AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete)

Amendment Number: ______

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: CARIBBEAN REGIONAL

3. PROJECT NUMBER: 538-0080

4. BUREAU/OFFICE: LAC 05

5. PROJECT TITLE (maximum 40 characters): CARIBBEAN AGRICULTURAL TRADING COMPANY

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 08 DD 31 YY 87

7. ESTIMATED DATE OF OBLIGATION (Under 'B:' below, enter 1, 2, 3, or 4)

A. Initial FY 82 B. Quarter 4 C. Final FY 87

8. COSTS ($000 OR EQUIVALENT $1 = $2.00BDS)

A. FUNDING SOURCE	FIRST FY 82 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	4,225		4,225	4,225		4,225
(Grant)	(225)	( )	(225)	(225)	( )	(225)
(Loan)	(4,000)	( )	(4,000)	(4,000)	( )	(4,000)
Other U.S. 1.						
Other U.S. 2. IDB	434		434	434		434
Host Country CATCO		750	750		2,031	2,031
Other Donor(s)						
TOTALS	4,659	750	5,40'	4,659	2,031	6,690

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	C. 2. Loan	D. OBLIGATIONS TO DATE 1. Grant	D. 2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	E. 2. Loan	F. LIFE OF PROJECT 1. Grant	F. 2. Loan
(1) FN	130	140	140	0	0	225	4,000	225	4,000
(2)									
(3)									
(4)									
TOTALS				0	0	225	4,000	225	4,000

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 840

11. SECONDARY PURPOSE CODE: 730

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	DEL						
B. Amount	100%						

13. PROJECT PURPOSE (maximum 480 characters)

To establish a commercially viable agricultural trading company which will open new market channels and promote the production and consumption of regionally produced agricultural commodities

14. SCHEDULED EVALUATIONS

Interim MM 03 YY 84 | MM 09 YY 85 | Final MM 09 YY 87

15. SOURCE/ORIGIN OF GOODS AND SERVICES

☐ 000 ☒ 941 ☐ Local ☐ Other (Specify) ______

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ______ page PP Amendment.)

17. APPROVED BY

Signature: William B. Wheeler

Title: William B. Wheeler, Director

Date Signed: MM 7 DD 28 YY 82

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM | DD | YY

AID 1330-4 (8-79)

Glossary of Acronyms and Abbreviations

AMP	Agricultural Marketing Protocol
BDD	British Development Division in the Caribbean
B.W.I.	British West Indies
CADEC	Caribbean Ecumenical Consultation for Development
CARDATS	Caribbean Agricultural and Rural Development Advisory and Training Services
CARDI	Caribbean Agricultural Research and Development Institute
CARICOM	Caribbean Community (also Caribbean Common Market)
CARIFTA	Caribbean Free Trade Association
CATCO	Caribbean Agricultural Trading Company
CCS	Caribbean Community Secretariat
CDC	Commonwealth Development Corporation
CFC	Caribbean Food Corporation
CFNI	Caribbean Food and Nutrition Institute
CIDA	Canadian International Development Agency
DAE	Department of Agricultural Extension, University of the West Indies, St. Augustine, Trinidad
DAEFM	Department of Agricultural Economics and Farm Management, University of the West Indies, St. Augustine, Trinidad
DHSA	Deloitte, Haskins, Sells Associates
EDF	European Delevelopment Fund
EEC	European Economic Community
FAO	Food and Agriculture Organisation of the United Nations
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GKC	Grace, Kennedy & Company
GMS	Guaranteed Market Scheme
GNP	Gross National Product
IDB	Inter-American Development Bank
IICA	Instituto Interamericano de Ciencias Agricolas
ISER	Institute of Social and Economic Research
LDC	Less Developed Country
OAS	Organization of American States
TASI	Tropical Agricultural Services International
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UWI	University of the West Indies
W.I.	West Indies
WINBAN	Windward Islands Banana Growers Association
WISCO	West Indian Shipping Corporation

CARIBBEAN AGRICULTURAL TRADING COMPANY

PROJECT PAPER

TABLE OF CONTENTS

I. SUMMARY AND RECOMMENDATIONS

A. Recommendations

The Regional Development Office/Caribbean (RDO/C) recommends the following loan to finance the Caribbean Agricultural Trading Company Project.

