ten to twelve months to harvest, faced with uncertain availability of replanting inputs, the grower may substantially reduce his input on the 5th ratoon and salvage what harvest he can. This

TABLE C-4

COMPARISON OF GROWER RETURN FROM VARIOUS AGED BANANA STANDS -  
ONE ACRE, USING WINBAN RECOMMENDATIONS AND FIELD PACKING<sup>1/</sup>

	1ST PLANT CROP	1ST RATOON CROP	2ND RATOON CROP	3RD RATOON CROP	4TH RATOON CROP	5TH RATOON CROP
Average month peak pro- duction (in calendar months from planting)	11	19	28	37	46	55
Production (bats/acre)	800	760	720	640	520	480
Average bunch weight, lbs.	32	40	45	42	40	30
Harvest yield, lbs/acre with field pack & 5% loss	24,320	28,880	30,780	25,536	19,760	13,680
Estimated Income @ 21¢ EC/lb (including field pack incentive)	<u>\$5,107</u>	<u>\$6,065</u>	<u>\$6,464</u>	<u>\$5,363</u>	<u>\$64,150</u>	<u>\$2,873</u>
Grower Costs:						
Inputs						
Chemicals & CIF prices to growers	1,630	1,064	1,008	901	740	667
Labor @ \$15 EC/Day	2,696	2,157	2,157	2,157	2,157	2,157
Total	<u>\$4,326</u>	<u>\$3,221</u>	<u>\$3,165</u>	<u>\$3,058</u>	<u>\$2,897</u>	<u>\$2,824</u>
Management @ 5% of Inputs	216	161	158	153	145	141
Rent @ \$200 EC/Acre	200	200	200	200	200	200
Total Grower Costs	<u>\$4,742</u>	<u>\$3,582</u>	<u>\$3,523</u>	<u>\$3,411</u>	<u>\$3,242</u>	<u>\$3,165</u>
Net to Grower	<u>\$365</u>	<u>\$2,483</u>	<u>\$2,941</u>	<u>\$1,952</u>	<u>\$908</u>	<u>\$292</u>

<sup>1/</sup> There is little data on the relative yield of older ratoon crops. The figures shown here for production and average bunch weights represent estimated by the PP team which were reviewed by WINBAN personnel

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thinking is what has led many growers, faced with scarce inputs and depressed prices, to allow their fields to decline in productivity. The result has been a downward spiral in production with increasing per unit costs for the SLBGA resulting in further lower prices to growers.

Because the plant harvest is relatively light (lower bunch weight) and relatively expensive (higher input costs), it makes sense to spread the costs of replanting over more than one harvest. The proposed grace period of twelve months (starting with the month after the grower purchases inputs on credit), and with repayments spread over twelve months, would allow adequate grower cash-flow to repay the input loan and to purchase next crop inputs.

Table C-5 illustrates the sensitivity of estimated grower return to changes in factor prices. To accommodate for difference in average mat life and the multi-harvest effect of replanting, the comparison is made between averages for the first plant and first ratoon crop, and the fourth and fifth ratoon crop. The Table is based on the production estimates discussed in the Project Rationale Description section.

The estimated rate of return on inputs (if the grower replants) of 48% is in line with the studies conducted by CDB. In their analysis, done in conjunction with the pending CDB "Input Revolving Fund" Project, calculate the rate of return to the St. Lucian grower to be in excess of 50%.

Of all the variables, grower return is most sensitive to sales income. A conclusion borne out by the historical need for a "trigger price" or minimal grower price in the spring of the year, if substantial replanting is to take place. In all variations of factor prices, the grower who replants is at an economic advantage to the grower who stays with over-aged banana mats.

TABLE C-5

VARIABILITY OF GROWER RETURN ON INPUTS

	<u>AVERAGE 1ST PLANT &amp; RATOON CROPS</u>	<u>RETURNS ON INPUTS</u>	<u>AVERAGE 4TH &amp; 5TH RATOON CROP</u>	<u>RETURNS ON INPUTS</u>
Export Production lbs. <sup>1/</sup>	26,600		16,720	
Sale Income, at 21¢ EC/lb. <sup>1/</sup>	\$ 5,586		\$ 3,512	
Est. Input Costs <sup>2/</sup>	3,773		2,861	
Gross Return <sup>3/</sup>	<u>\$ 1,813</u>	<u>48%</u>	<u>\$ 651</u>	<u>23%</u>
Changes to Gross Return if:				
*Sales Income Declines 10%	\$1,254	33%	\$ 300	10%
*Sales Income Declines 20%	696	18	51	-
*Sales Income Declines 30%	137	4	-403	-
*Input Cost Rises 10%	1,436	35	365	12%
*Input Cost Rises 20%	1,058	23	79	2
*Input Cost Rises 30%	681	14	-207	-
*Sales Income Declines 10% & Input Costs Rise 10%	877	21	14	-
*Sales Income Decline 20% & Input Cost Rises 20%	-59	-	-623	-

- 
- 1/ Based on PP Team estimates.
  - 2/ Includes chemical inputs and labor.
  - 3/ Return prior to rent, overhead and transport costs which would be similar for the two categories of growers.

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# Best Available Document

TABLE C-6

COMPARISON OF ECONOMIC IMPACT - WITH AND WITHOUT PROJECT\*

(2,000 Acres, Using WINBAN Recommendations, at Varying Levels of Replanting)

(Figures In EC\$000's)

<u>LEVEL OF INPUTS</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>
<u>Situation One -- No Project Assistance:</u>				
Assumes a replanting rate of 11%, and average age of crops of the 4th ratoon.				
Estimated Growers' Net Income Present Value, FY 83:	EC\$1.8 m.	\$1.9	\$2.1	\$2.3
At 10% Discount Rate	EC\$ 6.2 m.			
At 15% Discount Rate	5.4			
<u>Situation Two -- Project Assistance:</u>				
Assumes 20% replanting rate sustained by SLBGA and growers, with average age of crops of 2nd ratoon.				
Estimated Growers' Net Income Present Value, FY 83:	5.9	6.4	6.9	7.4
At 10% Discount Rate	EC\$20.4 m.			
At 15% Discount Rate	17.7			
<u>Situation Three -- Project Assistance:</u>				
Assumes initial 20% replanting rate is not sustained; growers continue replanting at a 14% level.				
Estimated Growers Net Income Present Value, FY 83:	5.9	4.2	4.6	4.9
At 10% Discount Rate	EC\$15.3 m.			
At 15% Discount Rate	13.4			

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## 2. Economic Analysis

This section focuses on the economic viability of replanting some 2,000 acres or 1.6 million mats of bananas. It is assumed that: (a) all inputs will be available in St. Lucia by July 1, 1983, and (b) all inputs are distributed to eligible growers by October 1, 1983. If the full amount of inputs are not utilized for replanting, the economic effort discussed in this section would be delayed.

The economic effect of replanting at the grower level would be substantially as set forth in Table C-6 of the Financial Analysis discussion. The economic and financial analysis are similar because economic factors are legitimately valued at their market price (e.g., fertilizer and related inputs). Other factors, such as the banana export tax of 2/10 of 1 cent (EC) a Pound, are transfer payments.

The issue of the economic value of labor is always troublesome. The official unemployment rate (1978 - 81) is approximately 14%. More recent, albeit unofficial rates, estimate unemployment at twice that level. Even with high unemployment, the prevailing wage rates are high. This appears to be due to: (a) relatively strong union activities, (b) impact of tourism service jobs, and (c) a tendency on the part of many St. Lucians to prefer not working at all to working for "reduced wages". The current market price of EC\$15/day for five hours of field labor appears to be a reasonable economic valuation. The small-scale grower (1 - 3 acres) will utilize family labor for most of his needs. The hard field work for replanting may require some paid for, or barter, assistance. Larger growers will need substantial, temporary, assistance for replanting activities. It is anticipated that these will be drawn largely from the ranks of seasonal workers. If all 2,000 acres were replanting, some 56,000 days of labor may be generated. Probably less than one-half of this requirement would be paid labor, labor wages would be a transfer payment within the island's economy.

The major economic effect comes in CY 84 and later years as the increased production and productivity leads to substantial higher incomes for those growers who replant. The following Table compares the relatively economic impact of three situations. Each situation involves 2,000 acres and assumes the production date in Table C-6. The Table shows relative economic impact at varying levels of replanting. It does not predict actual economic returns, as not all farmers will follow all WINBAN practices.

In situation One, no project assistance is assumed. Replanting continues at the average rate of 11% resulting in an average mat age of the 4th ratoon. The present value of grower net income over the life of this Project at 10% and 15% gives a total of EC\$6.2 and 5.4 million dollars.

In situation Two, project assistance is assumed to lead to a sustained replanting rate of 20% resulting in an average mat age of the 2nd ratoon. The estimated present value of grower net income over the life of the Project is more than three times that of situation One. As stated in the Financial Analysis, the absolute dollar amounts are overstated from what can be reasonably expected. However, the relative improvement over situation One with project assistance is realistic. For this comparison the flow of benefits beyond the life of the Project, is ignored.

In situation Three, project assistance is assumed to result from a one year increase to a 20% replanting rate, followed by a lower, but sustained replanting rate of 14%. The estimated present value of growers' net income in this situation is almost two and one-half times the economic benefits of situation One.

In summary, the estimates in the PID of 20% production increase in one year, and a 50% over five years, are achievable assuming no adverse outside forces (e.g., hurricane damage or an outbreak of leaf spot disease, etc.). Given the limited base of hard economic and agronomic data for banana production, any projections of actual export production and grower revenues must be clearly labeled "consensus" estimates, not firm predictions.

DETAILED COMPONENT BUDGET -  
LAND SURVEY & REGISTRY

(US\$000'S)

ITEM DESCRIPTION	AID COSTS <sup>1/</sup>					TOTAL
	FY 83	FY 84	FY 85	FY 86	FY 87	
Expatriate Staff <sup>2/</sup>	\$ 19	\$ 885	\$ 924	\$ 828	\$ 19	\$2,675
Local Staff <sup>3/</sup>	3	154	160	145	3	465
Technical Assistance: Short Term	7	20	20	20	8	75
Field Studies	-	14	14	14	8	50
Initial Costs <sup>4/</sup>	710	-	-	-	-	710
Operation <sup>5/</sup>	3	50	60	60	2	175
TOTALS	\$742	\$1,123	\$1,178	\$1,067	\$40	\$4,150

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FOOTNOTES

- 1/ These cost estimates are based upon the explicit limitation that the land survey and adjudication work will pertain to that part of the island outside of the urban area of Castries. Were only the GOSL to obtain alternative funding to complete the whole island, total additional requirements would be \$2.3 million (including estimates for inflation and contingencies).
- 2/ Salaries were estimated based upon the assumption of 6 expatriates (U.S. or equivalent) at \$120,000 per person year (inclusive of all costs), and 8 expatriate (West Indian or equivalent) at \$25,500 per year (inclusive of all costs).
- 3/ There are 85 local hire employees, at \$324,000 annual (GOSL) rate, of which the GOSL would pay one-half and AID would pay one-half.

4/ Initial Costs include:

Major Equipment (see following Commodity List)	\$240,000
Miscellaneous Technical Equipment & Supplies	60,000
Furniture (Castries & field offices)	28,000
Twenty-two All Terrain Vehicles	220,000
Estimated Shipping & Overhead	<u>162,000</u>
TOTAL	<u>\$710,000</u>

15,000

5/ Recurrent AID costs are based upon the following estimates for a fully operational year of field work:

Office Rents (AID's share)	\$11,000
Vehicle Operations (AID's share)	33,000
Maps and Photos	3,000
Publicity/Public Education	2,000
Printing & Stationery	1,500
Materials	6,500
Communication	<u>3,000</u>
TOTAL	<u>\$60,000</u>

LAND SURVEY & REGISTRY  
COMMODITY LIST FOR "MAJOR EQUIPMENT" PROCUREMENT

<u>LOCATION/ITEM DESCRIPTION</u>	<u>UNITS</u>	<u>ESTIMATED COST</u>
<u>Survey Stores</u>		
Electronic distance measuring eqipt. with range up to 10 kms. (AGA 14A or similar). Sets complete with tripods & reflectors.	6	60,000
Theodolites - 1 second - (WILD T2 or similar).	6	42,000
Theodolites - 20 second with compass (WILD T0 or similar).	10	4,000
Traverse targets & tripods - sets.	5	3,000
Clinometers.	30	3,000
Compasses - hand held.	30	1,200
Tapes - steel - 100 meter.	12	1,560
Tapes - steel - 30 meter.	32	1,440
Calculators - hand	30	2,700
Computers with print out	2	2,000
Ranging poles	120	4,200
	<b>SUB-TOTAL</b>	<b><u>\$125,100</u></b>
<u>Drawing Office</u>		
Co-ordinatograph 50 cm x 50 cm	1	\$ 10,000
Epidiastroscope	2	10,000
Dye-line copier - up to 150 cms wide	2	1,000
Photocopier	3	1,100
Print-trimmer	2	100
Planimeters	9	4,500
Stencilling sets (Leroy of similar)	9	1,800
Calculators - hand	10	900
Stenoscopes - hand	16	1,000
Stereoscope - mirror	1	4,900
	<b>SUB-TOTAL</b>	<b><u>\$ 35,300</u></b>
<u>Project HQ</u>		
Typewriters	6	\$ 2,500
Word Processor	1	1,200
Accounts Machine	1	400
Calculators - hand	3	2,700
	<b>SUB-TOTAL</b>	<b><u>\$ 6,800</u></b>
<u>Special Furniture</u>		
* Vertical filing cabinets for plans	10	\$ 7,500
* Plan presses	8	44,000
* Filing cabinets - 4 drawer - foolscap size	20	10,000
Drawing tables - for Draftsmen	10	5,000
Light frames 150 cm x 100 cm	4	2,800
Plotting tables with 50 cm x 50 cm illuminated insert - for Surveyors	10	3,000
Safe or strong box for cash	2	500
	<b>SUB-TOTAL</b>	<b><u>\$240,000</u></b>

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DETAILED COMPONENT BUDGET -  
PILOT CAMP FINANCING PROGRAM

<u>ITEM DESCRIPTION</u>	-----AID COSTS-----			
	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>TOTAL</u>
Technical Assistance: Short-Term	\$ 15	\$5	\$5	\$ 25
Credit Fund	<u>100</u>	<u>0</u>	<u>0</u>	<u>100</u>
TOTALS	\$115	\$5	\$5	\$125

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DETAILED COMPONENT BUDGET -  
MARKETING PROMOTION

[US\$000'S]

<u>ITEM DESCRIPTION</u>	-----AID COSTS-----				
	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>TOTAL</u>
Technical Assistance:					
Long-Term	\$ 15	\$45	\$285	\$105	\$450
Short-Term	-	30	240	90	360
	15	15	45	15	90 <sub>1/</sub>
Participant Training	-	-	30	10	40 <sub>2/</sub>
Local Staff	-	5	25	15	45
Construction	15	15	-	-	30 <sub>3/</sub>
Credit & MF	-	-	300	150	450
Commodities:					
Vehicles	100	20	-	-	120
Office Equipment	25	15	-	-	40 <sub>4/</sub>
Seed Production	-	5	-	-	5 <sub>5/</sub>
	75	-	-	-	75 <sub>3/</sub>
Operations:					
MPU Office Support &	-	5	20	20	45
Vehicle Operation	-	2	15	15	32
Marketing Studies	-	5	5	5	10
Seedling Acquisition &	-	3	-	-	3
Transport	-	-	-	-	-

FOOTNOTES

- 1/ Of this total, the following is for the Nursery Improvement element of this component: Architectural & Engineering services @ \$6,000 and Nursery Logistics Planning @ \$7,000.
- 2/ Of this total, the following is for the Nursery Improvement element of this component: two apprenticeships at U.S. nurseries, three months at \$3,000 per month for a total of \$18,000.
- 3/ Construction and Seedling Production are interrelated activities under Nursery Improvement element of this project component. The estimated costs for these two activities is \$105,000. The breakdown of costs is as follows:

<u>Drainage Improvements:</u>	<u>\$21,100</u>
1. Leveling and compacting four half-acre holding areas at Union & Bath Nurseries	4,500
2. Two acres of Propex ground covering	3,000
3. Concrete building connector paths	1,000
4. Graveling of driveways	5,000
5. Repair of three small bridges at Union	4,000
6. Hand trucks	3,600
<u>Installation of Irrigation Equipment:</u>	<u>\$26,500</u>
1. Purchase and install storage tanks	6,000
2. Purchase and install 30 hp diesel booster pumps at water source (Union and Bath)	7,000
3. Purchase and install electric booster pumps	500
4. Irrigation system, 2.5 acres including building, misting units at Union Nursery	5,500
5. Irrigation system, 1.0 acres including buildings, misting units at Bath Nursery	3,500
6. Spare-parts of irrigation system	4,000
<u>Improvement to Soil Handling Facilities:</u>	<u>\$32,500</u>
1. Land clearing & drainage	3,000
2. Reconstruct two soil sheds	6,500
3. Purchase and install two steam soil sterilizers	17,000
4. Purchase three soil mixers with electric motors	5,000
5. Purchase two coconut hull shredders	1,000
<u>Installation of Seed &amp; Budding Material Storage Facilities:</u>	<u>\$ 9,900</u>
1. Chemical inputs for seedlings	2,400
2. Purchase and install three refrigerated storage units	6,000
3. Purchase four insulated containers for bud transport	500
4. Purchase virus free grafting stock seed	1,000

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<u>Other Building Repair and Improvements</u>	<u>\$15,000</u>
1. Modification for "rooting" room	2,000
2. Roof modification for proper hardening regime	7,000
3. Chemical store rooms	2,000
4. Office space	2,500
5. Improve changing and toilet facilities	1,000
6. Security lighting	500

4/ This includes a \$15 thousand utility vehicle for the Marketing Promotion Unit and a \$25 thousand three-ton dump truck for the Nursery Improvement Program.

5/ Office equipment includes: typewriters, telex, furnishings, and technical reference materials.

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DETAILED COMPONENT BUDGET -  
BANANA REPLANTING

<u>Project Element/Item Description</u>	<u>Cost Estimate<sup>1/</sup></u>
<b>A. <u>Agricultural Replanting Inputs:</u><sup>2/</sup></b>	
1. NPK Blended Fertilizer (e.g. 16-8-24 + 2 MgO; or 15-8-23*)	\$ 550,000
Requirements -- 2 3/4 lbs. per mat for 1.6 million mats. Approximately 1,800 metric tons at \$.05/ton	
2. Sulfate of Ammonia	80,000
Requirements -- 1/2 lb. per mat for 1.6 million mats. Approx- imately 360 metric tons at \$.220/ton	
3. Nematicide (e.g. "Furadan")	<u>290,000</u>
Requirements -- 2 1/2 ozs. per mat, for 1.6 million mats. Approximately 115 metric tons at \$2,500/ton	
<b>TOTAL Agricultural Inputs</b>	<b>\$920,000</b>
<b>B. <u>Financial Systems Assistance:</u><sup>2/</sup></b>	
One mini-computer (e.g. IBM # 31), plus associated software.	80,000
<b>TOTAL Component Inputs</b>	<b><u>\$1,000,000</u></b>

1/ Cost estimated based on current CIF St. Lucia prices.

2/ Technical specifications to be confirmed by USAID/RDD/C.

TECHNICAL ANALYSISA. OVERVIEW

The following analyses describe technical issues confronting the implementation of several of the project's components.

The analysis for the Land Registration component provides a synopsis of the pending land legislation, a detailed description of the application of the Land Registration and Adjudication System, an analysis as to St. Lucia's needs for further mapping, and a rationale for the selection of a "general" survey and demarcation system rather than a "fixed" one.

The analysis for the Tenure Individualization Program (TIP), includes a general description of the selection criteria to be used in that program, a description of the expected supply and demand of capital for the program, and an examination of the present land market as it will relate to the TIP. The analysis for the Market Promotion component describes the rationale for the various crops selected including their market potential. This description is followed by a brief technical description of the nursery facilities which will be provided under this component.

Lastly, several technical issues pertaining to the Banana Component are presented; these include: the rationale for replanting assistance, the application of the Lome Agreement, the effective demand for inputs, the productivity response of inputs, the sensitivity of factor prices, the terms of the loans, and the financial systems assistance to the BGA.

B. LAND REGISTRATION COMPONENT

The Land Reform Commission recommended that certain new legislation be passed to give effect to its recommendations for a new land registration system, including a survey of the land parcels of the island. In addition, the report saw the need for amendments to the Civil Code of St. Lucia and the introduction of a new act to govern the legal relationship between landowners and small farmers. All these Acts have now been drafted and copies have been circulated in St. Lucia for comment in keeping with the Prime Minister's promise to have them passed by the legislative no later than the end of June, 1983.

In addition, Rules and Regulations have been drafted to supplement two of those Acts; and it has also been found necessary to amend the current Survey Law in order to blend it into the proposed new legislation. These various supplementary rules and amendments have also been drafted and circulated.

These pieces of legislation when taken together will provide for the creation of a modern system of records of land and rights in land; and for the first time, an adequate legal infrastructure for the proper functioning of a market in land. They can be summarized as follows:

1) Land Surveyors Act

This Act will replace current legislation. It provides, in a manner

consistent with the Land Registration and Land Adjudication Acts, for the licensing of land surveyors, the proper conduct of surveys, and the preservation of survey works.

2) Survey Regulations

These are rules of a detailed and technical nature which govern the actual conduct of surveys and are meant to guide licensed surveyors in the exercise of their functions. The Chief Land Surveyor as well as the other workers of the survey profession in St. Lucia made significant contributions to this draft.

3) Amendment to Current Survey Law

It was realized that even after the main pieces of legislation mentioned earlier had been passed and the new process had got under way; surveys would still have to be conducted under the current law until that particular area was reached by the demarcation and survey teams. This law makes it mandatory for such surveys to be tied to the national grid system, thus making life much easier for the cadastre teams when they encounter such portions of recently surveyed land.

4) Land Adjudication Act

This law provides for a process of systematic adjudication of rights to land and is a precondition to registration of titles and their guarantee by the State. This is a quasi-judicial proceeding. Notice is given for all persons with any interests whatsoever in land in a defined geographic area to bring forward these claims. Any disputes are resolved by the Land Adjudication Officer with a right of appeal to a three man tribunal comprising a lawyer, a surveyor and an experienced agriculturalist. A further appeal then can be made to the Court of Appeal. When the adjudication process has been completed for a defined area, all the parcels of land are registered, and the new land registration system can begin to function in that area.

5) Land Registration Act

This Act is to replace the ineffective deed registration system which is currently in force. Each parcel is demarcated and, if necessary, adjudicated upon before registration. Thereafter the title is unassailable except on grounds of fraud. Once the system is in place, the accuracy of the register is maintained by the requirement that all future transactions in land must be noted on the register in order to be valid. The certainty of title to land is thus perpetuated, and not permitted to deteriorate with the passage of time.

6) Land Registration Rules

This body of rules consists largely of the forms to be used by the officers of the Land Registry and also by lawyers and other persons when transacting business in land such as mortgages, leases, easements and transfers. A list of fees to be paid in respect of each such transaction is also included.

7) Amendments to the Civil Code

Where land is purchased or inherited by several persons there has been a tendency in St. Lucia either not to subdivide it, or to attempt to subdivide in uneconomic parcels. Two amendments will give effect to the recommendations of the Land Reform Commission by introducing the concept of the "trust for sale", whereby in such circumstances only four persons are named as legal owners of the land and entitled to have their names entered on the register. This does not affect the entitlement of other co-owners to their share of any proceeds of sale. The amendments also restrict the rights of co-owners to subdivide in uneconomic parcels.

8) Agricultural Small Holdings Act

This Act, which is modelled on legislation which is already in force in several Caribbean islands, seeks to provide a legal framework for leases of small agricultural holdings (i.e. five acres and under) which have hitherto been handled on a relatively informal basis, and have consequently been the subject of considerable uncertainty for both landlords and tenants. It does not regulate rents, and is intended primarily to provide both parties with that security of expectations which is so conducive to good husbandry. The Chief Agricultural Officer of St. Lucia made several useful comments on the original draft.

The passage of at least items 1, 2, 3, 4, 5, and 6 are required for the implementation of the Land Registration component, while 7 and 8 are part of the GOSL's program for resolving some land tenure problems pending for some time.

1. A Description of the Operation of the Land Adjudication Act and of the Land Registration Act In the Context of St. Lucia.

a) Introduction

The system of Land Registration proposed by the Land Reform Commission is modelled on similar systems introduced to the Cayman Islands, Turks and Caicos, British Virgin Islands, Anguilla, Antigua and Montserrat between 1968 and 1981, under the British Technical Assistance Programme of the Overseas Development Administration (ODA). The Commission in its Interim Report draws attention to the fact that the procedures used and the legislation enacted in the other territories will need significant alteration to take account of the conditions in St. Lucia and the Civil Law Code which prevails in St. Lucia as distinct from the Common Law basis used elsewhere.

b) The Registration of Land

It is important at the outset to establish what is to be registered, which can be either the Deed, the Title, or the Land.

The Deed is the legal document by which the right of ownership is acquired; it is an account of a transaction and the registration of deeds is currently used in St. Lucia.

The Title to a piece of land is in the abstract sense the right of ownership and in many jurisdictions this right can be registered. The title so registered is guaranteed by the Government and may be used, for example, to secure a Loan.

In either system a plan of the land may accompany or form part of what is registered and the accuracy of the plan may be of varying standards. The plans and hence the system suffer however, from the fact that the surveys are isolated and unconnected to any national referencing system. The land so depicted cannot be re-allocated by any one without local knowledge. A typical example in St. Lucia would be a plot carefully surveyed and well marked by beacons bounded on one side by a road and on three sides by lands of the vendor, but which cannot be precisely located.

The third alternative is the registration of the land itself in which the unit of registration is the parcel (or piece) of land. The size and shape of all parcels are surveyed onto an index map which in addition to facilitating the re-location of a parcel also shows the juxtaposition of neighboring parcels, access, rights of way, etc. One register page is allotted to every parcel and on this are registered all the facts relating to the parcel. These will include: the parcel identification number, approximate size, nature of title (whether absolute or provisional), details of any appurtenances which benefit the parcel and these are all contained in the Property section of the register because they will persist whoever the owner may be. The Proprietorship section indicates who is the current owner and gives the date and a cross-reference to the legal instrument by which ownership was acquired. The third section of the register lists all incumbrances which adversely affect the parcel such as charges, leases, cautions or restrictions on dealing.

Thus, on one register page is contained all the information required in order to deal in the land. It will be noted that by registering the land in this way there is no attempt to describe any building on it nor any description of the crops or cultivation but purely the parcel of land.

No entry in the register has any legal force until it has been checked and signed by the Registrar of Lands, but once it is signed the rights of the registered owner are guaranteed by law.

### c) The Legislation

Experience in other countries clearly indicates the need for three laws to be passed by the Government before the new Land Registration system can be introduced. They are:

- The Land Adjudication Act (LAA);
- The Land Registration Act (LRA); and
- The Land Surveyors Act (LSA).

The three are interdependent.

The LAA is in a sense ephemeral in that it is used as a means of bringing all land onto the register.

The LRA defines the way in which the register is to be maintained. It is supplemented by rules which prescribe the various forms to be used for land transactions and also sets out the fees payable.

The LSA defines and regulates those persons who may make surveys of land for the purpose of alterations to the register. It too is

supplemented by rules which define the technical standards and also specify fees.

d) The Process of Adjudication

When the necessary legislation has been passed and permission to start work has been given, the Minister acting on the advice of the Project Manager formally declares that an area is now subject to the provisions of the LAA and appoints an Adjudication Officer to be responsible for that area. It would seem that the eleven quarters into which St. Lucia is divided for administrative purposes might be used as adjudication areas. The Project Manager and his staff will then mount an island-wide publicity campaign to explain the aims and benefits of the Project. Seminars will also be held to discuss and explain the implications of the new legislation with members of the legal, surveying and banking professions and with civil servants, particularly from the Registry, Planning, Agriculture and Forestry Departments.

The Adjudication Officer then divides the area into sections and appoints Demarcation Survey and Recording Officers for each section. When a section has been "declared" as required by LAA, a major publicity exercise is mounted to explain to landowners what is happening, what the Project team will do and what they must do themselves. This normally involves the use of radio broadcasts, newspaper notices and advertisements and a series of public meetings. It is particularly helpful at the public meeting for the chair to be taken by the local elected representative and for community social workers, agricultural officers and other local dignitaries to attend. The landowner is required to do five things which are:

- (i) To claim his land: This he does by completing a claim form at an office established locally by an Assistant Recording Officer, who will help those who find difficulty in completing their claim. The claimant is asked to give details of the owner's name and address, occupation, manner of acquisition of the land, details of any documents held and to describe the land by reference to adjacent owners. The Assistant Recording Officer then enters the claim in a register and gives a numbered receipt. The claim number becomes the identifier for that parcel until such time as a parcel number is created. A separate claim is required for each parcel.
- (ii) To establish his boundaries: This would normally involve meeting his neighbor on the ground in order to agree on the boundary, putting permanent markers where none exist and then clearing the boundary so that the surveyor can run a line along it. The last often causes problems as the effort involved can be considerable. Where boundaries are not properly defined they are recorded as being "undemarcated" and a restriction is recorded for "no dealings until the boundaries have been demarcated to the satisfaction of the Registrar".
- (iii) To point out the boundaries to the Demarcation Officer: The claimant should produce his claim receipt at this time and as he indicates turning points these

are flagged with small numbered strips of fluorescent tape. The Demarcation Officer makes notes, sketches, and plans as he goes and is normally accompanied by one of his two Survey Assistants. The Survey Assistant would normally survey the boundaries as flagged on the following day.

- (iv) To submit documentary evidence: Those claimants who already have legal documentary evidence are required to submit their documents, for which they are given a formal receipt. It is critically important that there should be in the Project Office a secure and efficient storage and retrieval system for the many thousands of legal documents likely to be submitted. Although it is not one of the primary objectives of the Project, it is hoped that calling in the old type documents will prevent misguided attempts to continue to deal under the old system after the new system is working.

Claimants who have no legal document to support their claim will be advised and encouraged to submit a properly notarized affidavit in support of their claim. This is particularly relevant to those whose claim is based on long possession. The Project would normally provide affidavit forms which contain advice on the details required, but the completion and notarization of the affidavit should not be done by Project staff"

- (v) To check the Adjudication Record: This will be during the period of display on completion of the section and will involve a further publicity effort.

As soon as the section has been declared and the public meetings held, work can begin along three paths. Experience suggests and local opinion confirms that the leader of the team in each section should be an expatriate in order to make it abundantly clear that he is neutral, and uninfluenced by any personal, family or other local pressures. The expatriate will have working as part of his team, Demarcation Assistants, Survey Assistants and Recording Assistants all of whom should be locally engaged and able to speak the local patois.

The Recording Assistant will set up a small office at some convenient local center where he will issue and receive claim forms and affidavits and also receive legal documents.

The Demarcation Assistant will move ahead of the Demarcation Officer to ensure that boundaries are clearly marked and cleared. He will also arrange appointments with claimants so that the work can flow smoothly.

The Survey Assistants normally operate as two teams spending one day alternately with the Demarcation Officer and in surveying the previous day's boundary markers. During the initial phases in a section they will have the task of putting in a network of minor control points on which their surveys will be based.

The normal pattern of work is for field work in the mornings and office work in the afternoons when the results of survey and demarcations are

plotted and documentary evidence is analyzed and recorded.

During the process of receiving claims and of demarcation, some disputes will be disclosed. These may be ownership disputes when more than one person claims the same piece of land, or boundary disputes where neighbors cannot agree, or disputes involving both ownership and boundaries. The Demarcation Officer will normally try to resolve the issue on the spot but when he cannot do so he will collect all the available information, make such sketches and survey as he deems necessary and will refer the matter to the Adjudication Officer.

When a dispute is reported to the Adjudication Officer he arranges a formal hearing at which all interested parties may appear or be represented. Evidence is given on oath and recorded and there are opportunities for the parties to call other witnesses.

Typically these hearings would take place in a school or police station near to the area in dispute, and in boundary disputes the Adjudication Officer would visit the area in dispute in the presence of both parties. Having heard all the evidence the Adjudication Officer may either announce his decision or write a decision, copies of which are then served on those involved.

As a result of the field activities, the demarcation map is compiled. This shows the boundaries of all parcels as surveyed, annotations as to the nature of the boundary, and written in each parcel are the claim number and name of the claimant. Also shown are rights of way, road reservations and the high and low water marks, if any. Buildings or any other structures are not shown and the height or slope of the ground is not depicted. When completed the parcels are measured to get an approximate size and each one is allotted a unique parcel number which now supercedes the claim number as the identifier.

Meanwhile, an adjudication record is compiled for each parcel and on this is listed all the information which will eventually appear in the register, plus any non-registerable information collected in the field. For example, if no claim has been made for a parcel which is stated by neighbors to belong to John Smith, an absentee owner, then the land will be recorded as Crown Land because it is unclaimed. The Recording Officer could however note on the adjudication record that "John Smith may have an interest in this parcel" and also enter a restriction against dealing for some period of years in order to allow the absentee owner an opportunity to claim.

The adjudication record and demarcation data sheet are carefully cross-referenced and amended if necessary as the result of any decisions by the Adjudication Officer. When all work in a section has been done the Adjudication Officer issues a public notice that this section is now complete and that for the next 90 days the results will be on display at the Project Office. During this period claimants may view both the map and the record and if satisfied they are invited to initial the adjudication record.

There are opportunities for those who disagree with what they see and, thereby, seek rectification. If the error is not contentious, such as a change of name, or if documentary evidence of ownership is produced rather late in the process, then the record can be amended through an

"Application to Alter". In more serious cases, such as a dispute which is discovered as a result of the display, the claimant may make a Petition to the Adjudication Officer who will then conduct a hearing along the same lines as he did for a dispute. However, should the petition be against the decision of the Adjudication Officer, in a dispute already heard by him, the matter will be referred as an Appeal to a three man Land Adjudication Tribunal. This right of appeal to a Tribunal is an innovation recommended by the Land Reform Commission and eliminates the anomalous system whereby the Adjudication Officer heard petitions against his own decisions. When the statutory display period has expired, all applications to alter have been dealt with and all petitions and appeals decided, the Adjudication Officer will declare that the section is finalized and will hand over to the Registrar of lands an adjudication record for each parcel of land and where appropriate a parcel file for all documentary evidence submitted.

He will hand over to the Chief Surveyor the demarcation map sheet and all field notes and computations.

The task of the Adjudication Officer and his team for that section is now complete, but there are provisions for any person who is aggrieved by any act or decision of the Adjudication Officer or of the Land Adjudication Tribunal to enter an appeal to the West Indies Associated Court of Appeal.

e. The Process of First Registration

On receipt of the adjudication record the Registrar of Lands has a register made for each parcel. This register is one page which will later be bound in a volume containing all the registers for one section.

All information is transferred, normally by typing, from the record to the register and once this is checked and signed by the Registrar any further dealing in that parcel of land must be registered under the LRA.

Although the registry index map serves as a geographic index, there is also compiled an Index by Owners to facilitate searches. The Registry will also maintain a parcel file in which will be placed all legal instruments which have given rise to entries in the register. It is convenient but not essential to place in the parcel file any documents collected during adjudication, but strictly speaking the first entry should be the adjudication record.

The Chief Surveyor receives from the Adjudication Officer the demarcation map which he then has redrawn to form the registry map. This registry map shows the finally accepted alignment of boundaries, parcel numbers and areas, rights of way etc., but does not show the owner's name or claim number. A master copy of this map is kept in the Survey Department and duplicates are made for use by the counter clerks in the land registry.

f. Transactions Under the LRA

A simple transfer of the whole of a parcel can be effected by using a standard pro forma, and any literate person should be able to do this for himself. When the statutory fees have been paid, the Registrar accepts the transfer form and uses it as authority to amend the "proprietorship" section of the register.

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Simple mortgages and leases can be registered equally easily.

In the event of a registered proprietor wishing to subdivide his land and to sell it off in smaller parcels, he would first need approval from the Development Control Authority, and would then employ a licensed Surveyor to set out the sub-division. The Surveyor would submit his survey to the Chief Surveyor who, after checking the plan and on instruction from the Registrar, would amend the registry map. The original parcel number would be cancelled never to be re-used and each of the new smaller parcels would be re-numbered and re-registered in the name of the original owner. Then as a parcel was sold, the transfer of the whole of that small parcel would be registered following the simple process outlined above.

## 2. Project Component Organizational Structure

The following personnel are required for staffing the proposed project team whose organizational chart is outlined below.

### a) Responsibility

Although the Project Manager will clearly be responsible to the Minister, the project should be an independent entity and not run as an integrated part of a Government Department.

### b) Team Composition - (See Figure 1) for Organization Chart

The basic crew envisaged will consist of 1 Expatriate (and hence "visibly neutral") Survey Technician assisted by 1 Demarcation Assistant, 2 Survey Assistants, 4 Driver/Laborers, 1 Recording Assistant and 1 Draftsman.

A Survey Party Leader would be responsible for 4 such crews and would be required to coordinate, supervise and to apply quality control by independent checks. He would also be responsible for the densification of the national survey control network in order to prevent the aggregation of gross error.

The Survey Party Leader is responsible to the Adjudication Officer who, in addition to his semi-judicial function of resolving land disputes is legally responsible for all of the activities of the teams. He has a special responsibility for checking all Adjudication Records to ensure the legal validity of entries made thereon.

The Project manager will have overall control of the activities of two such Adjudication teams, save that the Adjudication Officer alone is responsible for his legal decisions. The Project Manager will supervise the administrative back-up of the project to ensure that the work can proceed smoothly and will be responsible for budgetary control.

### c) Vehicles

The number of vehicles proposed is such that each Survey Technician should have two vehicles in order that his two survey crews can operate independently. The Survey Party Leader will also require one. These

should be rugged vehicles with some cross country capacity and suitable for carrying either 6 - 8 persons or a 4 man survey crew with about 500 lbs of equipment.

The Project Leader and Adjudication Officers should each be provided with vehicles and an additional vehicle should be provided for the general use of Project HQ. The total requirements therefore is 22.

In selecting vehicles, attention should be paid to the availability of local servicing facilities, durability and to the requirement for right hand drive as the rule of the road in St. Lucia is to drive on the left.

d) Equipment and Material

In compiling the following lists it has been assumed that tables, desks, chairs, etc. will also be provided to normal standards. Similarly "miscellaneous items" such as straightedges, protractors etc. and expendable stores such as drawing materials, tagging tape and ordinary stationery items have been specified.

(1) Survey Equipment

Electronic distance measuring equipt. with range up to 10 kms. (AGA 14A or similar). Sets complete with tripods and reflectors.	6	
Theodolites - 1 second -(WILD T2 or similar)	6	
Theodolites - 20 second with compass (WILD T0 or similar)	10	
Traverse targets and tripods - sets		5
Clinometers	30	
Compasses - hand held	30	
Tapes - steel - 100 meter		12
" " 30 meter		32
" fibron - 30 meter		62
Calculators hand	30	
Computers with print out	2	
Ranging poles	120	
Hand tools - as required		

(2) Drawing Office

Co-ordinatograph 50 cm x 50 cm		1
Epidiascope	2	
Dye-line copier - up to 150 cms wide	2	
Photocopier	3	
Print-trimmer	2	
Planimeters	9	
Stencilling sets (Leroy or similar)		9
Calculators hand	10	
Stereoscopes hand	16	
Stereoscopes mirror	7	

(3) Project HQ

Typewriters	6
Word Processor	1
Accounts Machine	1
Calculators, hand	3
Vehicle tools and spares	as required

(4) Special Furniture

* Vertical filing cabinets for plans	10
* Plan presses	8
* Filing cabinets - 4 drawer - foolscap size	20
Drawing tables - for Draughtsman	10
Light frames 150 cm x 100 cm	4
Plotting tables with 50 cm x 50 cm	
Illuminated insert - for Surveyors	10
Safe or strong box for cash	2

\* Items to be of steel, fireproof and with security locking bars in addition to normal locks.

(5) Special Stationery Requirement

The project will require three full sets of the Laws of St. Lucia for the use of Adjudication Officers and Project Manager. There will also be a need for the printing of large numbers of forms, such as 40,000 each of Claim forms, Adjudication Records and Receipts for documents, plus many many others.

e) Job Descriptions

These job descriptions are abbreviated and should be expanded by the Project Manager as one of his first tasks on assuming his appointment. All appointments will be made in consultation with the St. Lucia Government.

(1) Project Manager

This person is responsible through the Minister to the Government of St. Lucia for the systematic demarcation, survey, recording and the settlement through adjudication of all matters relating to land titles and ownership, and for submitting to the Registrar of Lands and Supt. of Surveys such documents, records and maps as will enable the implementation of the provisions of the Land Registration Act.

His tasks are: to implement, organize and monitor the project; to maintain and report progress and to bring the task to a successful conclusion; to supervise and train as necessary approximately one hundred (expatriate and locally employed) staff; to coordinate with the relevant departments of the Government of St. Lucia; to cooperate with the Government Information Service in order to publicize and explain the work of the project; to be responsible for all matters affecting the administration of the staff of the project, all project equipment and about 22 vehicles.

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Qualifications. A professionally qualified Land Surveyor with a minimum of 15 years experience since qualification. Management and administrative experience essential. Familiar with the type of legislation now being introduced to St. Lucia and should have previously worked on a systematic Land Adjudication Project, preferably under similar legislation. To be familiar with the basic principles of English Common Law as it applies to land and must have full fluency in spoken and written English.

(2) Adjudication Officer

Reference in brackets are to sections of the draft Land Adjudication Act.

The Adjudication Officer is responsible to the Project Manager for the efficient conduct, in accordance with land adjudication legislation, of the adjudication, for which he may "issue general or special directions" (s.4) and of which he is "in charge".

The following specific functions are in amplification of the statutory duties contained in the Land Adjudication Act or relate to duties not covered by the legislation:

In appointing members of the project staff, as demarcation officers, recording officers or survey officers (s.4), the Adjudication Officer will act on the advice of the Project Manager in consultation with the GOSL.

Before issuing "general or special directions" to demarcation officers or recording officers (s.4) he will normally consult with the Project Manager.

He will divide the adjudication area into named sections (s.5) in accordance with decisions made by the Project Manager and will issue notices of adjudication (s.6) in accordance with timings decided by the Project Manager.

He is responsible for obtaining the approval of the Attorney General to the form and wording of any notices or certificates required by law to be issued (ss.6, 10, 19, 23).

Where in his or the Project Manager's opinion there is doubt as to the effect on adjudication legislation of any other laws, or where there appears to be conflict between the land adjudication and other legislation, the Adjudication Officer should refer the doubt or apparent conflict to the Attorney General, prior to the determination of any dispute or petition, for an opinion.

He is generally responsible for ensuring that the powers of demarcation officers are exercised in accordance with the law (s.2) and the recording officers adhere strictly to the principles of adjudication (s.16) and the rules of adjudication (s. 17).

He is personally responsible for checking the accuracy of the adjudication record prior to the issue of the notice of completion (s.19) i.e. he should ensure that the particulars on the record relate to the parcel named, that all details required by s.18 have been entered, that all

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Irrelevant matter has been excluded, and that the record has been properly signed and dated by recording officer and the persons listed in s.18.

His records of hearings of disputes should be in the form required by s.15. Hearings and records of petitions should follow civil court procedure, but he may admit evidence which would not be admissible in Court and he may call evidence of his own notion (s.21).

He is responsible for the arrangements for all hearings including summonses of witnesses.

He is personally responsible for ensuring that effect is given to any decision made by him in determining a dispute or petition

He is responsible for ensuring that adequate explanations are given to landowners prior to the start of adjudication in any adjudication selection.

He is responsible for liaison with the Registrar of Deeds and the Courts. Specifically in the matter of staying of land suits and dealings in land during adjudication, he should ensure that notices issued under s.6 are brought to the notice of the Registrar of Deeds and Courts.

Qualifications. Either a senior survey officer with legal experience or a senior civil servant with experience in the administration of land. Legal training is not essential, but some would be helpful

### (3) Survey Party Leader

Responsible through the Adjudication Officer to the Project Manager for organizing and controlling the work of four Survey Teams, and for ensuring the quality of their work by independent checks. Personally responsible for the densification of the national survey control framework as required for the survey of boundaries. Responsible for assisting the Project Manager to train local staff, to account for and maintain project equipment and transport, and to compile such data as is necessary to monitor progress and expenditure.

Qualifications. A professionally qualified land surveyor with a minimum of 5 years experience since qualification. Some previous knowledge of cadastral surveys and a proven ability to organize and control a survey operation.

### (4) Senior Cartographer

Responsible to the Project Manager for the training, supervision and coordination of nine Draftsmen.

Qualifications. Formal training and a minimum of 10 years experience as a Cartographic Draftsman at Technician level, with some experience as an instructor.

### (5) Demarcation/Survey/Recording Officer

This person's responsibilities are: to carry out the duties of these officers as defined in the Land Adjudication Act. To carry out land

surveys to specifications defined by law, including the survey of new control points and the emplacement of beacons; to inspect and survey property boundaries, to resolve minor disputes and to provide to the Adjudication Officer evidence of disputes arising during demarcation; to compile a record for each parcel of land showing all registrable interests and to plot and compile data index sheets; to assist in the training of and to supervise locally employed assistants.

Qualifications. Normal training and a minimum of 10 years experience as a Survey Technician. Prolonged experience in graphical survey techniques is essential together with a knowledge of surveys for Land Registration, and of Land Law. Must be familiar with instrumental survey work including the use of EDM and capable of carrying out computations and plotting. A meticulous attention to detail is required.

(6) Senior Recording Officer (locally employed)

This person's responsibilities are: to receive and record claims and legal documents; to establish a secure and reliable system for the recording and filing of documents; to compile adjudication records from source documents; to answer public enquiries particularly during the display period and to receive and register petitions and applications to alter; to check and tabulate all records prior to delivery to the Land Registrar.

Qualifications. Administrative business experience with particular reference to registry and filing systems. No previous legal experience is necessary but complete familiarity with the Land Adjudication Act should be acquired quickly. The ability to type is desirable and fluency in the local patois is required.

(7) Demarcation Assistant (locally employed)

Under the direction of the Demarcation Officer to ensure that boundaries are clearly defined and ready for demarcation. Arranges for claimants to meet with Demarcation Officer.

Qualifications. Local knowledge, fluency in English and patois.

(8) Survey Assistant (locally employed)

Under the direction of the Survey Officer to carry out simple surveys and to plot the results.

Qualifications. Survey Technician training or the ability to learn as shown by aptitude tests, fluency in English and patois.

(9) Recording Assistant

Under the direction of the Recording Officer to receive and register claims, to help those claimants who find difficulty in completing the forms. To receive and register legal documents. To examine claims and documents and to extract information from them to Adjudication Records.

Qualifications. Some previous clerical experience. Integrity and thoroughness are important. Fluency in written and spoken English and in patois are essential.

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(10) Adjudication Assistant

Under the direction of the Adjudication Officer, the Adjudication Assistant is to serve notice of the hearing of disputes and of the decisions arising, on all persons affected and to act as an interpreter during hearings.

Qualifications. Some administrative experience e.g. a retired civil servant. Complete fluency in English and patois. Must be able to drive.

(11) Others. The job descriptions of the following locally engaged staff are implicit in their job titles and no elaboration is necessary.

Transport Manager  
Vehicle Mechanic  
Labor and Wages Clerk  
Storekeeper/Office Messenger  
Typist  
Cleaner  
Driver/Laborer

f) Recruitment

As a result of the operations of the Regional Cadastral Survey and Registration Project in the Caribbean over the period 1979 - 1980 and of experience in introducing similar land titling systems elsewhere, there exists a reservoir of expertise on which the proposed project can draw.