- AID Loan	$4,000,000
Terms: Fifteen year repayment period including five years grace on amortization with interest of four percent during the grace period and seven percent thereafter.	
- Borrower Contribution ($750,000 as a CP to disbursement of AID Loan Funds)	2,031,500
- AID Grant	225,000
- IDB Grant	434,000
- Project Total	6,690,500
- Disbursement Period	Five Years

B. Summary Project Description

1. Borrower

The Caribbean Agricultural Trading Company (CATCO) is a mixed public/private stock corporation, with 51% of its stock held by the Caribbean Food Corporation (CFC), and 49% held by the private sector. CATCO was established in 1981 by the CFC and incorporated in Barbados. Its Board of Directors represents both CFC and the private sector, and is chaired by the President of Grace Kennedy & Co. The regional character of CATCO is reflected in both the shareholdings of CFC, which represent all CARICOM members, and in the distribution of shares to various private companies in the Caribbean. As a commercially viable trading company, CATCO's goal is to expand the trade of agricultural and agro-industrial commodities produced in the Caribbean. To achieve this goal, CATCO will establish trade between the producer, processors and wholesalers and markets for regionally produced agricultural products, while at the same time increase the use of agricultural inputs by promoting their availability at the distributor level.

The Caribbean Food Corporation will guarantee the full amount of the loan to CATCO. The CFC is a regional organization which was established by the twelve member governments of CARICOM in 1976 for the purpose of reducing growing food import bills through promotion of regionally produced agricultural commodities. CFC has the same twelve member government representation as does CARICOM and is the majority stockholder of CATCO. For the purpose of guaranteeing the AID loan to CATCO, CFC will set aside, or reserve, the equivalent of US$4 million in callable shares such that they could only be called for payment on this loan.

2. Project Summary

The project will support the establishment of a viable commercial trading company (CATCO) which can increase the volume of food commodity trade among CARICOM member states and in extra-regional markets. The CATCO operation is designed to overcome such market constraints as high transaction costs, geographic dispersion of production, inadequate intra-regional transportation, unavailability of agricultural inputs, high handling costs and others. It will aggressively identify markets, anticipate demands, and actively promote production of the kind and type of produce needed. This behavior will be a major step towards providing the necessary linkage between markets and farmers. As a result, more stable supply relationships can be established, and regionally produced commodities will take a larger share of existing CARICOM markets. CATCO will achieve cost savings by eliminating the need for multiple inspections of small lots of produce and by reducing losses through improved physical handling. It will also provide market leadership for selected high volume commodities produced in the Region. This will establish more routine and efficient movement of commodities and enable CATCO to gain greater market penetration and to assure markets for regional growers.

To help CATCO achieve these objectives, AID will provide loan funds for assistance in three areas: (a) approximately $3,250,000 will be used primarily for the purpose of financing inventory, trading activities and initial operating costs; (b) approximately $500,000 to be used as capital for the purpose of investing in specific services and facilities that are necessary links in the producer-to-market chain of agricultural products promoted by CATCO; and (c) approximately $250,000 for technical assistance in identified areas. In addition, AID will provide a Grant in the amount of $225,000 to enable frequent and intensive process evaluation of CATCO activities over the life of the project, and accomplish an impact evaluation in year five.

3. Summary Findings

The Caribbean Agricultural Trading Company Project addresses a major need in the Eastern Caribbean to reduce its traditional dependence on food imports and expand the production and marketing of regionally produced agricultural commodities. The Project Committee has reviewed all aspects of the proposed project and finds that it is technically, socially, economically and financially sound and consistent with the development objectives of the participating countries represented in CATCO and of RDO/C. It has also been determined that CATCO is institutionally capable of administering the project and disbursing the funds committed within the time planned for implementation (five years).