The boundaries to be surveyed by the project will be "general boundaries" rather than "fixed boundaries". Hence the primary survey skills required lie in the technique of graphical rather than instrumental surveys. The OAS sponsored Land Titling and Registration Pilot Project in St. Lucia has made some headway in assessing the social and economic justification for their task and conducted several valid studies in the pilot area. However because of the lack, as yet, of any legislation which they might be implementing and above all because they lack the professional expertise and guidance of a qualified Land Surveyor they have, as yet, only just begun the demarcation and survey of property boundaries. Nonetheless, the OAS project has trained a number of locally employed staff and it is to be hoped that it will be possible to use their training and experience, particularly during the opening months of the new Land Adjudication Team's activities. Arrangements should be made for some of the OAS staff to be transferred to this project.

3. Selection of Areas for Adjudication and Sequence of Areas

In selecting the area or areas in which adjudication should begin, it must be remembered that one of the primary requirements is that the process is systematic and comprehensive. Thus once an area is selected, all land parcels whether private or public, agricultural industrial or residential, claimed or unclaimed, will be subject to the process. And because the determination of the boundary of one parcel is also the determination of the adjacent one, the work must be progressive and not sporadic or selective.

Because the adjudication represents the first step in the installation of a completely new system, it is general practice to start with

a small section within a declared area and to use it as an example to politicians, landowners, lawyers, bankers, surveyors and to the general public of how the project and the attendant legislation works. That area also serves as an opportunity to train project staff and to perfect procedures. In other countries the first section has usually been chosen to include a good mix of rural and sub-urban parcels in which dealings are likely to arise, within reasonable access of the capital city and close to the Project Office. The more densely populated areas of the towns would best left until the project staff are well experienced.

With these aims in mind it is proposed that the first Adjudication Area to be declared should be the Gros Islet Quarter a few miles north of Castries and that within that area the first section would be the Marisule/Bois d'Orange settlements. The first Adjudication Team, based at Project HQ in Castries would then complete the rest of the Gros Islet Quarter and would thereafter work in the northern part of the island.

The second Adjudication Team, having participated in the pilot section, would be made responsible for the Dennery Quarter in which the first section should be in the Horne Panache area in order to incorporate as soon as possible the work of the OAS Pilot Project. Dennery is also an area in which many of the current problems of land tenure are known to be present, and the area containing Government land the current GOSL intends to distribute.

It is proposed that the second team should be based at Vieux Fort and made responsible for the southern part of the island.

The Project Manager who would be based at Castries would be responsible for arranging the sequence of operations thereafter in consultation with the Minister.

#### 4. Publicity

The public relations aspect of explaining what is happening, and why, will require a very intensive island-wide campaign at first, with possibly the Project Manager conducting seminars for government officials, lawyers, bankers and surveyors. Thereafter the Adjudication Teams will need to maintain publicity at the local level before and during their work.

Provision has been made in the budget for the printing of leaflets, newspaper notices and other forms of publicity. One very effective way of publicizing the project's work and, incidentally, of attracting the attention of absentee landowners is the use of a special stamp issue by the Post Office, "Have you claimed your land".

The Project Manager will be responsible for maintaining close and regular contact with the Government Information Service and for ensuring that their expertise and facilities are fully utilized.

#### 5. Organization and Staffing of a Combined Land Registry and Survey Department

The project will train personnel and advise the GOSL on the creation of a combined Land Registry and Survey Department.

a) Justification

The advantages of having a combined Land Registry and Survey Department have been clearly demonstrated in the Cayman Islands where one officer is both Chief Surveyor and Registrar of Lands. The joint department is responsible to one Minister and there is a ready flow of information between the surveyors and the registry staff. The efficiency of this pattern of administration had created a great deal of confidence in the security afforded to dealing with land.

In total contrast the Chief Surveyor and the Registrar in Antigua are in separate ministries and at opposite sides of the city. The flow of updated maps to the Registry is almost non-existent and members of the public making enquiries about land find themselves shunted backwards and forward between two offices, and the land registration and ownership system which is virtually identical with that in the Cayman Islands is under regular attack for its ineffectiveness.

St. Lucia is particularly fortunate in that it has a well established and efficient Survey Department with a comprehensive register of deposited plans. The Registration of Deeds affecting land forms a large part of the day-to-day work of the Registrar but he has many other types of legal documents to register and his staff are kept very busy.

It is proposed therefore that a joint Department responsible to one Minister should be established by combining the existing Lands and Survey Department now in the Ministry of Agriculture with a part of the staff of the Registrar, currently responsible to the Attorney General. Detailed organization and special requirements for accommodation, furniture and equipment follow in later paragraphs.

b) Training

The training of the Registry staff is of great importance, particularly when a new system is being introduced. Running a Registry is essentially an exercise in practical administration. Administration cannot be completely taught through a formal course of instruction, but rather it is learned by experience, and then only by those with the requisite aptitude. There is no academic course leading to a degree in land registration, and it is true that in this subject one look is worth a whole book.

It is therefore strongly urged that full use is made of the time before the first parcel of land is registered to train the staff who will operate the system. Two or more of the senior staff should be sent to visit one or two of the Land Registries in the Caribbean which operate under similar legislation and should be required to prepare critical reports on their operations. Cayman and Montserrat suggest themselves as good examples for study visits.

c) Accommodation and Specialized Equipment

The combined Land Registry and Survey Department should be in a reasonably central location with ready access for the general public. Parking space for Survey Department vehicles and for the public is desirable and there should be some shop work survey instrument, tripods, tapes and chains can be cleaned and oiled.

The following main rooms will be needed:

Chief Surveyor and Registrar of Lands	150 sq. ft.
Deputy Supts. ( 2)	150
Land Registrar	150
Deputy Registrar	100
Assistant Registrars ( 2)	150
Drawing Office (14 staff)	900
Surveyors Office (13 staff)	650
Administrative Office ( 2 staff)	150
Registry Main Office ( 8 staff)	600
Front Office ( 4 staff)	200
Printing Room	100
Vaults	300
Map Stores	100
Survey Tech. Stores	100
Stationery Stores	100
Field Laborers Room ( 8 staff)	100
Conference/Training Room	300
	<hr/>
	4,300 sq. ft.

Plus space for public access to Registry counter and map sales counter, corridors stairs and toilet facilities

Total area about 4,800 sq. ft.

In addition to the normal requirements of lighting and ventilation, the vaults should be fire proof, securely lockable with no outside windows and air conditioned as people will work in the vault. The vault should be fitted with steel shelving to accommodate 40,000 parcel files, 240 bound volumes of registers each holding 250 pages and with 10 vertical filing cabinets to hold the master copies of the Registry Index Map (RIM).

The front office should have a broad counter on which paper copies of the RIM may be laid for inspection and vertical filing cabinets in which the paper copies of the RIM will be stored. There should also be a separate counter for map sales.

There will be a recurrent need for the photocopying of documents and for making diazo prints of RIM's and other plans. The print room to house these facilities will need good ventilation with an extractor fan.

arrriage typewriters, capable of accepting paper up to 18 inches wide.

f) Budget of Land Registry Component

All costs of this component will be carried by GOSL. The capital costs of setting up the new combined Land Registry and Survey Department are based on a plan to build an additional storey on the building currently occupied in part by the Survey Department.

Initial costs are assessed at:-

Construction (4,800 sq. ft.)	US\$150,000
Specialist furniture and Office equipment	US\$150,000
Initial supplies registers and specialized stationery	US\$125,000
Total of set up costs	US\$425,000

c) Disaster Copy

It is prudent to make provision for a duplicate copy of the Land Register to be made in case the original is destroyed by some disaster. While the register is being compiled in the first instance from the results of systematic adjudication, a carbon copy on plain paper costs little extra effort and this, plus a copy of the Adjudication map, should be carefully stored elsewhere than in the Registry.

A microfilm facility presently exists under the control of the Registrar of Deeds in St. Lucia, having been donated by CIDA, but it would clearly be impracticable to microfilm every register after a transaction. It is advised that register should be microfilmed once every year, and that the microfile duplicates together with microfilms of the Registry Index map should be securely stored in another country.

COMBINED LAND REGISTRY AD SURVEY DEPT.  
ORGANIZATION CHART

CHIEF SURVEYOR AND REGISTRAR OF LANDS

Departmental Admin

1 Senior Clerk  
1 Junior Clerk  
1 Storekeeper  
1 Messenger

Survey Dept

Deputy Supt.

Lands Section

Lands Officer  
Crown Lands Overseer  
6 Crown Lands Rangers

Drawing Office

1 Sr. D'man  
6 D'man  
3 Junior D'man  
1 Print Technician

Checking Section

1 Sr. Surveyor  
1 Sr. D'man  
3 Rec. D'man

Survey Sec.

1 Sr. Surveyor  
3 Staff Surveyors  
2 App. Surveyors

Deputy Supt.

Survey Sec.

1 Sr. Surveyor  
3 Staff Surveyor  
2 App. Surveyor

Land Registry

Land Registrar

Deputy Land Registrar

Front Desk

Asst. Registrar  
1 EO  
2 Senior Clk.

Registry Office

Asst. Registrar  
1 EO  
2 Senior Clk.  
4 Junior Clk.

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6. Mapping Needs for Land Registration Project

a) Availability of Maps

The official mapping of St. Lucia has been produced as a joint Project between the Directorate of Overseas Surveys (DOS) which is one of the scientific units of the Overseas Development Administration in London, and the Lands and Surveys Department (LSD) of the Government of St. Lucia.

Coverage of the whole island in one sheet is provided by Series E 703 (DOS 445) at 1:50,000 scale. The current Edition 4 of 1982 was updated in 1981 and 1982.

Three sheets of Series E 803 (DOS 345) provide complete coverage of the island at 1:25,000 scale. The current Edition 5 of 1981 was compiled from air photography dated 1977 and from information supplied by a DOS Survey Party and LSD in 1980. For the more remote parts of the island this is the largest scale of map available, but it is too small for the survey of property boundaries.

The principal source of mapping for the Project will be Series DOS 045 at 1:2,500 scale. One hundred and fifty-five sheets, each 2 km x 1 km provide coverage of the vast majority of the populated areas. Dye-line transparencies of these are held by LSD and from these, paper prints for use by the Project can be made. The series was plotted from air photographs and field checked between 1977 and 1982.

b) Additional Requirements

(1) Semi-urban and urban areas. The 1:2,500 scale maps will prove to be too small for the more densely built-up areas where many parcels will be "house-spots" of less than 200 square meters, i.e. less than a 5 m square at this scale. About 90 half sheets each 1 km x 1 km should be enlarged to 1:1,000 scale and produced in 4 quadrants each 500 m x 500 m = 50 cm x 50 cm at scale.

(2) Rural areas. In those areas other than the Forest Reserve which are unmapped at anything larger than 1:25,000 scale, it is recommended the Registry Index map should be compiled at 1:5,000 scale. The enlargement of the 1:25,000 maps would provide a useful guide card but not a usable basis for survey. Aerial photography exists for much of the area in question but unfortunately because of excessive overlap it cannot be used for the production of orthophotomaps: the alternative of using the available photography to produce a regular series of 1:5,000 topographic maps would take several years and the costs would be prohibitive running into millions of dollars.

In order to ensure adequate accuracy in the survey and plotting of parcel boundaries while maintaining economy of effort and expenditure, the Project should be provided with enlargements of the available photography and using these and all available survey control data they will have to intensify the control and survey the boundaries by instrumental and graphical field survey techniques. They may also incorporate, subject to accuracy checks, survey plans already filed in the Lands and Survey Dept.

The equipment of the Project should include an Epidiascope to facilitate the enlargement or reduction of existing mapping.

### 7. Survey Accuracy: A Debate

Nothing provokes more argument among cadastral surveyors than discussion of the accuracy of boundary surveys, and particularly so when the vexed topic of "general" boundaries as opposed to "fixed" boundaries is introduced.

Writing in the "Survey Review" for October, 1982, I.P. Williamson of the University of New South Wales quotes two eminent authorities on the subject, and their views must be carefully considered. Professor A.J. Van Der Weele speaking at the U.N. Inter-Regional Seminar on Cadastral Surveying and Urban Mapping West Berlin in 1974 said: "If cadastral surveys in developing countries were carried out according to the sophisticated procedures established (though, in fact, only partly carried out) in the developed countries, the consequence would be great expense and slow progress. The contribution of such a cadastral survey to the development of the country would therefore be small, and probably very inefficient having regard to cost".

The second was a resolution adopted at the U.N. Regional Cartographic Conference for Asia and the Far East held in India in 1955, which stated: "The precision of a cadastral survey should not be more than necessary for the fulfilment of practical requirements. The system, the method of production and the legal basis should be adapted to local circumstances both social and physical".

The definitions given in the draft Land Registration Act for St. Lucia differentiate between a "fixed" boundary as being one which the Registrar has caused to be defined by a survey of the precise position of the boundary, and a "general" boundary for which the registry map and any filed plan shall be deemed to indicate the approximate boundaries and approximate situation only of the parcel. Note the distinction between precise and approximate.

The draft Survey Regulations attempt to quantify these rather vague definitions and state that surveys for fixed boundaries shall aim to achieve a standard accuracy of 1:5,000, while general boundaries are required to be surveyed "to an accuracy sufficient to allow the parcel of land to be drawn unambiguously on the registry map, and so that there is no plottable error between adjacent surveys". Later paragraphs of the Survey Regulations call for an accuracy of 1:1,000 in rural areas and 1:3,000 in urban areas for surveys of general boundaries.

Plottable error is a function of the scale of the map and a typical drawn line 0.4 mm wide would represent 0.4 metres at 1:1,000, 1.0 meter at 1:2,500 and 2.0 meters at 1:5,000 scale, these being the scales for registry maps in St. Lucia. Unless the actual measurements are to be precisely recorded for the purpose of a fixed boundary survey, there can be no justification in measuring to an accuracy of less than half the width of the eventual line. Since all the surveys made by the Land Adjudication Teams will be general surveys in the first instance, extensive use will be made of what is known as graphical survey technique, as opposed to instrumental survey technique. Graphical survey depends for its accuracy on the skill of the

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Surveyor and in his ability to fix points in relation to each other by alignments and directions with an absolute minimum of measurement, plotting the result as he goes. In contrast, instrumental surveys require every distance and angle to be measured, the results are computed before plotting and, dependent on the precision with which the measurements are made and computed, they can achieve a very high standard of both relative and absolute accuracy. But the more precise the survey, the higher the cost, and it has been convincingly demonstrated that for any fully comprehensive Land Registration system, the adoption of general boundaries is not only adequate but that it keeps the cost of surveys within sensible limits.

For those owners who demand, and are able to pay for, a more precise survey without the full implications of a fixed boundary survey, the Land Registration Act permits the registration of their plan. For the vast majority of owners, however, the general boundary survey will be done for him at no cost by the Adjudication Team and the owner is required thereafter to maintain his boundaries in good order. It is from the need for large numbers of general boundary surveys that the requirement for experienced graphical surveyors arises.

### C. Tenure Individualization Program

#### 1. The Problem

As shown in the Social Soundness Analysis, the productivity of an estimated 20% of St. Lucia's agricultural land is adversely affected by being under the "family lands" form of tenure. Multiple ownership of land and insecurity of title apparently prevent many farm operators from being eligible to receive production credits from banks and making longer term investments in the land, e.g. in improving the yields of bananas or in the creation of diversified tree crop enterprises. Consequently many small farmers who have considerable practical agricultural experience often do not expand and intensify their operations under this "family lands" form of tenure.

At the same time the traditional estates are encountering difficulties in maintaining large scale operations. Increasing wage labor rates, high management and supervision costs, problems of "defending" uncultivated portions of estate lands from illegal squatters, and the general socio-political milieu have induced some estate owners to begin to sell off some land parcels. The GOSL has acquired interests in some privately sold land and desires to transfer at least part of the land to small farmers.

Finally, land holdings are becoming increasingly fragmented. Inheritance laws and traditions favor the subdivision particularly of individually owned farms. Persons who wish to sell off their agricultural holdings find that there are very few buyers who can afford to cash purchase the entire area. Consequently unregistered and informal subdivision of already small fields occur since buyers can only afford to pay for micro-parcels.

Small farmers who wish to expand the size and scale of their operations generally find it difficult to finance such transactions. Their cash savings are simply not sufficient to allow them to become effective participants in the formal and quite limited commercial land market. The high

down payment required, often 30% or more, is generally beyond the small farmer's capital generation and savings mobilization capabilities. Additionally, the banks, which prefer to lend out their funds on the short-term commercial market, require that current mortgages carry an approximate 15% per annum interest rate and that the mortgage be completely repaid within 3 - 5 years. Also the banks generally do not make loans for purchasing of relatively small acreages of agricultural land. When banks make loans for land purchases, they are mostly to urban based commercial entrepreneurs or former managers of estates who are purchasing medium sized tracts of land of about 25 to 75 acres, and who may have significant other assets to guarantee the land mortgage. A final complication for the small farmer is the cost of assuring that the land he desires to purchase has a clear title.

## 2. The Proposed Solution

Under the project it is proposed that at least some family lands will be sold either as agreed by the buyer and the seller(s), with the sellers taking back a land contract (vendor's privileges), or with the buyer borrowing at the St. Lucia Development Bank and the sellers receiving a mixture of cash and mortgage payments. In case of the SLDB option, sellers will receive 20% of the value of their claim to family land in cash and 80% in SLDB debentures.

If the selling family members have not settled all differences among themselves as to the share of each, the sale may still proceed but all the monies, cash and future payments, would be credited to one passbook account in the name of the family (or Trust). In this case funds from this account could not be withdrawn, until the Bank receives a court approved order specifying the share of each person. When this happens, the Bank should then divide the funds, as well as those yet to come, into as many accounts as there are sharing family members. In effect, undivided shares in family land will have been converted into divided shares in the family savings account.

Sellers would be given 20% in cash, and the rest in debentures from the St. Lucia Development Bank. The SLDB debentures would make interest and principal payments, every quarter or six months, into the holders passbook accounts. Existing legislation already empowers the SLDB, with the approval of the Finance Minister, (an ex-officio member of the SLDB Board), to issue such debentures.

The debentures would also state that they could be used at face value in part payment for "Crown Lands", should a selling family member decide to acquire some of those lands at a later date. (That is, the SLDB would pay the future amounts over to the Crown Lands Office). This would be intended as an added inducement to sell in family lands. It would not change the existing mechanism for lease or sale of Crown Lands, except that the Crown Lands Officer would have to announce, by regulation, that this is an acceptable mode of payment.

The sources of funds for this component are (a) a grant of US\$100,000, (b) US\$400,000 in banana reflows from the NCB account, and (c) GOBL debenture or savings bonds which become additions to the SLDB capital structure and would require periodic payment of principal and interest over 10 years.

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The GOSL should choose a desired set of interest rates so the SLDB would receive a spread of 3% between the rate paid by the buyer and that paid to the sellers. i.e., if buyers are to be charged 10% then sellers would be paid 7% interest per annum on the future payments to be deposited in their passbook accounts, or if they chose, would receive 7% savings bonds. Government, under present law, is free to set different interest rates every time it issues a series of bonds. It can also vary the terms, but a payout term of 10 years is considered as standard for previous mortgage programs.

If it were deemed better to charge buyers 13% (the current prime rate), the sellers would be paid 10% on the mortgage part, which would be double the present average savings passbook rate and equal to the amount of the local banks typically pay for time deposits over EC\$5,000.

3. Criteria for selection of land purchasers

Small-scale farmers will be the participants in this program. As a guarantee that the funds will be used by small-scale farmers, the SLDB will require that the purchaser of the land being financed cannot already own, or have an interest in, the equivalent of more than 10 acres of land.

If it is subsequently encountered that he does have ownership or share rights in other properties totaling more than 10 acres ownership of the TIP financed land, these rights will be transferred to the SLDB. The SLDB would then sell and dispose of such lands and apply the net proceeds to the unpaid balance of the mortgage.

4. Focus of Tenure Individualization Program (TIP) Activities

It is expected that the SLDB will utilize these project funds for encouraging the consolidation of ownership claims on family lands. This consolidation and individualization of ownership is intended to create viable agricultural units upon those family lands encountered during the parcel identification and land adjudication activities of this project. These funds will be used only in those cases wherein the claimants to particular parcels of family lands voluntarily agree to have all ownership rights vested in one

particular person. In order to receive financing the new owner must agree to invest an initial down payment of 20 percent of the total value of the property and to be the cultivator of the land. The value of his/her down payment will include the pro-rated value of his/her present inherited share of the family lands being consolidated.

The value of the land area and the proportional shares of the heirs and claimants to the land will be determined in accordance with the present legal codes of St. Lucia and normal land appraisal procedures.

5. Operational Guideline for Mortgages from Tenure Individualization Program

The SLDB, which will implement this component, will be empowered to establish the specific terms of each mortgage financed within the following general guidelines:

- i. Value of Property Financed. Maximum EC\$40,000 (US\$18,518)
- ii. Down Payments Required. Minimum 20% of total value of property
- iii. Years for Repayment of USAID Provided Funds. Maximum - 10 years.
- iv. Annual Interest Rate Charged on Unpaid Balance of Loan of USAID Provided Funds  
Minimum - Prime rate less 3 percent per annum  
Maximum - Prime rate plus 2 percent per annum  
(Current prime rate in St. Lucia is 13%)
- v. Percentage of Farmers Yearly Gross Income Used for Debt Service Including Mortgage Repayment. Maximum 33 percent.
- vi. Value of GOSL Counterpart Contribution. GOSL debentures or SLDB debentures equal to 80% of the value of the lands.

6. Implementation of Tenure Individualization Program (TIP)

i. Initiation of process. During the land registration procedures of this project, the Adjudication Officers will be accompanied at the community meetings by representatives of both the SLDB and the Ministry of Community Affairs, Sports and Youth, who will explain the availability and functioning of the Tenure Individualization Program (TIP). Persons who desire to individualize their land titles, or desire to purchase small parcels of land in order to expand the size of their farm units may then apply to the SLDB for financing of up to 80% of the value of the land parcel they seek to acquire.

ii. Selection of participants and terms of mortgages. The selection of participants and the determination of the precise mortgage repayment terms will be at the discretion of the SLDB within the general guidelines noted above. Furthermore, in exchange for the payment received from the SLDB, the co-heirs and claimants, or Family Trust will provide a "Letter of Total Discharge" renouncing any claims they may have to the property in favor of the SLDB and the new owner.

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iii. Utilization of TIP resources by source of funds. In order to facilitate the acceptance of this program by the co-owners and sellers of the land parcels, the SLDB will utilize the Tenure Individualization Program to provide cash payments to all individual claimants for 20% of their share value in the property. During the first year of operation these cash payments will be financed by both down payments made by the new owners and by the AIO funds provided. In subsequent years reflows from other project components will be used.

The GOSL debentures, may be used by the qualified co-heirs at face value for purchasing government land. This option is designed to appeal to co-heirs who are willing to renounce their claims to a particular parcel, yet reluctant to abandon farming.

iv. Mechanics of implementation. To simplify the formalities, the GOSL would create and transfer bonds or debentures to the SLDB in an amount equivalent to the 80% of the expected value of the land to be purchased. Then as sellers seek payment, the SLDB would issue instruments (bonds or debentures) to them. (They would be freely negotiable, and available in a variety of denominations from EC\$50 to EC\$10,000). (The SLDB might also keep the GOSL contribution in its capital structure and simply issue its own debentures to the sellers, as is authorized by its own organic law).

v. Use of reflows from mortgage payments. The funds received by the SLDB as mortgage payments will be used to provide capital to other small-scale land purchasers. Such funds may also be used to guarantee loans financed by private sellers as well as to increase overall funds available for agriculture development programs.

#### a. Estate Land Sales

A significant question that must be addressed to determine the feasibility of the project is the nature and extent of the current market in land. A survey of the St. Lucian land market is reported by Robert Rickman (December, 1981). He notes that "Assuming that land sold in lots of one acre and over was agricultural land initially, registered land transactions from 1976 to 1981 account for more than 6% of the land in holdings." However, this does not cover all transfers of land. "If unregistered purchases of large estates by both government and private individuals are also included, the total area in transactions increases by at least 8,000 acres to 12,500 acres, or over 17% of land in holdings." At this rate it seems that this might account for most transactions since it implies a rapid turnover of land. However, it is not clear in this report why the large transactions went unregistered.

Many of the people interviewed during February, 1983 expressed the opinion that the future of the large estates (especially those owned by foreigners) is limited, and furthermore, because of social and political development, more and more of these estates will be sold off in relatively small parcels. There are indeed three current examples of the break-up of large estates; the St. Lucia Model Farms Project, the Dennery Farmco project, and a private subdivision and sale of the Marquis Estate.

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The Model Farms project has subdivided bottom land for banana production into 5 acre plots, and hillside farm lands into 10 acre plots. The new independent farmers were chosen from Geest estate workers and other applicants. They had 115 applications for land, interviewed 48, and approved 37. Two women applied; and one (with two children) was selected. The remainder were men in the 25-45 age range, with families. The major criterion in the selection process was willingness (and judged capacity) to undertake the entrepreneurial farm management functions. Although it is too early to judge, the plan seems to be well thought through. Individuals will receive title to their own farm after 15 years of payments to cover the land and development costs.

The Farmco experiment sought to combine estate with small farm operations, but lack of capital has hindered the land development phase. The current manager said he did not expect a further flood of applicants for individual farms by the former estate workers. Most former workers would apparently prefer to continue as laborers with job and pay-check security rather than undertake the risks and uncertainty on a farm of their own. (This preference was also attributed to many of the former estate workers at the Model Farms Project).

The Marquis Estate was surveyed and divided into parcels of varying size. Up to the present, 48 of the smaller parcels have been sold to former estate workers (the size of parcel varies from about 5 to 8 acres). Land price is \$1,500 per acre (below market value, according to the former administrator) with a down payment of about \$1,000 per parcel. Several have paid the entire purchase price and have been given title to their land. Another nine parcels of larger size (30 - 50 acres) were sold to professional people who live in Castries, as well as former managerial personnel from the estate. Eight buyers received loans from Barclays Bank and one from the Nova Scotia Bank. According to the former administrator, about half of the former workers did not desire land of their own. Of the remainder, only about one-half could come up with a down-payment.

What all three cases seem to indicate is that there is at least, a potential demand for land, if and when it becomes available in a size of unit which a family can manage. However, in none of the three cases did the estates look beyond their own workers, except in the last case where professional people from the capital city were also invited to buy. Thus these cases do not reveal the full extent of possible demand.

b. Analysis of (other than Estate Projects)

In order to arrive at an estimate of the extent of the current land market, and especially that market for small parcels, two sources of data were utilized. The first was a list of all land parcels which had been surveyed from 1976 through 1981. This information was obtained from the Office of Lands & Survey of the OJSL.

Analysis of the 489 parcels surveyed showed that for the 6 year period, 72 percent were of less than 5 acres, 18 percent were between 5 to 10 acres (inclusive), and 10 percent were of parcels larger than 10 acres. Thus subdivision usually produces units of fewer than 5 acres.

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TABLE 1  
Percentage of Farm Units and Land Surveys by Size of Farm

1 Size of Farm (Acres)	2 Number of Farms	3 % of Total Number of Units (%)	4 Number Of Surveys Carried out	5 % of Surveys	6 Percentage of Units Surveys (%)
Less than 5	8,555	82.0	353	72.0	4.1
5 - 10	1,082	10.4	88	18.0	8.1
More than 10	806	7.6	48	10.0	5.9
	<u>10,433</u>	<u>100.0</u>	<u>489</u>	<u>100.0</u>	<u>4.7</u>

Source: Sector Assessment & Land Survey Office.

As shown in the Table 1 above, of the 10,433 farm units, only 489 (or 4.7 percent) were surveyed from 1976 through 1981. However, the data in the table may be somewhat misleading because it implies that the surveys were carried out on farms of the stated size; when most were probably subdivisions of larger sized farms.

As shown in Column 6, the ratio of new units surveyed to the Census data is highest in the 5 to 10 acre size. This appears to substantiate the hypothesis of the UWI Legal and Sociological Survey: that is, there exists a significant core of small landowners who could form the base of a progressive agriculture. At the very least, the data does indicate that farmers of this size category are concerned with tenure security, and 88 of them had their properties legally surveyed and registered from 1976 through 1981. Many more were undoubtedly registered without survey, presumably because the parcel was transferred without a change in size or boundaries.

The data provided by the Land Survey Office, combined with a sample of land sales obtained from the Land Registry Office, also provides some indications of rural land prices. While these data do provide some indication, great caution must be exercised in using them. Most observers state that sellers and buyers often encouraged by their lawyers -- generally declare values below the prices at which the transactions actually occurred, presumably to evade the transfer tax.

TABLE II  
Per Acre Land Values Declared for Transactions Between 5-10 Acres 1975-1982

<u>Year</u>	<u>Number of Transactions</u>	<u>Average Value Per Acre</u>
1975+	20	E.C. \$1,066
1976	19	1,305
1977	8	1,314
1978	20	1,386
1979	9	1,445
1980	17	2,679+
1981	15	1,869
1982+	15	1,663

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- + Taken from land sales registered only during months of May, June and July. For 1976 through 1981, reflected all parcels of this size that were surveyed.
- ++ Includes 4 sales where declared per acre value exceeded EC\$5,000 and averaged EC\$6,385 per acre.

Source: Land Survey Office and Land Registry Clerk.

Except for the year 1980 and 1982 there appears to be a general price increase of about 13 percent per year. Only in the year 1980 was more than one transaction of land surveyed and recorded in which the value of the land was more than EC\$5,000 per acre. These high value 1980 transactions occurred near Castries, Gros Islet and Vieux Fort, and are presumed to be influenced by their value for tourist facilities.

While the rate of increase in land prices may be reflective of current trends, the land prices shown in the Table are most likely understated. The transaction tax on registered land sales is one incentive for such understatement.

Another reason may arise in financial institutions themselves. Small farmers report that the banks often assess the value of land quite low in order to reduce the amount that they will lend for mortgages, yet the buyer tends to register the land for that value and not for a higher amount even if he did pay more. Consequently, the farmers' actual downpayments may well be considerably higher than the 20 percent or more required as a minimum by the banks. Most observers in St. Lucia tend to place the actual current value for "good agricultural land" in the range of EC\$3,500 to EC\$5,000 per acre.

The column in Table II entitled the "number of transactions" shows that for three months of 1975 and 1982, 8-20 land sales were registered yearly. For the year 1976 through 1981, we have the number of transactions which involved a legally registered survey of the land. There were approximately 17 land sales of units of 5 to 10 acres per quarter recorded in 1975 and 1982, or approximately 68 such sales per year. Yet the Survey data for 1976-1981 indicate that on the average only 15 of such land transactions (about 22 percent) involve a legal land survey. Other transfers recorded are presumably sales not involving a division or change in boundaries.

A further study was made of the data on 1975 and 1982 sales of land below 5 acres in size. The value per acre was sharply and negatively correlated with size; it appears that parcels of 1.5 acres and less were brought as "house spots", in suburban areas and sometimes included houses as well as land. However, the prices for parcels between 1.5 and 4.9 acres probably reflect farm land, though the price still appears understated.

Size	1975 price/acre	1982 price/acre
Up to 1.0 acre	EC\$ 12,332	EC\$ 457,442
Over 1.0, up to 1.5	18,578	14,188
Over 1.5, under 5.0	1,864	2,648

c. Crown Land Sales

Crown lands are also occasionally sold, though most are relatively inaccessible and many are in water catchment areas, which the GOSL

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does not wish to populate. There were 19 agricultural Crown land sales from 1977 through 1982; the average price per acre was approximately EC\$700. However, these lands are generally inaccessible and covered with scrub vegetation which must be cleared before crops can be planted.

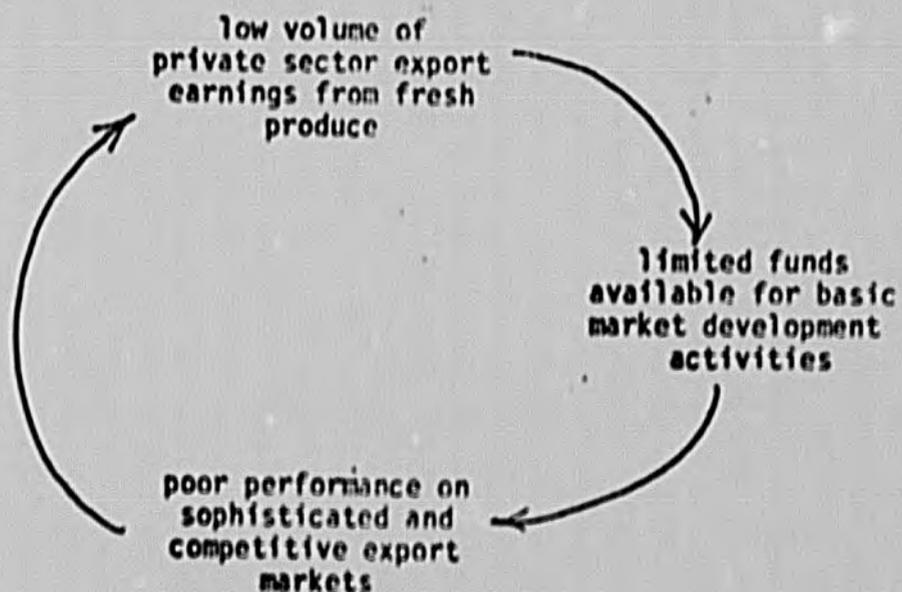
#### D. MARKET PROMOTION COMPONENT

##### 1. The Role of the Marketing Promotion Unit

Exports of fresh produce (other than bananas) have been, typically, sporadic and of relatively low volumes for many years. This less than successful export performance can be attributable, in part, to a lack of coordination between the domestic production and marketing sectors and the absence of an effective export marketing system(s) for fresh produce. This is presently the case for St. Lucian tree crop commodities.

Yet, strong evidence indicates that there is encouraging potential for the marketing of the project assisted crops and for other established commodities grown in St. Lucia; and that agronomic conditions are favorable for the growing of these commodities as well. The conclusion is drawn that if export marketing systems are not put in place for tree crops and other fresh produce, then, successful market penetration and sustained increases in export volumes will certainly never be attained. The three-pronged marketing program - establishment of a trade oriented Marketing Promotion Unit (MPU), a Marketing Opportunity Fund, and a Marketing Promotion Fund - is a mandatory requirement if the GOSL's diversification program is to be successful in the long-term, and to facilitate fresh produce marketing development in general over the short- to medium-term.

In many countries, public sector agencies have been established to stimulate private sector market development through the provision of marketing services that these firms would have been unable to afford otherwise. This component will fund these marketing services, and assist the private sector in building sound export marketing systems for selected key crops. The project will provide the "seed" capital and technical expertise that break the vicious circle outlined below:



The necessary expertise to staff a Marketing Promotion Unit is not available from either the public or private sector in St. Lucia. This lack of expertise leads to the requirement for technical assistance to be provided from outside the region. Over the length of the project, counterparts will be trained to the point where a pool of local marketing personnel will be able to continue market development and market training activities. At such a time, existing traders will have benefitted from an extensive period of "in-service" training from the long-term advisors and St. Lucian private sector marketing skills will have been up-graded.

Yet, the simple provision of technical assistance is not enough to stimulate the necessary marketing development. Marketing facilities must be up-graded in St. Lucia and this requires investment capital. Currently, and certainly for the medium-term, investment capital is in very short supply (only two of the five commercial banks are lending any longer-term money and, then, only to well established customers). Further, even in times when the supply of investment funds were more plentiful, traditional commercial banks were wary about fresh produce marketing investments; such ventures were associated with the traditional huckster trade and not with the modern management of fresh produce marketing systems. Bank officers and MPU staff administering the Marketing Promotion Fund will address this vitally important area of credit provision for the up-grading of marketing facilities. Currently, only very few export standard packing houses, and grading/washing facilities are in place, and there is a distinct shortage of cool storage space for perishable produce. Discussions with commercial bank managers and private sector traders convinced the project team that demand for these investment funds would definitely be forthcoming.

The market assessment has shown that attractive market opportunities exist for St. Lucian fresh produce traders in both intra- and extra-regional markets. Investment in marketing facilities, coupled with technical assistance on aspects of export market organization, will substantially increase the probability of profiting from fresh produce trade. Indeed, there are isolated examples of traders who have up-graded their facilities and, then, substantially increased the profitability of their business.

Within the Caribbean region there are numerous examples of insipient fresh produce trading ventures breaking down because of a relatively minor technological problem, a short-term breakdown in the export marketing system, or a lack of communication between buyer and seller. The Marketing Opportunity Fund is included in this project to cover such contingencies. Recent experiences in Barbados underline the usefulness of such discretionary grant funds. For example, a promising private sector export trade in sweet peppers would have foundered if it were not for the rapid injection of US\$1,000 provided by a public sector agency (the Barbados Marketing Corporation) to allow a private sector fresh produce marketing manager to visit the European buyer of his produce and solve short-term and relatively minor produce quality and trans-shipment problems. Such a public sector initiative served to sustain a private sector trading program which was to the benefit of sweet pepper producers, traders, and the Barbadian economy as well. The alternative - direct and longer-term public sector investment in the trading venture - would have only served to reduce the commercial incentive to the trader and embroil the public sector agency in an investment for which it was ill-suited.

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The marketing development package prescribed in this Project Paper is designed such that the MPU, the Opportunity Fund, and the Promotion Fund can show, by example, how marketing development activities can raise the volume and value of fresh produce export trade in St. Lucia, and how the public sector can participate, to the benefit of the overall economy, in private sector business development. By the end of the project, both public and private sector participants should be able to measure the worth of the Project's marketing development activities. The funding for the continuation of such activities could then be transferred to some combination of public and private sector financial source.

2. Draft Scopes of Work and Qualifications for the Long-Term Team Members  
a. Team Leader (Market Systems Development Advisor)

The responsibilities of the team leader will be as follows:

- i. Provide overall supervision and guidance to the staff of the Market Promotion Unit under the direction of the Director of the Marketing Authority and the Head of the MPU (if other than the team leader).
- ii. Exercise overall responsibility for the market systems development activities of the MPU, including:
  - a. Develop a work plan for the MPU specifying its relationship to the marketing authority and other marketing activities.
  - b. Complete analyses of the internal marketing system for the five target crops (regional bananas, plantains, mangoes, citrus, and cocoa) identifying the current trading system and opportunities for improving and expanding it.
  - c. Supervise the work of the Market Promotion Investment Advisor in completion of the benchmark analyses of the external market demand at the regional and extra-regional levels for the target crops, as a guide to expansion of St. Lucian marketing capacity.
  - d. Establish contacts with growers and traders in St. Lucia and overseas and promote better communication between them.
  - e. Actively promote the development of private associations of traders and growers as appropriate to expand trading activities and improve existing operation.
  - f. Provide technical advice on trading, packing, and financial management to traders and trading organizations.
- iii. Support the work of the Market Promotion Investment Advisor in working with the St. Lucian Development Bank and other banks to establish the Market Promotion Fund, to develop criteria for

use of the funds, and to identify traders who can make use of the fund.

- iv. Manage the Market Opportunity Fund and provide quarterly reports to the Coordinating Council and AID on its use.
- v. Develop scopes of work for short-term technical assistance and supervise their work in St. Lucia.
- vi. Monitor the progress of the banana and tenure individualization programs and coordinate as needed.
- vii. Provide quarterly reports on the activities and accomplishments of the MPU to the Director of the Marketing Authority, the Coordinating Council and AID.

If the team leader serves as the Director of the MPU, he or she will exercise supervision over the staff of the unit, including initial recruitment or arrangements for staff seconded from other government units. The staff will include:

- two professionals with prior experience or training in commerce or business management, to be trained on the job in the market promotion function.
- an extension agent seconded by the Ministry of Agriculture with expertise in post-harvest technology to provide advice to growers and traders in improving their operations.
- an ALDB Loan Officer assigned on a part-time liaison basis.
- an Administrative Assistant.
- a secretary to provide office management services as needed.

The qualifications for this position are as follows:

- i. At least 10 years of relevant experience in fresh produce trading and/or the development of marketing system in developing countries.
  - ii. A Masters in Business Administration or a comparable professional degree at the Masters or Doctoral level.
  - iii. Sound knowledge of business management practices.
  - iv. At least two years of work experience in developing countries, preferably including at least one period of residence in a small island country (in the Caribbean or elsewhere).
- b. Market Promotion Investment Advisor

The Market Promotion Investment Advisor will report to the team leader. The responsibilities of this individual are as follows:

- i. Complete the benchmark studies of the regional and extra-regional markets for the target crops under the direction of the team leader.

- ii. Develop and maintain information on subsequent market developments making use of available market services and provide this information to St. Lucian traders on a regular basis.
- iii. Work the SLDB and other banks to establish the Market Promotion Fund and monitor the flows into that account from project sources, including the bananas reflows.
- iv. Based on the analyses of the St. Lucian marketing system, establish contacts with individual traders and trading organizations to accomplish the following:
  - a. Identify investments needed to expand operations and provide support as needed to complete pre-feasibility and feasibility analyses for the financing of these investments.
  - b. Identify technical and managerial improvements needed in these operations and arrange for the necessary assistance to be provided through the project or by other means.
  - c. Support other programs of the MPA as directed by the team leader and the Director of the Marketing Authority.
  - d. Supervise all aspects of the short-term participant training included in this component, including identification of suitable participants, development of training plans, logistics of the training itself, etc.
  - e. Prepare a quarterly report summarizing accomplishments and activities in his/her areas of responsibility.

The qualifications for this position are as follows:

- i. At least five years of experience in the financial analysis of investments in the fresh produce or agricultural export area.
- ii. At least two years of work experience in a developing country, preferably in a small island situation (in the Caribbean or elsewhere).
- iii. An MBA or other relevant advanced professional degree.
- iv. Experience in establishing and managing commercial credit funds.
3. Rationale for Selection of Mangoes, Oranges, Plantains, and Bananas as Key Crops for Market Development Assistance
  - a) Mangoes destined for extra-regional and intra-regional markets.

The OSL estimates that mango production is close to 17,000 tons annually but this figure must be interpreted very carefully: first, the actual harvested volume is generally acknowledged to be only about 10 percent of annual production; secondly, the vast majority of harvested mangoes are of the common, ungrafted type which are small, stringy and totally unacceptable to consumers in both intra- and extra-regional markets. Prior to the 1980

hurricane, exports of mangoes hovered around 300 tons per annum in 1979, about two-thirds were exported to extra-regional markets (largely the U.K.), and one-third to intra-regional markets (largely Barbados).

The U.K. is among the largest of European importers of mangoes, reflecting a heavy mango consuming immigrant population (Asian and West Indian ethnic background) and, more recently, rapidly climbing consumption by the indigenous population. Imports of mangoes increased from 1,300 tons in 1975 to close to 3,000 tons in 1980. Major sources of supply to this market changed from year to year between 1973 and 1978 but, since then, Mexico has been the principal supplier.

Mexico has an established quality reputation on the U.K. market and supplies from this source are available between June and August. However, when competing against mangoes of equivalent quality, Mexico is at a disadvantage in that its product must be air-freighted to maintain quality standards. Exports of South African mangoes are on the rise and may represent the most serious competition in the longer-term. Worldwide fresh produce traders are optimistic that the U.K. demand for mangoes will continue to increase through the 1980s.

In 1981, Barbados imported about 200 tons of mangoes, largely from St. Lucia and St. Vincent, and in 1980, Trinidad & Tobago imported about 60 tons of mangoes from Grenada. In both countries, a ready market exists for quality, well-packaged mangoes to service the expanding supermarket sectors and the tourist trade; currently, bruise-free fruit are not available on these markets. CATCO estimates that the present market for quality mangoes over and above domestic supplies and 1981 huckster import volumes is around 300 tons per annum. Furthermore CATCO estimates that its own market share will exceed this annual level by the late 1980s to both of these targeted markets.

Estimated production of Julie and Graham grafted mangoes from present and planned diversification programs are expected to increase from 53 tons in 1984 to 1700 tons in 1992; Both these varieties of mangoes have high consumer acceptability in the U.K., Trinidad, and Barbados.

Given the buoyant market outlook for mangoes in both extra- and intra-regional markets, and the planned increased of quality varieties of mangoes from existing and planned mango expansion programs in St. Lucia, the mango production and marketing trade anticipate that export markets can be penetrated and sustained as production increases throughout the 1980s. This optimistic view is endorsed by Geest (VI) Ltd. - a company which has a major position in the U.K. fresh produce "exotica" trade. (With the important caveat that produce quality must be maintained at very high levels).

b) Oranges destined for intra-regional markets.

Prior to the 1980 hurricane, production of oranges in St. Lucia was estimated to be less than 200 tons per annum. With the exception of a small quantity of intra-regional exports of oranges (largely destined for Barbados), St. Lucian trade in this commodity has been insignificant in recent years.

Oranges are a favored fruit commodity by consumers in both Trinidad and Barbados.

(1) Trinidad. Orange production has declined from about 12,000 tons in 1974 to less than 6,000 tons in 1982. From being a substantial net exporter of fresh oranges, Trinidad now consistently "shorts" its own market. In 1982, the processed citrus juice production sector relied entirely on Belizean juice. Extra-regional imports of oranges are, typically, precluded from market entry. Trade analysts estimate that a market for an additional 2,000 tons per annum exists in Trinidad at present, (present production of oranges in the Windward Islands is at levels well below this figure).

(2) Barbados. The size of the orange market was about 1,000 tons in 1981; over 80 percent was provided by imports, of which half of this figure came from Jamaica and the remainder from extra-regional sources.

Estimated orange output from present and planned St. Lucian expansion programs are estimated to be 115 tons in 1988 and 735 tons in 1992. A ready market for this output exists in Barbados and Trinidad. Major regional competition may come from Dominican produce (as the Dominica Tree Crop Diversification Program comes on-stream by the mid to late 1980s) nevertheless, estimated market potential is expected to exceed this by a significant amount. CATCO has identified oranges as one of its core trading commodities during this decade. The produce manager of this company is confident that St. Lucian quality oranges (and ortaniques) could successfully and profitably compete in the Barbados and Trinidad markets, and this assessment is endorsed by other private sector trade participants as well.

c) Plantains destined for intra- and extra-regional markets.

Production of plantains in St. Lucia was estimated to be about 4,500 tons in 1979; Small quantities of this commodity are exported to the U.K. and even smaller tonages are traded intra-regionally, largely shipped to Barbados.<sup>1/</sup>

Plantains are an item purchased by immigrant communities in the U.K. Market size has been severely constrained by the poor quality of imported produce in recent years. Plantains produced in St. Lucia could follow the same export path to the U.K. as do bananas at present, although post-harvest technological problems must be overcome for shipments to be successful. Increasing plantain exports to the U.K. will offer an attractive marketing opportunity to the plantain production and marketing sectors over the next few years.