C. Project Issues

The PID for the project was reviewed on March 5, 1982. Issues raised by the DAEC were expressed in a guidance cable dated April 3, 1982 (see Annex B, Exb. 2). These issues are identified below along with a reference to the appropriate section of the Project Paper in which they are addressed:

ISSUE	P.P. REFERENCE
1. Marketing and Related Production Constraints	Section II B, II D-2 and IV D-2
2. Inter-Island Transport Constraints	Section II D-3 and IV A-3
3. CATCO Plans for Trading in the Extra-Regional Market	Section III D-3 and IV A-1
4. Financial Issues - Grant Funds	Section III D-5 and IV C
5. Financial Issues - Debt/Equity Ratio	Section IV C
6. Financial Issues - Loan Guaranty	Section I B and Annex A-2
7. Legal Aspects of CATCO's Organization	Section IV B-3
8. Environmental Aspects	Section IV E

D. Participants in the Preparation of the Project Paper

RDO/C

William Baucom - Agriculture and Rural Development Officer, RDO/C
Mary June - Capital Projects Officer
Robert Meighan - Regional Legal Advisor, RDO/C
Terry Brown - Development Resources Officer

USAID/Washington

Dr. Duncan Miller - Chief, Rural Institutions Division,
Office of Multi-Sectoral Development, S&T

Contractors and Their Representatives Participating in Project Development

Michigan State University, Alternative Rural Development Strategies
Cooperative Agreement AID/ta-CA-3

Deloitte, Hoskins and Sells Associates, Edmonton, Alberta, Canada
Systems, Group of Companies, Bridgetown, Barbados

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Principal Liaison Persons in CATCO

CATCO Staff and Consultants

Mr. Douglas Orane	- Grace Kennedy Co. & Acting CATCO General Manager
Mr. Trevor Lovell	- CATCO Trade Manager
Dr. Basil Springer	- CATCO Consultant, Systems
Ms. Anne Gittens	- CATCO Consultant, Systems
Mr. Robert McDonald	- Grace Kennedy Co. & CATCO Consultant
Mr. Peter Renwick	- CATCO Consultant, DHSA
Ms. Brenda Shorey-Nicholls	- CATCO Consultant, Systems
Mr. Roland Malins-Smith	- CATCO Consultant, Systems
Mr. James Nurse	- CATCO Consultant, CFC

Approved By

William B. Wheeler, AID Director, RDO/C

II. PROJECT BACKGROUND

A. The Problems and Opportunities

Marketing has been identified as a major constraint to agricultural development and increased food production in the Eastern Caribbean Region. This is the opinion of most farmers, businessmen, government officials and development experts concerned with regional economic development. More detailed assessments of market organization problems and possible solutions have emerged from a series of studie including a major report financed by AID through the Caribbean Development Bank and actually carried out by Louis Berger International, Inc. The two phase Berger Study and other reports listed in Section VI have provided the general background material for the design of this project.

Basically there appears to be significant opportunities to expand the production and sale of a selected range of Caribbean agricultural commodities to displace existing food imports, to satisfy a potentially larger intra-regional demand and to capture a larger export market. But this expanded volume can only be achieved through a systematic attack on market organization problems to be advanced concurrently with closely related programs to stimulate the efficient production of high quality commodities.

1. Import Substitution

The Eastern Caribbean Region has been importing 50 or more of their total food supply. A high proportion of the imports are products such as cereal grains and livestock products which are difficult, if not impossible, to produce locally at costs which are competitive within the world market. However, there are significant imports of fruits and vegetables that could be replaced with regional production, see Table 1. In 1978 Barbados and Trinidad were importing 45 and 25 respectively of their vegetables. Barbados imported 75 of its fruit supply while Trinidad imported almost one-half of its root crop requirements. A significant percentage of the individual country imports are obtained from other islands in the region but a large and growing volume of the imports are coming from extra-regional sources where dependable, high quality produce shipments are easily arranged through large scale wholesale shippers.