Strong markets exist for quality plantains in both Trinidad and Barbados. Trinidadian domestic production of plantain has been declining over the past ten years. St. Vincent exports close to 600 tons per annum to this market but, typically, the quality of the produce is poor and not suitable for the rapidly expanding supermarket segment. Plantains continue to be a preferred staple dietary item in Trinidad. The current size of the plantain market in Barbados is about 700 tons, the bulk of which are imported from St. Vincent, as is the case with Trinidad, the plantain trade is characterized by

<sup>1/</sup> Although the reported trade figures for intra-regional exports very probably understate actual amounts, as this commodity is traded by the small-scale huckster sector and their export figures are notoriously inaccurate.

high degree of product spoilage and, generally, low quality fruit. In the immediate future, the annual market potential for well packaged, quality of plantains in Trinidad and Barbados is close to 1,000 tons; this represents a financially attractive market opportunity for St. Lucian producers and fresh produce traders, and an entry point for the Marketing Promotion component to make a significant contribution to fresh produce trade expansion. This assessment is endorsed by major participants in the supermarket, hotel and restaurant sectors in both countries. CATCO has made initial efforts, with a reasonable degree of success, to exploit this market opportunity but is stymied in expanding the volume of its trade because of poor organization in supply countries such as St. Lucia.

d) Room-ripened bananas destined for intra-regional markets.

A recently completed feasibility study prepared for the CDB has identified that substantial markets exist for room-ripened bananas in selected Eastern Caribbean markets, and that bananas rejected for the U.K. market could provide the necessary raw material source.<sup>1/</sup> The study specified that between 2,700 and 3,800 tons per year (60 to 80 tons per week) of St. Lucian bananas could be marketed within the region; further, if ripening rooms were operational in Barbados and Trinidad, the anticipated market demand at competitive price levels is projected to be about 3,600 tons per year (70 tons per week). These reject bananas currently have very little value. Some are used for animal feed, but many are simply thrown away. At a projected net price to producers of 9 cents per lb. of bananas, the commercial value to the farmer alone of annual reject volume would be over half a million dollars [EC\$]. A ripening-room has been opened in Barbados and will be opening shortly in Trinidad - both in response to commercial initiatives from CATCO. The feasibility study identified that simple modifications to existing banana boxing plants and the introduction of a disciplined delivery system to move produce from point of production to wharfside (as per the existing U.K. export system) were the sine qua non for successful reject banana project implementation. This presents a further opportunity for the Marketing Promotion component of this project to make an immediate impact on fresh produce export volume through the provision of technical and other assistance.

4. Rehabilitation and Strengthened Management of Tree Crop Propagation Facilities:

Under this component of the project the Ministry of Agriculture's tree crop propagation facilities will be rehabilitated, and limited technical assistance provided in propagation management. This will be performed in order to cut the mortality rates of the planting stock being produced, facilitate more stable production levels, and expand the production volume of the combined facilities to at least 90,000 seedlings annually.

After a substantial part of the construction and equipment acquisition has been accomplished, the project will engage the short-term services of an experienced propagation nursery manager to provide technical assistance in the proper use of refurbished facilities and newly acquired equipment. More importantly, however, this person will establish an effective management regime for the propagation units, and train and assist the MDA's propagation officers.

<sup>1/</sup> Feasibility Study and Outline Implementation Plan on the Intra-Regional Marketing of Windward Island Bananas Ripened Under Controlled Conditions, System Group of Companies, November, 1982, prepared for WINBARI, funded by CDB.

Rough estimates of required nursery space requirements and seedling time in each space are presented here, subject to verification by the nursery management specialist. As an example, seven types of space are identified below:\*

Seed beds/cuttings beds	3 wks	0.1 ft/plant
grafting stock growing area	16 wks	0.5 ft/plant
budding area	2 wks	0.8 "
75% shade	2 wks	0.8 "
50% shade	2 wks	0.8 "
25% shade	2 wks	1.0 "
Inventory area	about 16 wks	1.2 "

Each space is characterized by a distinct controlled environment, distinct holding time for plants passing through it, and space requirement per plant.

The plant propagation process involves the production of budded/grafted planting material by the process of budding or grafting buds or scions of quality planting material onto appropriate disease/pest resistant root stocks, hardening off the successful takes and holding them for distribution.

The holding area requirement for grafting stock and for final inventory represent the major problem with respect to existing facilities because of their relatively large size. These need to be relatively level, well drained areas, with overhead irrigation systems. No roofing or shading is required however and thus the cost per square foot is lower than for other types. A total of little less than two acres of such space is required as a minimum.

Approximately one and a half acres at Union and a half an acre at Bath will be leveled and compacted for use as holding areas. An overhead irrigation system will be installed at both sites and the ground surface will be covered with a woven plastic covering such as Propax which allows water to percolate through, but at the same time control water splash-up and winds. Auxiliary water tanks will be installed on hill tops adjoining the water sources. The irrigation systems will also include branches to the existing buildings and other holding areas as well as mist facilities for citrus and cocoa leaf cuttings. The misting devices will require auxiliary electric pumps and automatic controls.

Under the project three small bridges will be repaired at Union and the driveways will be gravelled at both sites, allowing all weather access by the vehicles used by the propagation units.

The soil handling facilities will be improved at both stations starting with improvements to the soil shed at Union and the construction of such a shed at Bath. Soil mixers will be provided both stations as well as steam sterilizers and coconut hull shredders.

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\* Trees per acre are assumed to be the same for purposes of the example. In reality this figure will vary according to species.

Refrigerated seed and bud storage equipment will be provided at both stations in order to allow a more even production level over the year. Insulated containers for bud transport will be provided, and a supply of virus-free grafting stock seed will be provided.

A plan will be prepared for the movement of planting material through the stations according to the space requirements and apportioned 3/4 to Union and 1/4 to Bath. Connecting pathways will be constructed to connect the appropriate buildings and areas to accommodate the movement of trees from one area to the next. The roofing will be improved to accommodate the hardening of requirements for varying degrees of shade, and, as mentioned above, overhead irrigation facilities will be installed. Furthermore, chemical store rooms, office space, changing and toilet facilities, modifications to the "rooting" rooms, and security lighting will be financed.

Seven handcarts will be purchased for transport of the seedlings from one area to the next, and a three ton truck will be provided to move the increased volume of soil and seedlings.

Plans for these improvements will be prepared by an architectural/engineering firm in consultation with experienced nursery managers.

An essential complement to the propagation facilities is the establishment of arboreta or museum stands of varieties of tree crops which might, at a later date become economically important.

Arboretum establishment involves the collection of local fruit varieties and varieties imported from other sources such as other Caribbean islands including Puerto Rico and from mainland Florida.

Once representative numbers of fruit trees have been established, studies could be initiated on their agronomic characteristics as well as their production and economic potentials. Studies could also be made on potential root stock value and pest and disease resistance characteristics and suitably as germ plasm sources for future breeding.

The arboreta would each cover about two acres in area and should be located on sloping ground with good drainage. Three or four would be established on the most appropriate agricultural stations.

## E. Banana Replanting Component

### 1. Overview

The banana industry in St. Lucia, as in the rest of the West Indies, is a high cost producer, selling to a protected market. It is essentially a small farmer crop (77% of growers produce less than 5.5 tons per year) requiring high levels of chemical inputs to achieve desired yields.

St. Lucia has access to the protected U.K. market at preferential prices. Its share of this market is some 80,000 long tons, substantially more than it has produced in recent years. St. Lucia growers are in the enviable position of having a preferential market, as well as an effective transport mechanism (Geest Industries), for all the export grade bananas it can produce. The Green Market Price (GMP) for bananas in the United Kingdom has demonstrated a favorable long-term, up-trend. Recent low grower prices have

been the result of low production and adverse fluctuations in the Pound Sterling and EC\$ exchange rate. In addition, past inefficiencies in SLBGA management and field operations have contributed to depressed grower prices.

In spite of several difficult years (starting with hurricane damage in 1979), the banana industry has made progress toward sustained profitability. Substantial donor inputs have contributed to the survival and evolving rehabilitation of this crucial industry. At present there are several constraints to increasing the profitability of the banana industry:

- (a) relatively low crop yield, some 25% of what they could be;
- (b) high unit cost of production for growers and the SLBGA; and
- (c) depressed grower prices as a result of abnormal exchange rates.

One answer to these constraints is the provision of technical assistance to the grower and to the SLBGA. The British Development Division in the Caribbean (BDD) is providing expanded technical assistance to WINBAN, the SLBGA and to growers. A second response to these constraints is to accelerate the replanting of banana fields to improve yields, increase overall production and to lower per unit costs. If yields can be increased, through accelerated replanting and broader adoption of recommended practices, the banana industry could be profitable even at the current depressed exchange rate.

In addition to the research and extension efforts by WINBAN and BDD/C, there is a need to support replanting activities at a higher rate than the 10 - 15% of the past several years; without substantial replanting it will be difficult to increase production and profitability. A recent survey of St. Lucian banana growers indicates that replanting in the summer of 1982 was undertaken at the rate of 15% (including new acreage brought into banana production). This rate is lower than the recommended 20 - 25% rate, but higher than the depressed levels of replanting in recent years. Estimates by WINBAN personnel indicate that even with the 1982 replanting effort, the average age of banana mats may be between the fourth and fifth ratoon crop cycle (or fifth and sixth harvest from the original planting).

The following Table compares crop yields for a hypothetical acre of bananas using recommended WINBAN inputs and field practices.

TABLE I

	<u>First Crop</u>	<u>Ratoon Crops (Without Replanting)</u>				
		<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>5th</u>
Bunches/acre	800	760	720	640	520	480
Bunch Weight, Lbs	32	40	45	42	40	30
Harvest Yield						
(Field Pack and 5% Reject Rate, in Lbs.)	24,320	20,880	30,780	25,536	19,760	13,680

The average production per acre drops off at an accelerated rate after

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the 2nd ratoon crop. Although input costs drop somewhat for older crops, the economic yield is even less than the production trend would indicate. The new crops, with their higher yields result in lower unit costs to the grower and the SLBGA. In addition, replanting can be targeted to maximize production for the seasonal price rise in the U.K. market. Older ratoon harvests are out of sequence and miss the substantial bonus for sales in the months of May to September (typically this period provides a premium of 55 - 60% over the off-season months of October - March). As a result replanting offers greater economic yields than the comparisons of average production indicate.

The following Table compares the effect of different replanting rates on production yields.

TABLE II

<u>Average Replanting Rate</u>	<u>Average Age of Mats</u>	<u>Average Yield Following WINBAN Practices</u>
11%	4th Ratoon Crop	8.8 long tons/ac.
14%	3rd Ratoon Crop	11.4 long tons/ac.
20%	2nd Ratoon Crop	13.7 long tons/ac.

A shift in the average age of mats from the 4th ratoon to the 2nd ratoon, through accelerated replanting, would increase average production by more than 50%. Economic returns should increase even more due to lower unit costs and improved market-timing of production.

The illustrative yields in the Table are above current average yields (4.3 long tons/acre of exports), but they are below WINBAN research experience (18 - 22 long tons per acre) and the experience of progressive growers (15 - 20 tons). If the replanting cycle were raised to 20% from the current level of 11% (over a five year period) production could rise from an average of 4.3 long tons per acre to 6.7 tons/acre, increasing export sales from 43,000 tons to 67,000 tons.

Discussion with growers, extension personnel, and WINBAN/SLBGA officials indicate the growers will accelerate replanting this year if inputs are available. While recent adverse factor prices have discouraged some marginal producers (1 to 3 acres) from applying adequate inputs, most of the active growers (more than five acres) realize the need to invest in their future production.

## 2. Replanting Assistance

The major element of this component is the provision of US\$0.90 million of agricultural inputs to replant 2,000 acres of banana mats. Briefly stated, the inputs would be made available to the GOSL on a grant basis; the GOSL would provide the physical inputs to the SLBGA as an interest-bearing loan. The SLBGA would, in turn, provide these inputs to selected farmers on a credit basis. Repayments of this loan, by the SLBGA, would go to a joint GOSL/AID Agricultural Development Fund Account; SLBGA repayments would be secured by automatic deductions from export sales prior to their receipt by the SLBGA. Local currency costs of implementation (e.g. on-farm labor) would be provided by participating individual growers. The following is a detailed description of the replanting element.

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(a) Actions To Be Taken

Based upon agronomic estimates, the following amounts of fertilizer, nematicide and herbicide are needed to support the replanting of approximately 2,000 acres or 1.6 million mats of bananas.

NPK Fertilizer	1,820 Tons
Sulfate of Ammonia	370 Tons
Nematicide Furadan	115 Tons

These inputs would be procured in the U.S.A. and consigned to the GOSL on a grant basis. The GOSL would provide these inputs to the SLBGA on a full cost, loan basis at the rate of 6% simple interest on the outstanding balance. The SLBGA would have a fifteen (15) month grace period before repayments would begin. Beginning with the sixteenth (16) month, after receipt of inputs, one-twelfth (1/12) of the amount outstanding (including accrued interest) would be deducted from the "Geest Check" (export sales) by the National Commercial Bank (NCB) and transferred to a joint GOSL/AID "Agricultural Development Fund" account. The NCB receives, on behalf of the SLBGA, weekly export receipts from Geest Industries; the NCB would deduct a pro rata amount from each check before transferring these funds to the SLBGA account.

This provision assures timely repayment of the GOSL loan by the SLBGA. Over the period from the nineteenth month of the Project or the [sixteenth (16) month after receipt of inputs] through the thirty-first month [31] of the Project. Thus, the SLBGA would bear the financial risk of grower repayments. The fifteen month grace period would allow for the inputs to be distributed over a three month replanting season (July to October) and for the individual grower to begin repayments to the SLBGA from proceeds of his first harvest (within ten to twelve months of replanting).

Upon receipt of the commodities, the SLBGA would store, breakdown, and distribute inputs to selected growers. SLBGA would select growers eligible to receive these inputs based upon: (i) certification by field staff as to the completion of pre-planting activities; and (ii) the grower's credit experience with previous SLBGA input facilities. Preference would be given to growers with a substantial percentage of over-aged mats, and who had demonstrated adequate certification and harvest practices to achieve the economic benefits of these inputs. An upper limit on inputs to any one grower would be established to assure broad distribution of inputs among growers (e.g., inputs for no more than 10 acres or 8,000 mats of replanting).

The GOSL would utilize the technical services of the St. Lucia Development Bank (SLDB) to monitor receipt, storage and distribution of the commodities by the SLBGA.

These inputs would be made available by the SLBGA at cost plus 8 1/2% credit terms (simple interest against the outstanding balance). The grower would be given a twelve (12) month grace period before repayments would be required. This repayment schedule will allow the grower to repay with the proceeds from his first and second harvest (normally the eleventh and nineteenth months after planting). The manner of repayment by the grower could be by a per pound deduction by the SLBGA against grower exports sales

("CESS") or a flat monthly repayment (e.g., 1/12 of the amount borrowed, plus accrued interest). The ability of the SLBGA to monitor grower accounts will be strengthened by the second project element, "Financial Systems Assistance".

It should be underlined that it will be the responsibility of the SLBGA to assure that the inputs are used only for approved replanting activities by eligible growers. The SLBGA will bear the financial risk of grower repayments, as its repayments to the joint GOSL/AID account will be automatic, and not dependent upon repayments to the SLBGA. Given the past mixed history of SLBGA's enforcement of cess account repayments, it is important that the SLBGA Board formally bind itself to fixed repayment procedures for growers.

The terms of the GOSL/SLBGA and SLBGA/Grower Loans have been modified from those suggested in the PID. The new grace periods (15 and 12 months) have been changed to schedule repayments to match approximate yields from the first and second harvest, and to allow for distribution of inputs to growers over a three month period. The interest rates have been adjusted to bring them more in line with the pending CDB Input Revolving Fund rates, and to provide the SLBGA with a 2 1/2 percentage point spread to cover administrative costs and a very modest allowance for uncollectable grower loans.

(b) Project Participants and Beneficiaries

The GOSL is the recipient of the AID Grant for U.S.A. procured agricultural input called for in this Project element. The GOSL, acting through the St. Lucia Development Bank, will monitor the receipt, storage, distribution and application of agricultural inputs by the SLBGA.

The SLBGA will store, distribute and monitor grower repayment of inputs provided on credit. The SLBGA will be financially liable for the repayment of the input loan.

WIIIBAH will continue its technical guidance to SLBGA field staff and will accelerate its updating of grower information to reflect current research findings which may reduce input costs and improve grower yields.

The National Commercial Bank will be the executing agent for transfer from the SLBGA account to the joint GOSL/AID "Agricultural Development Fund" account.

The major direct beneficiary of this Project will be the small-scale banana growers. Based upon the analysis set forth in the Financial and Economic Annexes, the growers should experience a 21 - 55% gain in per acre yields. The grower will have adequate net profits and cash-flow to repay the input loans to the SLBGA, procure inputs for the next crop, and enjoy increases in farm income.

The expected 50+% increase in total yield, due to the accelerated replanting schedule which will generate additional income to the SLBGA, and will lower per unit costs, thereby increasing grower cash income or providing for repayment of back debts to the SLBGA. The additional total export tonnage will increase revenues to GOSL through its 2/10 of 1¢ (EC) per

pound export tax. Indirectly, increased profitability of the banana growers will generate added employment in the rural sector.

The Project has been discussed with representatives of the GOSL, SLBGA, NCB and WINBAN. In addition, a small sample of growers have been interviewed to discuss the practicalities of credit inputs to foster expanded replanting.

(c) Projected Issues

During the course of designing this Project element several issues were identified and addressed.

(1) Timing of Replanting

Replanting activities of the banana grower is seasonal. Typically, growers replant during June to September, after harvesting the mature ratoon crops during high market price period. This is also the traditional rainy season, so most fields can be prepared, new stock planted and inputs applied with adequate water supply. Replanting requires high levels of timely inputs if desired production is to be achieved. If chemical inputs are not thought to be available, growers will defer replanting.

Comment:

For this Project assistance to have the estimated effect on productivity and profitability, inputs must be locally available no later than July 1, 1983. This implies that AID must place orders for inputs in April of this year.

(2) General Availability of Inputs

Because of the financial difficulties of the SLBGA, the BDD/C has made available substantial shipments of fertilizer (approximately 6,000 long tons a year) on concessional terms. The fertilizer was a grant to the SLBGA, which in turn made it available at market cost to the growers. The repayments by the growers were to provide working capital to the SLBGA.

The SLBGA has been informed by the BDD/C that after the 1st quarter of this year there will be no further fertilizer assistance. The pending CDB "Input Revolving Fund" Project would provide approximately a million U.S. dollars for inputs at 4% interest to the SLBGA. This stable source of input assistance is not expected to be operational until late in the 3rd quarter of CY 83. The interim period will pose a difficult challenge to the SLBGA. The SLBGA will probably seek to provide maintenance inputs (beyond those for replanting activities) through purchase of low cost fertilizer in Martinique on supplier credit and sell to its growers for cash.

Comment:

The potential scarcity of fertilizer and related inputs over the 2nd and 3rd quarters of CY 83, will encourage replanting by the growers with the availability of AID procured inputs. It will also put pressure on the SLBGA and Ministry of Agriculture Banana Extension staff to closely monitor the distribution and actual application of replanting activities to prevent diversion to less productive uses (e.g., growers diluting the replanted mats).

( 3 ) LOME Agreement

The economic feasibility of banana production in St. Lucia depends upon preferential market treatment; given this dependency, what is that status and effect of the LOME Agreement?

Comment:

The United Kingdom (U.K.) is the principal market for Windward Island banana production. This connection dates back to the 1950's when the British encouraged banana production in the Caribbean through Commonwealth preferences and the placement of import quotas (and later, duties) on so-called "dollar" area bananas.

Access to the U.K. market by St. Lucia (and other Caribbean producers) is determined by the domestic demand for bananas in the United Kingdom, rather than by quotas. With assistance from producer organizations in the Caribbean, the U.K. government estimates what the islands can produce. Any unfilled domestic demand is met through controlled imports of "dollar" fruit. Current U.K. demand for bananas is more than 300,000 long tons annually. The Windward Island banana exports now total a little over 100,000 tons (including more than 40,000 tons from St. Lucia). In light of these export levels substantial room for market expansion by St. Lucia and other Windward Island producers exists.

The Lome Convention between the ACP-EEC countries, signed in February of 1975, gave bananas from Non-Commonwealth ACP countries equal treatment with those from the Commonwealth Caribbean countries. St. Lucia's preferential access to the U.K. market predates, and is not dependent upon, the Lome Convention. However, Chris International, a British firm, has taken the U.K. government to court in an attempt to eliminate preferences for Caribbean and ACP fruit (and to gain unlimited access to that market for its own "dollar" fruit). The law suit is expected to be in litigation for several years and, in the end, will likely fail. Moreover, the British government is committed to maintaining the longstanding preferential relationship with the Windward Island and Jamaica producers. Consequently, for the foreseeable future, the preferences are likely to remain in effect, thereby assuring a protected market for St. Lucia production.

This project is to increase and stabilize the production of bananas to help prevent further erosion of St. Lucia's market share to admittedly cheaper "dollar" fruit. The increased production will help to lower unit costs for the SLBGA and the growers; however, it is unlikely that without preferential markets, St. Lucia will be able to compete on the world market.

( 4 ) Effective Demand for Inputs

Over the past several years grower prices have been depressed. In part this was due to high SLBGA costs and more recently by adverse exchange rate fluctuations between the Pound Sterling and the EC dollar. In combination with hurricane damage (growers cut back, rather than replanting, existing ratoon mats to generate quick cash income), has lowered replanting rates. If growers perceive that current conditions will persist they may not replant at the proposed 20% rate but will try to get by with limited inputs to existing mats.

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Comments:

Most banana growers have experience with fluctuations in income due to external factors. Banana growers understand that replanting is a necessary investment in future production. The average mat, now at the 4th to 6th ratoon, is clearly less productive than younger plants. It was because of these considerations that growers began to accelerate replanting last year when some 15% of surveyed fields were replanted.

Some banana growers will choose not to replant rather than incur further debt for new inputs. For those growers who are marginal producers, this may be a rational economic choice. The majority of growers will replant; the ready availability of inputs for replanting (compared to the more scarce or cash-and-carry supplies for ratoon maintenance) will encourage major replanting.

In addition to the question of "effective demand", there is the question of institutional capacity to distribute more than 2,000 tons of inputs to eligible growers in a three month period. The proposed replanting inputs represents 15% of the normal volume of physical inputs handled by the SLBGA on an annual basis. The SLBGA has the storage capacity, facilities and staff to handle the commodities. What is less certain is the ability of some 18 extension agents to inspect and certify grower replanting activities as a condition to their receiving inputs on credit. This will require: simple, enforceable procedures; a pre-established list of eligible growers; and coordination between SLBGA field and headquarters staff. If the traditional planting season is foreshortened, by say early rains, the ability to distribute all inputs will be reduced.

If it happens that not all the inputs are needed to meet eligible grower replanting requests, a decision will have to be made as to the use of the remaining inputs. For example, credit sales could be made to selected growers who had young fields (1st and 2nd ratoons) but who could not afford SLBGA's cash terms for their input main tenure requirements.

This Project is a limited, intensive effort to significantly increase production. Given time constraints, the emphasis will be on the middle-size grower who has demonstrated adequate cultivation practices. While the smallest and larger growers will benefit, they are not the primary focus. As defined here, middle-size farmers would include the 22% of growers producing 5.5 to 50.0 tons a year (45% of total production) See Table III, at the end of this section.

(5) Productivity of Inputs

Due to the fact that the St. Lucia Banana Industry appears to be a marginal producer, the productivity of chemical inputs under varying conditions needs to be examined.

Comment:

There is widespread experiential data on the productivity of fertilizer and nematicides to achieve economic yields. However, there are rigorous production function data which identify precise effects on yields at various levels of inputs. The Financial Economic Analysis Sections examines the assumptions upon which the proposed input levels are based.

(6) Sensitivity Analysis of Factor Prices

Given the high cost nature of St. Lucian banana production and its vulnerability to external variables, it is important to examine the assumptions and sensitivity of factor prices which undergird the project's estimated productivity increases.

Comment:

To examine the sensitivity of grower return to changes in factor prices, two cases were compared (cf. Tables IV and V, Financial/Economic Analysis Section). In the first case a grower replants; the data shown is an average for the plant and first ratoon crops. In the second case the grower does not replant; the data shown is an average for the 4th and 5th ratoon crops (production assumptions and input costs are from Table I of the Financial/Economic Annex, Comparison of Grower Returns).

In the first comparison with a grower price of EC21¢ per pound and production of 26,600 and 16,720 pounds respectively, the rates of return on input costs are 48% for the grower who replants, and 23% for the grower who does not replant. The estimated 48% return on inputs for replanting is consistent with analyses done by CDB in conjunction with their "Input Revolving Fund" Project (they calculated a return to the St. Lucian grower of over 50%).

As noted in the Financial/Economic Analysis section, under all permutations of factor prices, the replanting growers are substantially better off than the non-replanting grower. The key variable is sales income, not input costs. If sales income declines 20% (reduced yield and/or reduced grower prices), the replanting growers receives 18% return and the non-replanting growers receives virtually no return on his input costs. If sales income declines 10% and input costs rise 10%, the replanting grower would receive a 21% return on inputs, the non-replanting grower would again receive virtually no return. The return to the grower who replants would be negative in the last comparison shown: sales income declines 20% and input costs rise 20%.

(7) Loan Terms

The PID proposed that the grant inputs to the GOSL be loaned to the SLBGA at 8%, and that the SLBGA should make available input credit to the growers at 9%. The grace period would be twelve months with repayments spread over the following ten months. Why have these terms been changed?

Comment:

The grace period has been adjusted to allow for distributing inputs to growers over the three month replanting season, and to provide repayment of grower credit from the proceeds of the first and second harvests. By providing the SLBGA with a fifteen month grace period, and the grower with a twelve month grace period, potential scheduling conflicts are avoided between export sales from the crop plant harvest and SLBGA's first automatic deduction from its export earnings.

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The interest rates have been shifted from 8% and 9%, to 6% and 8 1/2%. This will come closer to the grower input credit from the CDB "Input Revolving Fund" and will provide the SLBGA with a modest reserve for uncollectable grower loans.

(8) Financial Systems Assistance

In addition to physical and field staff capability to implement the replanting effort, the SLBGA must be able to make grower-specific credit judgements and collect grower repayments on a timely basis. If the SLBGA cannot collect from its growers an amount equal to the automatic deductions from its export earnings (transfers to the GOSL/AID Agriculture Development Fund), it will aggravate its already difficult cash-flow position.

The ability to manage grower credit transactions has not been one of the notable strengths of the SLBGA. Past problems have been due to several factors: (i) complicated grower accounts, each with various incentive and cess transactions, (ii) archaic accounting procedures and erratic computer processing, (iii) management which has not been able or willing to run the SLBGA like a major business, and (iv) a Board of Directors which on occasion has been more concerned about maintaining grower prices than in collecting past loans or covering current SLBGA operating costs.

The management capability of the SLBGA has recently been strengthened through the provision of a new General Manager and Financial Comptroller by the BDD/C. The three new Directors appointed by the GOSL (six are elected by growers) appear to be more sensitive to the financial realities of the SLBGA than past appointees. Even with BDD/C's concessional input assistance, and the more recent provision of technical assistance, past mistakes have left the SLBGA in a fragile financial position. As of September 30, 1982, the SLBGA has a negative net worth of EC\$1.1 million and a hand-to-mouth cash-flow position. Of the EC\$4.9 million in receivables on its books, more EC\$4.4 million was due from its growers for past credit activities. Under its new management, the SLBGA may be turning the corner. In spite of adverse exchange rate fluctuations, the SLBGA has reduced operating costs, established financial controls and begun to rationalize grower cess accounts. A continuing obstacle to improving SLBGA's financial management is the inability to maintain current, cumulative-to-date, grower records.

The SLBGA keeps records on more than 7,000 growers; each grower's account includes several sub-accounts (it is like a payroll system with various deductions). Each week a grower receives a statement showing his sales to the SLBGA, price per pound, applicable production incentives (e.g., field pack bonus) and cess deductions (e.g., for past credit, or prepaid cess, transactions). The resulting net price, per pound, is what the grower receives. All this data should be an input to a cumulative grower balances for each sub-account. It is not. The problem has been reliance on outside computer processing facilities. Originally, the SLBGA relied upon the computer capability of the Dominican BGA; due to technical problems that did not work. For the past two years they have relied upon the computer facility at the St. Lucian Port Authority. They have yet to receive current figures from the Port Authority. Without current account balances, the ability of the SLBGA to establish credit guidelines and monitor repayment and cess levels is severely limited. Without improved computer process capability the SLBGA will not be able to monitor, on a timely basis, the proposed replanting credit

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scheme or assure itself of repayments, to replace deductions made from the "Geest Check" to the GOSL "Agricultural Development Fund".

The inability of the St. Lucian Port Authority Computer Facility to service its many clients is widely recognized. The GOSL has established a Computer Task Force (including a BDD/C consultant) to determine specifications for a new shared system. It is anticipated that the GOSL will standardize on a IBM 34 or ICL 25 system for Government-wide use. It is proposed that the SLBGA, with assistance from the GOSL Task Force, establish its specific hardware and software requirements. It makes sense for the SLBGA to utilize equipment in conformity with the GOSL selection so as to standardize software, programming support and provide back-up support among the systems. It is important that the SLBGA's mini-computer be compatible with new GOSL systems, however it should not be dependent upon the implementation schedule of the new shared system. The SLBGA needs its own facility, or at a minimum, dedicated access to the shared facility.

SLBGA's current needs-assessment indicate a new computer would provide support for the following: (i) all grower payment and input transactions, (ii) grower accounts with delineation between "input cess" accounts and other debt repayment accounts, (iii) Input Revolving Fund and inventory control, (iv) all other accounting records, (v) field operation statistics including quality control (production, spraying and boxing plant activities), (vi) personnel statistics, and (vii) grower registration records.

It is estimated by the BDD/C consultant that an appropriate system, with software and insulation assistance, would cost approximately US\$100,000. This Project would provide the hardware and basic software components. Additional programming requirements and installation assistance would be provided by the SLBGA.

(a) Actions to be Taken

The SLBGA would be provided with grant assistance by AID to cover the cost of mini-computer, along with associated software and technical assistance. The total Grant cost would be approximately US\$65,000. This capability would improve the capability of the SLBGA to monitor and control grower financial transactions. The computer and associated application system should be on-line in time to monitor grower activities associated with the replanting project.

The ability to monitor grower accounts on a current basis would reduce the risk of the SLBGA fixed repayments on the GOSL input loan.

(b) Project Participants and Beneficiaries

The SLBGA would be the implementing Agency for this Project element. The computer and software would be of U.S.A. origin. The necessary technical assistance could be procured within the Region to provide relevant and timely on-site assistance.

The primary beneficiary of this assistance would be the SLBGA and its growers through improved financial controls and profitability.

The Project element was designed in conjunction with relevant SLBGA officials.

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TABLE III

BAHAMA EXPORT PRODUCTION (1977) BY FARM SIZE

<u>GROWER CATEGORY</u> (EXPORT TONS/YEAR)	<u>NO. GROWERS</u>	<u>PRODUCTION</u>		
		<u>%</u>	<u>TONS</u>	<u>%</u>
Less Than 5.5	4,679	77	6,965	18
5.5 - 15.2	995	16	8,519	22
15.2 - 30.5	288	5	6,031	15
30.5 - 50.8	83	1	3,162	8
Over 50.8	<u>45</u>	<u>1</u>	<u>14,645</u>	<u>37</u>
TOTAL	<u>6,090</u>	<u>100%</u>	<u>39,322</u>	<u>100%</u>

SOURCE: Caribbean Development Bank "Regional Input Supply Scheme (Input Revolving Fund)" ED 60/82, dated July, 1982.

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TABLE IV

SURVEY OF BANANA REPLANTING - JUNE TO NOVEMBER, 1982

<u>REPLANTED</u>		<u>NEW PLANTINGS</u>		<u>TOTAL</u>	
<u>MATS</u>	<u>ACRES</u>	<u>MATS</u>	<u>ACRES</u>	<u>MATS</u>	<u>ACRES</u>
638,140	797.7	199,190	240.9	837,338	1,046.7

SOURCE: WIIBAN Report, December, 1982.

NOTE: (1) One acre equals 800 mats.

(2) The Report was based on sample growers.

Assuming approximately 10,000 acres of banana production, the author commented:

"The 1,047 acres of banana planting represent

10 percent of St. Lucia's banana acreage. Bearing

in mind that those producers sampled account for a

substantial proportion of the island's production,

yet forming 8 percent of total farmers, it can be

argued that at least another 500 acres could be

added to the 1,047 acres".

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## ANNEX E

### SOCIAL SOUNDNESS ANALYSIS

The project will attempt to improve the lives of rural people through (A) the clarification and simplification of the land registration system, (B) strengthening the marketing of non-banana production, and (C) help with banana replanting. Each of these components will face special difficult socio-economic problems.

#### A. Land Registration and Tenure Individualization Component

The question of viable solutions to the problems of "family land" is the most socially problematic element of this component of the project, and this social soundness analysis addresses the issues raised by family land both with respect to tenure individualization and land registration. An attempt is made to clarify the nature of family land tenure and its negative effects on investment in land; to examine factors affecting likely levels of response to tenure individualization opportunities; and to identify possible inadvertent and negative effects of both tenure individualization and land registration, which will require monitoring.

##### 1. The Nature of Family Land

Family land emerged following the end of slavery in the 1800's in the legal context of the civil law of property under the St. Lucia Civil Code, enacted in 1897. While the Code has since been amended in many respects, generally through the introduction of Common Law principles, the law concerning land, and in particular the law concerning intestate succession to land, has retained its distinctly civil law character.

Family land (the family in St. Lucian Creole) is from the legal viewpoint co-ownership of land. Co-ownership in civil law corresponds to ownership in common in Anglo-American law. Each co-owner holds a fractional interest in the entire parcel of land, without that interest being identified with any particular fractional physical part of the parcel. Co-ownership occurs extensively in St. Lucia because of the inappropriateness of the Civil Code provisions on intestate succession for St. Lucia's smallholder sector. Where no will is made, which has been and continues to be the usual case in St. Lucia, the Code provides that land belonging to the deceased becomes the property of his heirs according to a complex system of priorities set out in the Code. Where there is a surviving spouse and children, the spouse takes one-third and the remaining two-thirds of the estate is divided equally among the children. If there is no surviving spouse, the children take equal shares in the entire estate. If there are no surviving children, ascendants and collaterals share in the succession.

Under this system all legitimate children, male and female, are heirs. Pressure on land in the smallholder sector is already acute, and the 1973/74 Agricultural Census shows that 82% of all holdings affected

by successions are already below five acres in size. There were then 4,730 holdings of less than one acre, giving an average farm size of those holdings of .31 of an acre, and 3,828 farms of between one and five acres. In a relatively extensive agriculture as that of St. Lucia, this is severe sub-division. There is simply not enough land in the small-holder sector to permit each child to take a share in the parental holding.

Family land arises in these circumstances as an evasion of the law of intestate succession. Where a parcel is small and the owner dies, one of two approaches may be followed by the heirs to avoid partition (formal legal division of the parcel for each heir). First, the co-heirs may have the administrators of the estate convey the parcel to them jointly, in co-ownership. Second, they may avoid administration of the estate entirely, and simply treat the parcel as co-owned. In either case they will then make arrangements among themselves for the use of the parcel which do not have the sanction of law. Those arrangements will invariably involve a relatively few of the co-heirs actually farming the parcel, thus avoiding the full subdivision impact of the Code's provisions.

It should be emphasized that this is a perfectly rational response by the co-heirs to the inappropriateness of the Code's provisions on intestate succession given the man/land ratios in the small-holder sector. Only by recognizing this can one understand the persistence of the family land phenomenon. Legally, any heir can at any time file a suit for partition and force a division of the land on his co-heirs, but this occurs only very rarely.

On the other hand, co-ownership as conceived in civil law is not intended as a continuing tenure in land, but as a transitional state during successions. Co-ownership has been characterized by one civil law authority as a "precarious and ill-organized state". Co-ownership is nowhere defined in the Civil Code, nor does the Code set out any rules to govern co-owner's rights with respect to one another or third parties. To govern these relations, customary rules have evolved, but these rules and arrangements made under them have no force in courts of law.

Much of the family land in St. Lucia has been in existence for several generations, and it is the complex patterns of use which develop over several generations which justify its characterization as a land tenure system. While there has never been a serious study of the dynamics of family land in St. Lucia, the broad outlines of the system are clear enough. When a holder of family land dies, he will generally have already given most of his land to some among his children to farm. Other children will be working abroad or in the towns of the island, and will recognize these parental dispositions. When a parcel became family land several generations ago, such dispositions by succeeding generation of parents will have divided the parcel into a patchwork of house plots and fields, though the field boundaries will not be readily evident on the ground. Because an individual farmer may inherit land rights from both his mother and father, he may be using plots of family land to which he has rights under a different line of descent. His holding is commonly a mixed tenure holding in any case, and he may also hold leased land or land which he has purchased.

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Co-owners who are not in possession (and there will be many of these after several generations) retain their status of co-owners, however. Custom confers on them certain rights, including rights to produce of the land, and the uncertainties created by their interests severely hamper the family land farmer in his development of the land.

## 2. Constraints on Development under Family Land Tenure

Family land tenure confers benefits on the co-owners who farm it, because they hold much more land than they would if the land had been partitioned in accordance with the law of intestate succession. But the tenure has also been said to pose serious constraints on development of the land. These are examined below:

### a) Subdivision and Fragmentation

Subdivision as used here takes the parcel as its reference point, and refers to the process whereby a single parcel of land is divided progressively, and by which land generally may over time reduced to parcels of economically unviable size. Fragmentation, by contrast, takes as its reference point the farmer's holding, and describes the situation which is divided into several parcels. As noted above, there has been severe subdivision in the smallholder sector in St. Lucia. There also exists fragmentation of holdings, though this not severe. The 1973/74 Agricultural Census indicated that the average number of parcels per holding is 1.2, and that about 80 percent of all holding consist of one parcel, 20 percent of two or three parcels, while only 150 holdings were found to be composed of four or more parcels. Distances between parcels are not very great, limiting the adverse economic consequences of such fragmentation.

While in some reports family land has sometimes been associated with subdivision and fragmentation, these are instead the product of partition of land under the intestacy provisions of the Code. Family land in fact reduces the level of subdivision which would occur if those provisions were followed to the letter.

### b) Uncertainty and Insecurity

Family land clearly does engender considerable insecurity on the part of landholders under that system, and assertions that the tenure discourages investment seem well-founded. This insecurity has been clearly established by surveys which tested attitudes of family land farmers, but the exact nature of the insecurity is harder to define. Family land farmers do not feel any imminent danger of being ousted from their holding by other co-owners. But there are battles of attrition over small areas of land, often involving the desire of non-farmer co-owners to have a house plot with a kitchen garden, perhaps for retirement. Because boundaries are ill-defined and have no force in law, these desires are the subject of contention. Non-farming co-owners also have a recognized right to claim a part of the production of the land, but although such claims are made with fair frequency, they are sporadic and not regularized as to timing or amount. Custom recognizes such claims only as to perennial crops, not including bananas. Even in the case of perennials, such as coconuts, breadfruit and mangoes, informants give somewhat different versions of the extent of such rights. The

"custom" in respect of family land is not a body of authoritative rules established by elders of a family, but the balance struck as a result of much pushing and shoving in the many individual situations. It is thus uncertain enough in some areas to allow for differing interpretations, thus generating uncertainty and disputes.

The uncertainties involved in farming family land will be seen to affect both its marketability and farmers' access to credit, but it should also be noted that it affects day to day land use decisions. It discourages the cultivation of perennial crops in many cases, and holdings will plant perennials on purchased land rather than family land, discounting considerations such as soils, slope, etc.

c) Marketability and Access to Credit

Family land is for all practical purposes shut out of St. Lucia's land market, frozen in the hands of the co-owners in possession. The parcel cannot be sold by those in possession or any of the co-owners, without the consent of all the other co-owners. When several generations have passed, it is difficult for a potential purchaser to be sure he has accurately identified all the co-owners and their respective shares, let alone be certain that they have consented. It is open to any co-owner not involved in the transaction to appear at a later date and assert his co-ownership with the purchaser. As a result, few parcels of family land are bought and sold. Nor can a possessor of part or a parcel of family land sell that share, because what he actually owns is an undivided share which is not specific to any particular part of the parcel and which is not proportionate to that part of the parcel which he farms.

While it has been stressed that family land tenure retards rather than facilitates subdivision, the non-marketability of family land may help perpetuate subdivision. Where subdivision is severe but a fluid land market exists, one expects that purchases will tend to combine parcels and consolidate holdings, but the existence of family land clearly limits such possibilities.

Because family land is not marketable, it restricts access of those farming it to credit for major improvements. Land is the most important form of security for agricultural loans in St. Lucia, and a lender must in case of default be able to sell the land to recover his loan. Because family land is not marketable, it is generally not acceptable to lenders as security for a loan, and there is data clearly indicating the relationship between tenure and success of loan application. Laville (1978) for example, showed that for a sample of 140 farmers, only 117 had ever applied for a loan. Of these, 70 had been granted a loan. Table E-1 shows clearly that having little is fundamental for getting a loan.

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TABLE E-1

INFLUENCE OF TENURE ON LOAN  
APPLICATION AND APPROVED FARMERS  
WITH 25 ACRES OR LESS

Tenure Status	Loans Applied For		
	Granted No. %	Not Granted No. (%)	Total
Freeland	59 (74.9)	20 (25.3)	79 (100)
Family	10 (32.3)	21 (67.7)	31 (100)
Squatter	1 (14.3)	6 (85.7)	7 (100)
Total	70 (59.8)	47 (40.2)	117 (100)

Source: Laville (1978)

3. The Extent of Family Land

While a good number of surveys have been carried out which have attempted to assess the extent of family land, they show major variations in results which are difficult to reconcile.

Some of the work is clearly misleading, including the 1967 estimate that 67% of privately owned land in St. Lucia is family land. Recent surveys show consistently much lower figures, though they differ among themselves as to the precise amount. A major uncertainty is introduced into the estimates by the fact that leased land and borrowed land ("permission land") are listed as independent tenures in all the surveys, and there is no way to be certain how much of the land leased or borrowed is held by the lessor or lender as family land or individually owned land. However, it can be reasonably concluded that:

- a) Family land constitutes between 20% and 35% of the privately owned land in terms of acreage;
- b) Between 25% and 45% of holders of privately owned land hold some or all their holdings as family land; and
- c) Between 20% and 40% of the parcels of privately owned land are family land.

These are island-wide estimates, and it should be noted that the data shows great regional variations in the incidence of family land, with high incidences in areas of high rural population density where smallholdings predominate.

4. The Social and Economic Costs of Land Disputes

In discussions with St. Lucian officials, they frequently emphasize the number of both civil and criminal cases in St. Lucia which originate in land disputes. This is directly connected with the uncertainties created by the existing system of recording land titles

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and to the uncertainties created by family land tenure. The family land tenure system is an extra-legal system, a system permitted to exist by law but not governed by law. Custom has governed the creation of farms and boundaries within parcels under family land tenure, but these are unenforceable in the courts. A tendency toward forceable resolution of disputes concerning family land is understandable in these circumstances.

There are however, no very reliable figures on land disputes. One hears estimates that as much as 80% of litigation is generated by disputes concerning land, though this certainly an exaggeration. A hurried review in the course of this study of 152 criminal actions brought between 1980 and 1982 suggested that less than 10% of the crimes concerned originated in land disputes. A review of civil cases for the same period showed 1166 civil cases filed, of which 110, about 10% were land cases. A breakdown of these cases showed:

Trespass	24	Actions for Possession	28
Boundary	4	Partition	22
Title Disputes	31	Right of Way	1

The Morne Panache Household Survey, inquiring into disputes concerning either individually owned or family land (p.14), found that 33.5% of the interviewers reported land disputes. The disputes, by types reported, were 31.6% boundary disputes, 45.6% title disputes and 22.8% disputes which involved both boundary and title. These figures may be more indicative, as many serious disputes do not reach the courts.

Family land disputes certainly occur, but they are difficult to quantify. They often are not taken to court because of the extra-legal nature of the tenure system, and because they are usually not revealed to outsiders. It has been suggested that the most significant of these disputes are over whether family land should be sold. As land increases in value, there is every reason to expect that such disputes will become more common. A recent anthropologist study reports that at Morne Panache:

Informants maintained that land disputes are more frequent now than in the past. They associated the increased incidence of disputes with a generally higher level of education among area residents, and a corresponding decline both in "proper behavior" (bonnes mes) and in the influence of traditional authority figures. Better educated people are said to be less reticent to take disagreements over land to legal authorities, and to manipulate the legal system at the expenses of customary understandings or agreements.

Family land tenure, based as it is upon informal understandings, may be particularly vulnerable to these trends. Lawrence (p.7) describes a situation which has considerable potential for disruption of family land arrangements. One co-owner can mortgage the whole parcel and secure a loan in respect of his undivided share; if he defaults on his

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repayments, the whole property can be sold, and although the remaining co-owners will receive a share of the sale money in proportion to the size of their shares, they are automatically dispossessed of their interest in the land

While it is impossible in the absence of better data to place cash values on the avoidance of land disputes and litigation, such disputes clearly impose major economic and social costs. There is every reason to expect that these will increase dramatically in years to come if a better system of records of rights in land is not instituted and a rationalization of the family land tenure system not achieved.

#### 5. Solutions to Family Land Problems

Because holdings are already so small, partition of family land in many cases no solution to the problem. Surveys of family land farmers establish substantial reluctance on their part with respect to partition, in spite of a recognition that individual ownership confers benefits in use and management. They are after all farming more land than would be the case if there was a partition, but here are other factors as well. Partition requires surveys, the cost of which would often exceed the value of the parcel, and there are serious concerns about the disruptive impact of a demand for partition on family relationships. What are required instead are solutions which preserve the benefits now enjoyed by those farming family land, while rendering their tenure in the land they farm more secure, marketable and viable as security for loans.

Many solutions have been proposed. Two of these, amendment of the Code's provisions on intestate succession and forfeiture of shares by co-owners not farming, have been rejected by St. Lucia officials as too drastic and unpopular to obtain enactment. Proposals for government acquisition and redistribution of smallholding have also been rejected, both because they would be unpopular and because they would cause major short-term disruptions of cultivation.

Other solutions did command support, however, and several of these are drawn from the recommendations of the recent reports of the St. Lucia Land Reform Commission. A strategy has been developed for this project which includes several of these in concert, co-ordinated to implement a policy of tenure individualization for family lands. These recommendations are:

##### a) Restriction by Law of uneconomic sub-divisions

The Land Reform Commission's report endorsed such an initiative, and this would be achieved through the conferring on judges under the Civil Code, and officials under the proposed land registration legislation, a greater degree of discretion to refuse applications for uneconomic partitions and a wider range of alternatives in such situations. These do not involve commitments of project funds but do depend on the extending of the Development control authority's activities into signing of agricultural land.

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b) Facilitation of Economically Viable Subdivisions

In the course of the land survey and adjudication of titles prior to registration, opportunities for inexpensive partition will arise. Where the land is capable of partition without creating unviable parcels, and all the co-owners agree to the partition, the family land parcel will be divided into individually owned parcels. The officers conducting the adjudication will not, however, become involved in partitions which are contentious, as the resolution of such disputes would greatly delay and increase the cost of the adjudication process. These conflicts are better left to the courts.

c) Voluntary Introduction of the Trust for Sale

The Interim Report of the Land Reform Commission (p.8) concluded that the problem of family land is one of "negotiability of land, and not of entitlement to land", and that the easiest and cheapest means of solving the problem lay in the introduction of the "trust for sale" concept. The Commission's remarks are worth quoting at length (pp. 12-13):

We suggested earlier that the concept of the trust for sale can be used as a cure for the evils of multiple ownership and fragmentation. This device does not of course limit the number of co-owners or affect their rights to the property but it narrows down the number of persons involved in the negotiability of land, as the shares of the co-owners become vested by operation of law in one or more trustees (not exceeding four) who are given the powers to deal with the land on behalf of all the co-owners.