Table 1. Estimated Percent of Total Consumption of Selected Commodities Supplied by Imports, CARICOM Countries, 1978

Country	Fruit	Vegetables (Percent)	Roots
Antigua	11	54	85
Barbados	75	45	27
Belize	6	34	8
Dominica	2	15	3
Grenada	6	8	12
Guyana	2	34	24
Jamaica	3	12	2
Montserrat	2	20	6
St. Kitts/Nevis	18	54	90
St. Lucia	2	50	5
St. Vincent	1	38	2
Trinidad & Tobago	11	25	48

Source: (9), Table V C-2.01

2. Expanding Intra-Regional Sales

There appear to be ample opportunities to expand within-the-Region sales for locally produced fruits and vegetables. The retail prices of fresn produce are very high, the quality and condition of the products is extremely variable, and in many instances the fresh products are simply not available in supermarkets or in restaurants. The produce sections of most supermarkets are unattractive and relatively small compared to similar retail outlets in the U.S. and Canada. Greater emphasis is placed on the merchandizing of non-perishable processed food, most of which is imported. Street vendors continue to be a major channel for the retailing of locally produced fresh fruits and vegetables but the volume per vendor is very small and their operational costs per unit of sales are high. If retail prices could be reduced and a wider selection of high quality products supplied on a more dependable schedule, the total sales of locally produced fruits and vegetables could undoubtedly be increased. In markets such as Trinidad and Barbados the average annual per capita incomes exceeds US$3,000. The rising incomes of local consumers, increasing population, plus the tourist trade, will support a growing demand for a wide variety of high quality fresh fruits and vegetables. Recent studies and actual sales experiments indicate a ready market exists in Trinidad and Barbados for bananas processed through a ripening room. Ready supplies of bananas are available from the Windward Islands that, currently, are dumped because they do not meet European import standards.

3. Expanding and Finding New Extra-Regional Markets

The traditional extra-regional markets for CARICOM agricultural commodities are the European Economic Community, the U.S. and Canada. The market share of the existing exports to these markets is extremely small; only in the case of bananas exported to the United Kingdom does the market share exceed 1%. This is due to a variety of factors including the relatively high unit costs for average quality produce, stiff competition from other countries, and poor export market infrastructure in the Region.

The only regular, volume export sales are the banana shipments which link producer organizations in the Windward Islands with Geest Industries, Ltd. who provide regular, ocean vessel shipping services to the U.K. A special concessionary U.K. sales agreement facilitates the continued sale of bananas which otherwise would have difficulty competing with higher quality fruit available from other sources of supply. Small quantities of other fruits and vegetables, such as mangoes, grapefruit, egg plants, breadfruits and yams are also being shipped to the U.K. on the Geest vessels. Some additional exports are being made by private traders but a great deal of developmental effort will be needed to generate the volume of quality products that could effectively compete for potential markets in the U.S., Canada and Western Europe.

4. Lagging Production Response

Farmers have not responded to what appear to be attractive market opportunities for expanding production of fruits and vegetables. Most farms are quite small (average size is less than 5 acres) and they are faced with significant natural risks in growing vegetables (temperature and rainfall variations, insects, and disease) which can greatly affect yields and net returns. Hurricane damage is a major risk in tree-fruit production. There are also market risks associated with seasonal supply gluts which depress prices and in some instances there is no ready market for a crop that is ready for harvest. Furthermore, research and extension support for expanded commercial production of fruits and vegetables has been initiated only recently. As the traditional export crop (sugar) has undergone economic difficulties there have been new efforts to shift agricultural production towards food crops, including intensive production of fruits and vegetables. Nevertheless, there are significant amounts of tillable land that remain uncultivated in most of the islands. This suggests that coordinated efforts are needed to generate farm level production of fruits and vegetables and to create marketing institutions that will provide reasonable assurance of a ready market at remunerative prices.