Where a "statutory trust for sale" is deemed to arise by operation of law, it is usual to include an accompanying provision restricting the number of persons who may act as trustees at any one time. They are the legal owners and all powers of dealing with the land rest with them but they do not necessarily have to sell since there is usually a power to postpone the sale. If however, a decision is made to sell, then only a maximum of four signatories are required instead of the concurrence and signature of all the co-owners..."

The purchaser of family land under a trust for sale is thus certain of securing a clear title, and the marketability of family land is greatly enhanced.

d) Voluntary Simplification to Tenure Patterns Promoted by Provision of Government Credit

There is one important possibility which is mentioned in some recent reports by consultants representing donors but not pursued by the Land Reform Commission (perhaps because of no evidence of donor funding for it at that time). If provided with credit, the co-owners in possession of family land may be able, using the market in undivided shares in land, to acquire the interests of their co-owners not in possession. Areas now under the family land tenure would thereby be upgraded to individual ownership.

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This initiative as proposed in the present project must be frankly characterized as experimental. It will only succeed if all or nearly all those co-owners not in possession are willing to sell their shares in the parcel of family land to the co-owners who, under normal circumstances, have no intention to live on the land or to cultivate it, but still like to maintain their claim because it provides them with a feeling of security. The eventual payment of a compensation may not be attractive enough for most of them to voluntarily give up their claim.

An attempt at such market-managed upgrading of family land to individual ownership through the provision of credit to the co-owner(s) in possession is, however, worth the attempt. An approach along these lines is detailed the Tenure Individualization Program of this project. This initiative is financially sound in that funds will only be expended if the co-owners not in possession are willing to sell their undivided shares. If it proves they are not willing to do so, it will be clear that resort must be made to less voluntary, less market-oriented approaches.

#### 6. The Response to Tenure Individualization Opportunities

Because family land tenure involves intra-family economic relationships, rather than relations among strangers, levels of response to tenure individualization opportunities are difficult to predict reliably.

With respect to the element of credit-supported acquisition of other co-owners' shares, buyer response is perhaps less problematic than seller response. There is data to suggest that co-owners in possession are anxious to have better title to their land and that their incomes can support acquisition of other co-owners interest if credit is provided on somewhat longer terms than is present banking practice. Will they be willing to risk disrupting family relations by attempting to buy out the interests of their other co-owners? Probably. After all, they are simply being encouraged to make offers, which may be refused. This project element has been specifically framed to avoid compulsion in acquisition of land or interests in land. And the backing of a well-publicized government program with developmental justifications should make the buyers more comfortable in pursuing the matter with their relatives.

But what of seller response? Consider the position of co-owners not in possession. The size of their aggregate interest in the property will be quite small in many cases, perhaps a tenth, or a twenty-fourth interest. Many of these co-owners will be making their income outside of agriculture. The cash value of their shares will in many cases not be impressive. Will they consider it adequate incentive to give up what that share represents to them: the connection with the family, with the home village, the security represented by a place to retire and, without purchasing land, to build a little house with a kitchen garden? Will the cash offered be attractive when they consider that accepting it may mean a need to purchase land at retirement, at a price which it is difficult to predict? Even if access to more land on Crown Land elsewhere is provided as a part of the compensation, will it be attractive given the pull of the home village?

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Far too little is known about the situations, attitudes and expectations of such co-owners to permit confident answers to these questions. Virtually all attitudinal research concerning co-owners has been with the co-owners on land rather than those who are absent at jobs in the towns or abroad. Undoubtedly some may find the offer for a purchase of their share of interest, but how many will do so? Here it must be stressed that most of them must accept the offer for the program to be successful. It will not confer any great benefit upon a co-owner in possession to acquire only some of the shares of his other co-owner. Unless the project can elevate him to individual ownership, it is hardly justifiable economically. Given the number of small shareholders who may exist with respect to many parcels of family land, this is a daunting prospect.

It is of course possible that not all other co-owners would have to be bought out if the parcel was of good size. Two or more co-owners might form a group to buy out the others, then partition the parcel between themselves. Or if only a few small shares owned by absentees remained outstanding, a partition could be made which set aside house sites for them. And once the trusts for sale are in place, the process will be considerably easier.

Similar uncertainties exist with respect to the opportunity for facilitated partition during the adjudication process and the trust for sale mechanism. Will many co-owners take advantage of the opportunity for facilitated partition? Will many trustees actually decide to sell the parcel, thus transferring it into individual ownership? Will enough do so in order to make any significant difference in five years, in ten years?

There is finally the question of the law of intestate succession. It appears that it is not politically feasible to alter the law of intestate succession at this time. But will the project then be expending funds to achieve individual ownership, only to see this lapse into co-ownership after an intestate succession in the next generation? The answer here is that, hopefully, the incidence of will should increase in coming years and prevent this from happening in many cases. But it is difficult to predict with confidence how soon and how generally will become common. Certainly the project would be on somewhat firmer ground had a change in the law of intestate succession been possible.

While it is difficult to predict the extent to which the desired result can be achieved, there is one factor which makes it justifiable to proceed with the tenure individualization component of the project on a frankly experimental basis. The only element in the tenure individualization component which requires any significant commitment of project funds is the buying out of some co-owners by other co-owners. If the necessary deals are struck in a particular case and the desired end of an individually-owned parcel is clearly obtainable, then the credit will be extended. If the potential buyers and sellers of shares do not respond as hoped, then the funds are not expended. In that event it should be possible to switch those funds to support of other components in the project.

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In conclusion, though the success of this element of the project is subject to considerable uncertainty, the costs will be incurred only to the extent it does prove successful. It is thus entirely justifiable to proceed with it on a frankly experimental basis, providing, consistent with current USAID policies, an opportunity for the market to resolve the difficulties faced by family land farmers.

#### 7. Potential Inadvertent Impacts: Tenure Individualization

Do the informal allocations of family land for use, made by decisions of various co-owners over the years, reflect the same conception of who constitutes an heir as that of the Civil Code? If so, no problem will arise in this regard. But it is entirely possible that there may be persons residing on and using family land who are not legally defined co-owners at all. It is difficult to make any estimate of how many of these there may be, but that some will exist should be clear if the provisions of the Civil Code and intestate succession are recalled. There would appear to be two potential categories: surviving "non-spouses" of couples living out of wedlock and illegitimate children and their descendants.

Under the Civil Code, a surviving spouse takes a one-third share in deceased spouse's land, but if the couple was not married, then the surviving one of the couple is not a spouse, and has no rights under the law of intestate succession. Because unions not formalized by marriage are so common in St. Lucia, it must be wondered whether the practice followed on this point in the case of unadministered successions to family land corresponds to the provisions of the Civil Code. Many surviving "non-spouses" may in fact be holding family land of their deceased "non-spouses". These will be elderly persons primarily widows, often with no other means of support.

Again, under the Civil Code's provision on intestate succession, illegitimate children generally do not inherit from their mothers, and never from their fathers. They are heirs only if there is a failure of relatives of the deceased to twelve degrees, and if the relative is a woman. Clearly this is an unusual circumstance. There are legitimation procedures, but this option does not appear to be utilized often. Do the informal allocations of family land for use, made by decisions of various co-owners over the years, reflect the same attitude toward illegitimate children as that of the Civil Code? If so, there is no problem. But a recent anthropological study indicates this is not the case. At Morne Panache, informants were of two minds about the status of illegitimate children (SLC *Yich deyò yich bata*) at inheritance. The majority of the informants held that "*tout yich se yich*" (all children are children), implying that all of a person's children are, regardless of legal status, equal and entitled to the same inheritance rights. On the other hand, several informants felt that illegitimate children should be provided for separately prior to inheritance. If this had not been done, they were considered entitled to a portion of their inheritance, but a much smaller one than the legitimate children. Perhaps the most important point about this sort of disagreement among informants is the extent to which the resolution of such inheritance problems depends on the attitude of deceased persons towards outside children (e.g. the conduct and attitudes

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of a parent towards their illegitimate children prior to death) and whether amicable social relations existed among the parties involved.

Given the number of unadministered intestate successions plus these attitudes, those farmers' family land may include substantial numbers of illegitimate children or descendants of illegitimate children. These are not co-owners, because they were never heirs. When and if a partition is made, or trustees under a trust for sale make a sale, or a co-owner is buying out interests of other co-owners, what will be their position?

It is possible that these concerns will not prove to be justified. It may be that relatives will not even raise the question of illegitimacy, and that "non-spouses" will continue to be provided for by the extended family. Without clear evidence that the anticipated problems will materialize on a significant scale, and given that they would be engendered by legal statuses created by law in the past, it is perhaps premature to give them too much emphasis. They do, however, suggest a need for careful monitoring.

#### 8. Inadvertent Impacts: Land Registration

The primary cause for concern here arises from the fact that land registration will be implemented in a civil law legal contest. There is nothing inherently incompatible between the land registration program under consideration by the Government and St. Lucia's civil law system. The concern is rather that the senior positions in the registration operation would under the staffing proposed, be filled by non-lawyers whose experience of law will be with Anglo-American law. Care should be taken in connection with training and orientation of this staff to ensure that they absorb the civil law of property, which will be some respects run contrary to their assumptions, e.g., the civil law regime of community property in marriage. Land registration projects are carried out largely by technical staff with survey training backgrounds. Experience in several countries (the Sudan, Kenya) have indicated that a failure on their part to understand local laws and customs can produce significant inadvertent impacts. These undermine the credibility of land registration, and every effort should be made to avoid them.

#### 9. Conclusions

Our understanding of the dynamics of family land tenure are minimal. Nonetheless, the tenure individualization components of this project is socially sound because of its emphasis upon voluntariness, function of its market mechanism oriented approach to problems of family land tenure. A lack of response will be an indication that the objectives sought are not socially (or economically) sound.

Because there has been no serious study of family land tenure in St. Lucia and our understanding of its dynamics is so limited, monitoring activities under this component of the project should include an in-depth study of family land tenure. In addition, the concerns noted as regards response to tenure individualization and impacts of tenure individualization and land registration require a monitoring approach which would permit shifts in emphases in implementation and corresponding shifts of funding, should these appear necessary.

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B. The Marketing Promotion Component

The marketing component will provide resources to the GO SL to resolve one of its most pressing problems, i.e. how to assure reasonable markets for traditional agriculture production so as to be able to reduce the country's dependence on banana, the complexity of the task is enormous.

Three distinct marketing systems function simultaneously in St. Lucia. The first is the system for export crops of which bananas and coconuts are the most important. This system functions well in the moving a relatively large quantity abroad quickly. The system incorporates production and export marketing, organized around producers' associations with specialized functions - the St. Lucia Banana Growers Association, the Coconut Growers Association and the Agriculturists Association.

In contrast, marketing systems for non-traditional exports and domestic food crops are highly unorganized and are generally regarded by both farmers and the public as constituting an obstacle to the expansion of production of food crops for domestic and regional consumption. Non-traditional export commodities include cocoa, mango and some citrus, mostly grown by larger farmers and traded by less than 10 shippers, usually attached in some way to the Geest boat. The capacity of these trader and their responsiveness to farmers are limited and their commitment to investing in St. Lucia's marketing facilities is at best unknown.

The market system for food crops for domestic consumption in St. Lucia is characterized by its low development and rudimentary marketing practices. It is essentially composed of farmers and vendors ("hucksters") who offer their produce for sale along the sides of the roads in the countryside and in the only municipal market in Castries.

Produce is sold by number or bundles: it is spread directly on the ground and/or in wooden trays or market stands and often kept there for the entire market day. However, the amount of trade is reduced by the part of the farmer's own produce which is kept for household consumption. The small farmer's marketing activities are only supplementary. Their main income source is banana production. The same is true for most of the vendors who supplement selling agricultural produce with dry goods.

The structure of the domestic market is integrated by an estimated 250 vendors (including farmers-vendors) who come to the municipal market in Castries, or set up stands or trays on the sides of roads. Supermarkets and groceries have a minimal intervention in the fresh produce market (they sell mostly processed and frozen imported foods). They have a potential role, provided there will be an improvement of the present unorganized characteristics of supply. Hotels utilize mainly imported items in their attempt to maintain the tourist business.

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1. St. Lucia Marketing Board

The St. Lucia Marketing Board has an important potential role in marketing fresh produce.

The Marketing Board is a governmental statutory body. Its main functions are described as follows:

- To provide agricultural producers with an efficient service for the marketing of those crops which are not controlled by other statutory bodies in both the local and overseas markets.
- To import where necessary and in accordance with government policies certain items of agricultural produce deemed necessary to make up for the shortfall between local production and demand.

The Board also operates a retail outlet where local produce is offered with the purpose of influencing consumer price levels, although the volume of sales from 1973 to 1975 was only US\$55,500 (total for the period).

Export of produce, particularly to the U.K. (mostly yams mango and breadfruit shipped by air) is another of the desired activities of the Marketing Board. The importation of produce, mainly from USA, is suppose to occur to supply fresh produce to the hotels and restaurants.

Despite this potential, the operations of the Board have had problems which are similar to Governmental Marketing Boards of other islands. They tend to be the object of political interference and inadequate managerial and operational capacity. These limitations have resulted in a number of problems in the areas of:

- finance, resulting from poor marketing practices and lack of adequate administrative support (accounting) and operational facilities;
- transportation: the Board has to hire vehicles since the two old trucks owned are usually under repair;
- chilled rooms: only one of the two is in operation and with old equipment (parts problems). Both rooms provide inadequate cold storage space.
- inadequate and insufficient storage facilities: unsealed building, subject to flooding and with no ventilation.

The Board in effect acts as a buyer of last resort with the result of not being able to market good quality commodities nor having the funds necessary to pay sellers oportunely. These problems seriously affect its capacity to execute the two functions outlined for it. The general consensus is in fact that if some restructuring is not done, the Board's operations will continue to be minimal in terms of its overall objective role in the agricultural sector.

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## 2. Hucksters

Hucksters have been the traditional inter-inland vendors of fresh fruits, vegetables and root crops between the East Caribbean Islands. They trade more than 70% of the total volume of sales for St. Lucia. For Dominica, it is estimated that the huckster did twenty three times more trade on a volume basis than did their Marketing Board. The same situation exists in St. Lucia"

The total volume of perishable crops handled by hucksters has been preliminarily estimated by Manraerlli at about 10,000 to 11,000 tons and by the governmental board at 3,000 to 4,000 tons.

Hucksters' trade in St. Lucia on the whole, is handled by 29 persons or groups of people who account for a total volume of export trade of about US\$ 1 million or an average of US\$34,000 per huckster per year in 1980. At least half of the hucksters are female.

The operations of the hucksters' business is not completely specialized, the reason being that they adjust their activities to current market conditions. Most of them will export fresh produce and in return use export earnings to buy dry goods that are unavailable in the domestic market. This aspect of the huckster trade is the base of the long profitability of their operations and partially explains how they could operate with good returns when marketing boards incurred losses.

About 70% of the hucksters buy produce from farmers and other sources and, even though they buy produce from a variety of sources, they tend to maintain regular suppliers. However, a proportion of the hucksters (about 30%) are farmers themselves.

In the first case, produce is bought mostly at farmers' houses and/or at the wharfside where inter-island schooners dock. The produce is normally stored at the homes of hucksters for a few days before being transported to the wharf. The produce is normally not graded and is packed and repacked sorting out rotten or crushed products. Containers consists of bags, cartons, wooden crates, boxes, baskets, etc., all of various shapes and sizes. Some of the hucksters accompany the produce on the schooner although it is common practice to fly and meet the produce on arrival (35 minutes-plane ride from St. Lucia to Barbados). Typically two days elapse between the purchase of produce and the time when it is unloaded at destination. All the handling of the produce is done in the open air (under the direct action of the hot tropical sun or rain).

Hucksters try to wholesale most of their produce right on the unloading wharfs (some of them have their own market stall in the town market). The unsold produce is then transported to be sold in local retail markets where it is either wholesaled or retailed in one to three days.

Main ports of destination for hucksters in St. Lucia are Bridgetown (Barbados), Port of Spain (Trinidad), Antigua, Virgin Islands (US), St. Martin and Martinique.

The main problems of the hucksters' trade are related to the low and intermittent quality of the services. A larger amount of products should be handled under better conditions so as to reduce the present high product losses. Losses in root crops fluctuate between 33% and 35%, in fruits between 25% and 35% and in vegetables between 25% and 46%, which represent a total annual figure of US\$ 800,000 to US\$ 1.2 million.

These losses are directly related to the available storing, packing and transport facilities of the huckster as well as to the availability of technical and marketing information to them. The most important characteristic of the huckster's operation is its flexibility which gives the huckster the possibility to switch from agricultural produce to dry products or from regional to domestic markets or from product to product looking for the most profitable or less risky activity at each moment.

C. Banana Component

The emphasis of the project will be to provide fertilizer for the replanting of bananas to the middle sized growers, i.e. the 22% of the growers who sell between 5.5 and 50.8 tons per year and thereby provide about 45% of the banana exports (see Table 1). These growers appear to be most limited by the lack of availability of inputs for carrying out replanting.

The social significance of the project is demonstrated by the overriding importance of banana production.

TABLE E-2

BANANA EXPORT PRODUCTION (1977) BY FARM SIZE

<u>Grower Category</u> <u>[Export tons/year]</u>	<u>Production</u>			
	<u>No. Growers</u>	<u>%</u>	<u>Tons</u>	<u>%</u>
Less than 5.5	4,679	77	6,965	18
5.5 - 15.2	995	16	8,519	22
15.2 - 30.5	288	5	6,031	15
30.5 - 50.8	83	1	3,162	8
Over 50.8	45	1	14,645	37
<b>TOTAL</b>	<b>6,090</b>	<b>100%</b>	<b>39,322</b>	<b>100%</b>

Source: Caribbean Development Bank "Regional Input Supply Scheme [Input Revolving Fund]" ID 60/82, dated July, 1982.

The production of bananas dominates the Agricultural Sector and the entire economy. Banana lands occupy 13,500 acres, or almost 20% of the agricultural land, often the most productive. Bananas are grown in many of the remaining 55,000 acres categorized as "mixed agriculture" (See St Lucia National Plan, 1977) Banana exports accounted for 45% of all exports in 1981 (Assessment, 1982 p. 16)

The growing, harvesting, packing and transporting of bananas account for a major proportion of the agro-business labor force. A major change in the banana industry has a substantial ripple effect throughout the St. Lucian economy.

The cultivation of bananas in St. Lucia has a long history; the present day dependency on banana dates back to the 1950's as a result of the phasing out of sugar cane and the establishment by Geest Industries of regular specialized shipping to meet the needs of the preferential U.S. markets the rapidity of that transformation demonstrated the flexibility of the St. Lucian farmer and his responsibilities to positive economic incentives.

In spite of high costs of production (need for heavy chemical inputs, and high inland transportation and packing expenses) and the risk of hurricanes, bananas provide the major source of regular cash income in the rural sector. Typically the small grower is residentially stable, depends mostly on family labor for the operation of the farm and has a annual income of approximately US\$1,000; He will spend six to eight hours a day on farm activities during the major growing and harvesting periods of production, in most cases involving at least some bananas.

As a result of on-going WINBAN research and broad gauge extension efforts, the basics of modern production practices are known by St. Lucian growers. Growers have long experienced fluctuations in the profitability of this major crop. The projected replanting rate is higher than in recent years, but the need to upgrade existing banana lands is widely understood and accepted. The use of inputs on credit is a historical practice for both growers and the SLBGA. Poor monitoring of repayments since the hurricane damage of 1979 and 1980 led to substantial grower indebtedness to the SLBGA. This situation reflects more on the difficulties of the SLBGA than on the character of the St. Lucian farmers. It is likely that this project will fit naturally with long-standing banana growing practices and should help increase the level of production of bananas (a high priority of the GOSL).

#### D. Women in the Rural Sector

##### 1. Roles of Women in Agriculture

Women in St. Lucia play an important role in agriculture and in all aspects of rural life, especially those related to food production, marketing, purchase, preparation and allocation within the family.

From a survey conducted by WAND in 1980 on women from 195 households, and other sources, it can be concluded that:

a) Farm work is the largest occupier of women's time, with more than half the women spending 5 - 6 hours daily in these activities. They farm a plot of land ("kitchen gardens") for home consumption (especially eddoes, tannia, yams); they also contribute to family farm activities by doing most of the work of weeding, staking and harvesting, and assist the male members of the household in land clearing and preparation, and in plant protection.

b) Housework is next in importance amongst the activities of rural women, with a majority of women spending three to six hours for these activities. Time spent on housework depends on the number of children in the family and on the distance from water source, since water collection belongs to women's share of tasks. Some 2,500 rural families in St. Lucia still have to get their water from rivers or streams.

c) Marketing of farm produce is one of the main regular activities of more than 52% of the women in the sample. It is often performed once or twice a week, except for the professional women traders ("hucksters") who spend five or six hours daily in that activity (14% of the women of the sample).

Furthermore, a majority of the women feel that the money got in the market from the sale of their produce, and from the sale of family production, is their own, 96% of the women of the WAND sample utilize this money for buying basic household necessities: food, first of all, which absorbs, for 2/3 of the households, more than 1/2 of the available money, followed by clothing (with only little amounts of money spent on this item in the poor families), rent or tax, and finally farm supplies.

d) It should be noted that as much as 36% of the women of the WAND sample receive some remittances from relatives living abroad.

e) The access of women to production resources, for example to credit and extension, does not reflect their role in food production. The WAND survey indicates that only 14% can recall ever having had an opportunity to learn anything from an agricultural extension officer.

When asked about what kind of assistance they would like to have through extension, the first request was for assistance with credit, provision of equipment to help in agricultural jobs.

f) According to Bwunic, there are at least 1,200 rural households headed by women in St. Lucia, i.e. households in which the women have the main responsibility for the family and related expenses. However, this figure is undoubtedly an under-estimate, since the available data do not permit the identification of several situations: (1) women who never had a husband (or common law partner); (2) women whose husband (or common law partner) is permanently absent; (3) women in "visiting" relationship; (4) women either married, or (5) in common law union. Some estimates are that 40% of the rural households are headed by women.

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## 2. Women and the Land Registration/TIP Components

One of the basic activities of the Land Registration Survey is the identification of owners of land as well as those who have some other claim to land. In the family lands and in other "non-owned" lands, many family units formed by non-married couples using land will be encountered by the survey teams.

The question is how to register ownership in such cases, whether in both names or singularly depending on who has the most direct inheritance claim in the case of family lands and who actually works the land in other circumstances.

This question will certainly be faced in the TIP when the provisional title is drawn up as the basis for the mortgage to be held by the SLDB. Several specific problems can be foreseen:

a) The Civil Code, with its exclusion of non-married spouses from inheriting property (in the absence of a Will) will often be at variance with the family desires, or at least with the desires of some of the family. In the majority of cases the surviving spouse will be a woman who as far as the law is concerned has been involved in an immoral act of co-habiting and cannot legally claim the property of her former mate. The family may offer to her a portion of the property or other settlement, but no legal provisions for such settlements exist in the Civil Code.

In such cases, presumably the Adjudication Officer or the Survey Crew Leader will be presented with evidence as to the intent of the expired spouse, and will be guided by legal precedent. However, it seems desirable to assemble available legal precedents and guidelines for the team before the project gets underway in order to handle such situations.

b) Much of the work in farming and in the marketing of crops sold on the internal market is the responsibility of women, as is the maintenance of the household and many of the family enterprises. The rural woman, however, is often overlooked as an integral part of the farm enterprise by many public and private agencies dealing with farmers.

One exception, however, has been the policy of the National Commercial Bank in the granting of mortgages to properties where both the man and woman are listed as co-owners regardless of their marital status. The Bank is not interested in acquiring property, but rather in getting a return on its loaned capital. This objective requires that both individuals responsible for making farm produce profitably, also be responsible for debts incurred for that farm. Where the couple is not legally married, the man could be considered as the provisional title holder. In such situations, however, either spouse may easily leave the other, and the farm enterprise will likely deteriorate. In practice, however, in such cases it is more often the man who leaves than the woman.

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By listing both man and woman as co-owners of a mortgaged property, the Bank protects its investment by recognizing that the woman usually contributes a significant part of what it takes to make a farm pay. This recognition also encourages the legal access of both spouses to the land in the case that the union dissolves.

Such arrangements should be seriously considered in the preparation of the guidelines for the operation of the TIP. The experience of the NCB should be consulted to develop these guidelines.

## ANNEX F

### INSTITUTIONAL ANALYSIS

The Agricultural Structural Adjustment Project will be implemented primarily through the Ministry of Finance and Planning, the Ministry of Agriculture, the St. Lucia Development Bank, and the St. Lucia Banana Growers Association.

#### A. The Ministry of Finance and Planning

The MOFP will play a dual role in project implementation. First, it will be the GOSL agency primarily responsible for the project as a whole. Second, as the parent agency of the Land Registry, it will take the lead in implementing the land registration and survey component.

The MOFP, as currently organized, has three main agencies. These are the Budget Division (responsible for drawing up the GOSL budget), the Fiscal Division (responsible for GOSL revenues), and the Planning Division. Project implementation will involve primarily the Planning Division.

The Planning Division is at present comprised of an office for Economic Planning, an office for Physical Planning, and an office for Architectural Services. It is proposed to transfer the land survey function, which currently rests with the Ministry of Agriculture, to the Planning Division. This would bring this function together in the MOFP with the registry, which is at present part of the Fiscal Division but would be transferred to the Planning Division under the proposed reorganization.

As the GOSL agency with overall supervisory responsibility for nearly all donor-funded projects, the Planning Division represents the logical location for the project management and supervision functions associated with implementation of the ASAP. The additional administrative burden created by the project is not expected to pose serious problems for the staff of this unit, in view of their experience with other projects and their overall high level of preparation. AID should monitor the work of this office fairly closely during the first stages of project implementation, however, since the staff is generally unfamiliar with AID requirements and project-funded technical assistance teams will not arrive in St. Lucia until well into the project. Project management within the Planning Division will be under the responsibility of the Deputy Director for Planning, following the usual arrangements for donor-funded projects. It is expected that a full-time Account/Administrative Assistant will be assigned by the Planning Division to service this project.

#### B. The Ministry of Agriculture

The Ministry of Agriculture will be directly involved in three specific project implementation activities: 1) the Minister of Agriculture will be responsible for formulating a national marketing strategy and establishing activities of the Marketing Promotion Unit, 2) the Plant Propagation Unit will be responsible for the seedling production activities and 3) the Lands Division will participate in the land registration activities.

1. Market Promotion

Agricultural marketing functions in St. Lucia are achieved predominantly by private sector entities. Domestic marketing of food crops is carried out by a large number of small-scale market traders, while major export marketing is conducted by a few growers' associations, each handling a single commodity. Export marketing of non-traditional commodities is still relatively small in terms of volume, and is conducted by a small number of individual entrepreneurs and the Government owned St. Lucia Marketing Board (SLMB).

The MDA has primary responsibility for formulating policy and providing services to regulate and promote agricultural marketing. The principal public policy tool for marketing is the SLMB. This agency has performed poorly in accomplishing its mandate to promote and expand the marketing of St. Lucian produce. In recent years, the SLMB has functioned primarily as an importer of fresh produce for domestic consumption, and exports by the SLMB have accounted for less than 20 percent of total fresh produce exports excluding bananas. The poor performance of the SLMB has resulted in the board's losing the confidence of St. Lucian farmers, traders, and retailers, as well as international shippers (such as Geest) and the GOSL itself.

The current widespread dissatisfaction with the SLMB has led the GOSL to re-examine its policy for marketing development, and, in fact, the Minister of Agriculture has not reconstituted the Board of Directors for the SLMB, following dissolution of the previous board by the current Government upon taking office.

During design of this project, there was considerable discussion regarding the need to strengthen the level of effort aimed at building a more modern wholesale marketing sub-sector and the need to broaden the policy tools of the IDA. The GOSL places extremely high priority on market promotion and development. The Prime Minister and Minister of Agriculture have consistently expressed their commitment to encouraging the development of private sector initiatives in this area. Producer associations and other group entities are seen as particularly appropriate to the needs of St. Lucia. Direct trading operations by parastatal organizations like the SLMB are deemed to be also required in certain cases to foster new markets and demonstrate leadership for establishing new marketing functions and behaviors.

The institutional dilemma is how best to balance the need for the Government, on the one hand, to stimulate private organizations engaged in modern marketing functions, while on the other hand undertaking direct trading operations on its own account. The inherent contradictions of addressing both needs with the same organizational management are apparent. Still there is a strong case that careful coordination between the two is necessary and beneficial.

The establishment of the Market Promotion Unit supported in this project is designed exactly to broaden the range of policy tools available to the Minister of Agriculture aimed at private sector development. It is clear that the establishment of the Market Promotion Unit must be in consonance with other elements of the GOSL marketing strategy. As a result of discussions during project design, the Minister of Agriculture will seek the advice of a

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wide range of private and public individuals and organizations concerned with marketing, and formulate a overall national marketing strategy with clear specification of public and private roles. The institutional placement of the Market Promotion Unit will be determined as a part of this strategy formulation. There are basically two likely options. The MPU may be established as one of several clearly defined units within a new marketing authority established in St. Lucia, or the MPU may be established within the MDA as a new unit.

This unusual step to include formulation of institutional adjustment as part of the project implementation is recommended to meaningfully address marketing constraints in St. Lucia and to take advantage of a unique opportunity to support a critical policy change by the GOSL. The Ministry of Agriculture is the appropriate institution to oversee this activity because of its current market related responsibilities and because of its broader responsibilities to service and coordinate all aspects of the agriculture sector.

## 2. Plant Propagation

The Plant Propagation Unit of the MDA is at present under the management of the Research Division. The unit currently operates three facilities, each located at one of the three principal research stations (Union, Bath, and Beausejour). The unit has a permanent staff of 5 headed by the Propagation Officer who is located at Union. In addition there are a number of casual laborers employed at the three stations.

The unit suffers from deficiencies in both the technical and managerial areas. The head of the unit, who has only been assigned to the position recently, has relatively little experience and training in the area of seedling production. Many of the staff, however, are well-qualified in the technical area and could increase their productivity with proper management and physical facilities. Further training is necessary to update their techniques and to build on the base of skills that exists. Management of the propagation activities, which requires careful attention to the complex logistics of moving supplies and thousands of seedlings through the system, remains a problem.

The project will address both these deficiencies, through technical assistance and training accompanied by appropriate rehabilitation of the physical facilities at Union and Bath. With these additional inputs, it is expected that the propagation unit will have the capacity to produce the levels of seedlings anticipated.

## 3. Lands and Surveys

The land registration component will draw on the personnel of the Lands and Surveys Division of the MDA. Since these personnel will be integrated into the registration survey team, which will operate as a special project unit, they will not be under the jurisdiction of the survey division during the life of the project. The ability of the division to manage their activities is therefore not a concern and will not be discussed here.

During the registration survey, the Lands and Surveys Division will continue to operate as at present with regard to lands that have not yet been reached by the survey, with the staff gradually transferring over to the new

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method of operation as lands are brought progressively into the new system following survey and registration. Since staff trained in the new system will be released back to the division as the survey is completed, the division will have the capacity to implement the new system by the end of the project.

### C. The Banking Sector

The St. Lucian banking sector is made up of three types of banks: 1) public-sector banks that operate to serve both developmental and financial purposes, 2) private-sector St. Lucian banks, and 3) St. Lucian branches of foreign banks and joint ventures with such banks. Only one bank (the Cooperative Bank) exists in the second category.

The two banks making up the public banking sector are the National Commercial Bank (the NCB) and the St. Lucian Development Bank (SLDB). Both of these banks began operations in 1981, although the SLDB was formed by merging two public banks (including the agricultural bank) with a history of unsound banking practices going back several years. The GOSL is committed to maintaining the financial solvency of both banks, although the SLDB is clearly intended to be less conservative and more developmental. At present, as a result of vigorous management reforms and infusions of additional government capital, both banks are solvent.

The St. Lucian banking sector is currently facing a serious liquidity shortage, which has led to a severe reduction in lending activity for all purposes. Long-term lending has virtually ceased over the past year and funds for investment in land or physical facilities have been for all practical purposes unobtainable. Extremely small amounts have been available for working capital for traders (no loans over \$EC 20,000 have been made by any bank), and funds for agricultural production credit are generally not available.

In implementing those aspects of the project that require banking facilities (principally the TIP and the MPF), the project will utilize the public sector banks as the primary implementing agencies. Following the banking reform in 1980, the management of both public-sector banks have renewed their commitment to operating on a commercially-sound basis and it is the judgment of the RDO/C that these banks as currently staffed and managed have the capacity to carry out the project's banking activities effectively. The GOSL is in any case reluctant to entrust implementation of the project's banking activities to foreign-owned banks.

Among the institutions, the St. Lucia Development Bank is the only lender to indicate staff capacity and interest in financing family land transfers, and it lacks the cash with which to finance any mortgage loans at the present time.

The SLDB was created in February, 1980 and mandated to take over the operations of the Agricultural and Industrial Bank (AIB), Housing Development Bank (HDB) and part of the operations of the National Development Corporation (NDC), as the centerpiece of a major restructuring action plan for public sector developmental institutions in St. Lucia.

The central components of the restructuring exercise also provided for:

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- a) Global line of credit of US\$1.6 million to enable SLDB to finance sub-loans for agricultural and industrial credit under the CDB-funded Agricultural Industrial Credit (AIC), Farm Improvement Credit (FIC) and Small Industry Credit (SIC) Schemes, respectively.
- b) A loan of US\$0.4 million from CDB/International Development Association (IDA) funds to the Government of St. Lucia on highly concessional terms to be used as seed capital by SLDB for on-lending on a project-related basis.
- c) The formulation of an appropriate package incorporating:
  - (1) the taking-over of the assets and liabilities of AID, HDB and the industrial operations of NDC suitably adjusted to take account of loans in arrears which will be placed into a special account for appropriate legal and other action by SLDB with a view to recovery of the amounts in arrears;
  - (2) a lending program for the next five years, covering the Agricultural, Industrial and Housing sectors;
  - (3) a financing plan to meet the needs of the above-mentioned lending program, but so structured to provide a reasonable balance between debt and equity;
  - (4) an appropriate administrative structure consistent with the size of operations but which includes a cadre of competent staff with suitable experience;
  - (5) an appropriate interest rate policy geared towards achieving viability within a reasonable period after the commencement of operations;
  - (6) a suitable program for the orderly reduction of arrears and the institution of procedures to control the level of arrears with reasonable limits; and
  - (7) a program of Technical Assistance geared towards the development and improvement of skills, systems and procedures either through the attachment of experienced specialists for a specified period or through other forms including the use of short-term consultants.

A recent CDB Assessment Team observed:

- a) SLDB has prepared a comprehensive document containing general and sectorally specific information on its lending policies. SLDB's interest rate policy, while it is different from that recommended by CDB, should result in the appropriate yield intended by CDB.
- b) SLDB has established loan approval authority limits from the Managing Director's level, through the Board Loans Committee, to the level of the Board of Directors. This policy should facilitate the streamlining of the loan approval process, by assisting in expediting that process.

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- c) As required by the CDB Loan Agreement No. 25/SFR-ST.L, the Government of St. Lucia has taken up its first block of 250 shares and accordingly injected cash of \$1.25 million.
- d) In compliance with conditions of the restructuring plan, SLDB has placed a special account for appropriate legal and other action, delinquent sub-loans to the value of some \$2.81 million.

The CDB Assessment Team also observed several deficiencies which require appropriate action by SLDB, and in one case, the Government. Steps are now being taken to remedy the following deficiencies:

- a) An unfortunately long delay, partly due to the suspension of Parliament in early 1982, on the part of the Government to fully satisfy conditions precedent to first disbursement of Loan No. 25/SFR-ST.L and No. 27/SFR-ST.L which are the funds provided by CDB in support of the restructuring process.
- b) Inadequate arrangements for safeguarding security documents. Security documents are currently being kept in sub-borrowers' files, some of which are filed in cabinets where fireproof safeguards are not satisfactory.
- c) The General Ledger had not been posted since March 31, 1982, for reasons which were implausible.
- d) For the last financial year, SLDB accrued interest on hard-core delinquent sub-loans and brought such interest into income, while it ignored making provisions against interest receivable (\$1.06 million) in respect of such accrued interest income.

The SLDB recently resumed lending on a modest scale, with resources obtained from the CDB. These loans are mainly for individual educational and housing purposes, though there are modest funds available for industrial projects as well. The CDB funds may not be used for financing real estate transfers such as are envisioned herein.

The SLDB has a staff of 6 Agricultural Loan Officers, all with at least some experience and training in appraising agricultural projects, and intends to hire a seventh officer at the beginning of the next fiscal year (April 1). Its Managing Director would like to undertake the experimental land market development project and all of the Finance Ministry officials with whom the team spoke indicated that this is the Government's wish as well. Both for reasons of capability and willingness, therefore, it is clear that the appropriate institution for the TIP is the St. Lucia Development Bank.

Once several years' experience has been gathered, however, and in a better economic climate which we postulate for a few years hence, it is likely that the commercial banks will be interested in starting at least a modest lending program for small farmers wanting to buy out co-heirs in family lands. It appears from recent interviews that the SLDB would welcome this involvement and would believe that they had properly led the way but would not desire a monopoly of any sort.

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D. St. Lucia Banana Growers Association (BGA)

The BGA is the primary executing agency for the banana component, including the pesticide management activities funded under this project. As the parastatal growers association currently responsible for all aspects of banana production on St. Lucia, the BGA is the agency best suited to implement the replanting activities financed by the ASAP.

1. Overview of Organizational Capacity

The BGA is open to all banana growers; it provides a link between individual growers and the U.K. market utilizing the transport and marketing services of Geest Industries. BGA is the founding member of the Windward Islands Banana Growers Association (WINBAN).

The BGA provides the growers with a variety of services: (i) technical support, such as leaf spot spraying, banana quality control and extension assistance; (ii) production inputs, such as the central purchasing of fertilizer, nematicides, diothene sleeving and crown pads; (iii) packing assistance, such as boxing plants and grading, as well as assistance with field packing and transport to the pier; and (iv) financial assistance, such as collecting export receipts for growers, providing inputs on credit and, recently, establishing a price stabilization fund to smooth out fluctuations in EC\$-denominated export earnings.

The BGA works closely with BDD, WINBAN and MDA personnel to increase the productivity of growers. The BGA finances its activities through a deduction from the export price prior to paying the grower. The grower receives a basic price per pound adjusted for production incentives (e.g., field packing) and amounts due for past credit transactions. Currently, the BGA is participating with CATCO in plans for a program to market intra-regionally a portion of the bananas that do not meet U.K. market requirements. This additional marketing of some 200 tons a year will provide additional income to the BGA and its growers. In addition, it will help strengthen intra-regional trading activities.

a. Legal Status

The BGA is a statutory corporation founded in 1967 as the successor to the BGA, Ltd.

The BGA Board of Directors is composed of nine members; three are appointed by the Government and six are elected by the growers. Grower members are elected in three categories according to level of production. Two Board members represent growers with average weekly export production of 12,000 or more pounds; two represent growers with 2,400 - 12,000 pounds weekly production; and two represent growers with between 500 and 2,400 pounds of weekly production.

The BGA has the power to borrow money and to impose a cess (deduction from grower payments).

b. Financial Status

The most recent financial figures are as of September 30, 1982. They indicate the following:

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SLRGA BALANCE SHEET

<u>ITEM</u>	<u>EC\$000'S</u>
Current Assets	\$6,939
Current Liabilities	<u>6,321</u>
Working Capital	
Surplus	618
Fixed Assets	1,732
TOTAL NET ASSETS	<u>\$ 2,350</u>

BGA INCOME AND EXPENDITURES

<u>ITEM</u>	<u>EC\$000'S</u>
Export Sales	<u>\$32,504</u>
Cost of Sales:	
Paid to Growers	16,845
Retained by BGA	15,659
BGA Cost of Operations:	<u>16,056</u>
Deficit After Operations	( 397)
Other Income	97
Deficit for Year	<u>(\$300)</u>

Experience to September 30, 1982, indicates the following for 1982 BGA operations:

Average price received from exports	43.0¢/lb.
Average payment to growers	22.9¢

Basic price	17.3¢
Fertilizer cess	4.1
Sleeving incentive	0.8
Field pack bonus	0.7

COST OF BGA OPERATION  
TO SEPTEMBER 30, 1982

<u>ITEM</u>	<u>UNIT COST PER POUND</u>
Administrative	1.4¢ EC
Transport of Fruit	1.1
Field Operations	0.6
Disease & Pest Control	2.9
Transport & Maintenance	0.8
Building Maintenance	-
Packing Material	10.0
Sleeving Allowance	0.8
Boxing Plants, Private	0.9
Boxing Plants, BGA	2.6
Export Tax	0.2
WINRAN Cess	<u>0.4</u>
 SUR-TOTAL	 21.7¢ EC
Field Pack Bonus	0.7
 TOTAL	 <u>22.4¢ EC</u>

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**BALANCE SHEET**  
**AS OF 12/31/83, IN 000'S EC\$**

Current Assets	\$ 7,169
Current Liabilities	(5,979)
Fixed Assets	
(net of depreciation)	1,919
Long-Term Liabilities	( 218)
Net Assets	(\$2,891)

**INCOME AND EXPENDITURES**  
**AS OF 12/31/83, IN 000'S EC\$**

Export Sales		\$45,661
Cost of Sales		<u>21,842</u>
Basic Price to Growers	15,756	
Input Cess	6,086	
Gross Contribution to Operations		23,819
Cost of Operations		<u>23,823</u>
Deficit after Operations		( 4)
Net Other Income & Expenses		109
Surplus		<u>\$ 105</u>

**c. Organizational Structure**

The organization of BGA is composed of financial, field, technical and administrative operations.

Two of the three key positions are filled with BOD/C recruited personnel. The General Manager and Financial Comptroller are not advisors; they have full operational authority. The boxing plants are being phased out as a result of emphasis on private packing plants (which are cheaper) and increased field packing by growers.

**2. Administrative Assessment and Considerations for Implementation**

The BGA (and its predecessor institution) has been the dominant force in banana production and marketing in St. Lucia for over twenty years. Over time, inefficient practices have accumulated, leading to a trend of rising fixed costs and decreasing payments to growers. In addition, political pressures have on occasion led the BGA to maintain a higher level of grower payment than was financially prudent. Periods of excessive payments to growers, combined with the inability to monitor closely grower repayments for BGA provided inputs, has led to the organization's current fragile financial condition.

The BGA's past record in the management of input credit transactions has been mixed. The disaster relief provided following Hurricane Allen and later BOD/C concessional inputs of fertilizer were not well-handled and have not resulted in the planned financial strengthening of the BGA. Prospects for

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better management in the future are strong, however. The BGA has a new General Manager and Financial Comptroller provided by the BDD. In addition, the three new Board members appointed by the new GOSL (out of nine members) provide a stronger financial and business perspective than past boards have had. The BDD and WINBAN are also providing technical assistance to BGA field staff.

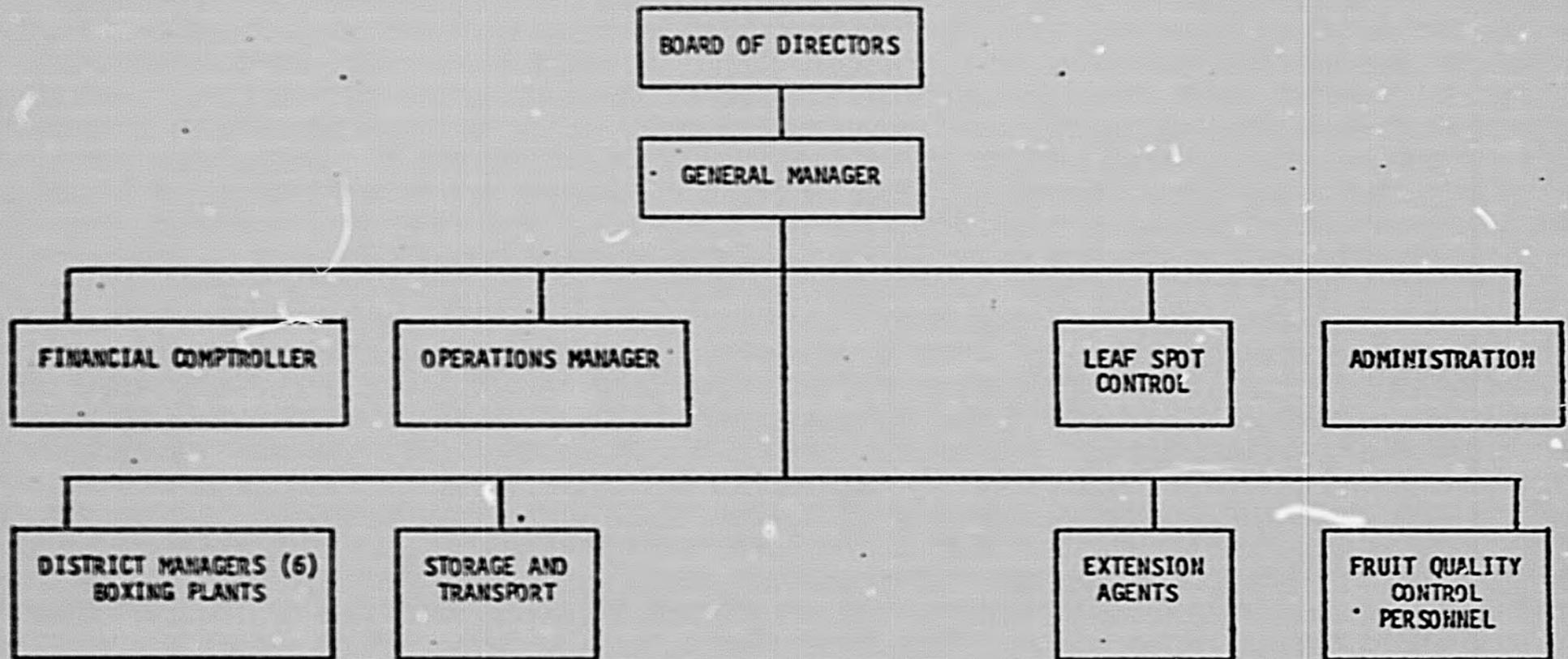
In spite of extensive technical and managerial assistance, the BGA will continue to be burdened by the financial mistakes of the past. Any new credit input program will have to be structured so that inputs go only to eligible growers and the BGA in fact collects from growers the amount due, preferably by direct deduction from the funds transferred from the export receipt account in the NCB. Management understands that failure to collect on grower credit accounts will in effect decapitalize the BGA.

The BGA has the facilities and staff to store and distribute the replanting inputs. Because of the potential scarcity of other inputs during this project's implementation, care has to be exercised to separate and control replanting inputs. The SLDB would assist in monitoring inventory and distribution procedures.

The present accounting procedures and computer facilities are inadequate to monitor grower accounts on a timely basis. The provision of a mini-computer and associated programming assistance under this project will give the BGA the necessary ability to track grower repayments. The BGA is moving ahead with new financial controls and a rationalization of various growers' "cess" accounts to streamline BGA/grower transactions. The lead time between acquisition of the mini-computer and the scheduled repayments by growers should be adequate to provide operational capability to track down credit transactions for this project component.

The implementation and financial plans developed for this project reflect the strengths and weaknesses of the BGA. The guidelines for grower eligibility and provision of computer capability will strengthen the reform efforts of the current BGA management. In addition, the establishment of distribution and repayment criteria and procedures, along with the monitoring activities of the BGA, should enhance BGA's ability to manage the proposed replanting activity.

ST. LUCIA BANANA GROWERS ASSOCIATION



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