B. Market Constraints

The marketing system for fresh fruits and vegetables produced and distributed within the Eastern Caribbean is fragmented, poorly coordinated, high risk and relatively costly. A high percentage of the trading activity is in the hands of "hucksters" who purchase small quantities of produce directly from farmers and then personally accompany their merchandise until sold in local markets or until delivered to a buyer in another island. There are a few larger volume private traders that provide commission selling services for producer groups and who also purchase products on their own account. Producer associations are another element in the marketing system, the most important example being the Banana Growers' Associations who market exclusively bananas. In recent years Agricultural Marketing Corporations (AMC's) have been organized in nearly all of the islands as public sector interventions to assure producers a market for their products and to bring products to consumers at lower prices. Most of the AMC's and some grower associations are in chronic difficulties and suffer from political interference in management, inadequate financial resources and poor management skills. (8).

A number of studies have identified the conditions and specific market organization problems which continue to constrain the development of a more efficient and competitive production and marketing system for perishable food crops in the Eastern Caribbean. These constraining factors are summarized below.

1. Geographic Dispersion of Production and Lack of Specialization

Orderly marketing arrangements for Eastern Caribbean produce have been difficult to achieve due to geographic dispersion of the island states and the relatively small volumes of a wide variety of crops grown by small farmers. The production of any given commodity is therefore likely to be scattered and the volumes available for sale in any one community or island are likely to be small. Assembly costs are therefore relatively high and the quality of products and the aggregate volumes are poorly coordinated with actual market demands.

2. Lack of Routine and Stable Supply Relationships

Typically, little effort is made by existing traders to perform the communications functions which link farmers to existing or potential markets. Moreover, these traders do not anticipate market demand and do not offer contracts which link planting decisions with future market needs. Thus, the typical trader does not act as an agent for effective coordination and change in the production distribution system. This means that most traders are not able to assure a stable and routine supply to market buyers, nor can they provide the stable market incentives required for farmers to sustain commercial levels of production. To overcome these problems, reliable information on market requirements and an effective system for transmitting useful information to producers will be needed.

3. High Transaction Costs

Given the current structure and practices of traditional marketing in the Eastern Caribbean, as outlined above, the cost associated with transacting purchases and sales is relatively high. Moreover, in a system characterized by a lack of standard weights, measures and grades, traders are forced to personally inspect each lot at every transaction point and negotiate a price, depending on the results of each inspection. Because of the time required for each inspection, most traders are limited in the amount that can be personally inspected. This in turn requires a large number of low volume/high margin firms engaged at each link in the marketing chain.

4. Transportation Physical Handling Costs

Inefficient work methods, congested markets, poor transportation and inadequate packaging contribute to high levels of spoilage and result in high physical losses. The lack of reliable inter-island transport and the very limited availability of adequately ventilated and refrigerated space on existing vessels continues to impose very high costs on the movement of perishable products. Unloading delays at destination port facilities cause additional product deterioration. Physical handling costs are also increased by the tradition of multiple inspections of small lots referred to above. As these problems are a basic feature of the existing system, it is difficult for small traders to individually overcome them. Innovations to overcome these shortcomings are most likely to occur through having a strong market participant that can provide overall market leadership and demonstrate new and less costly handling procedures.

5. Lack of Inventory (Trading) Capital

Working capital to finance trading inventory for agricultural produce is typically not available from established credit institutions. Credit for perishable products is almost non-existent. Yet, the credit most traders need is not for facilities, equipment or other fixed assets, but rather to cover the costs between produce production and sale. The fact that traders are expected to finance activities with equity capital clearly demonstrates why there is an absence of relatively larger volume trading companies. As a result, regional agricultural marketing is currently characterized by a large number of small volume traders, known locally as hucksters. These traders typically engage in bilateral markets. Indeed, there is no trading firm that has a regional perspective, i.e. one that stays in touch with region wide supply and demand situations for a wide range of products.

6. Research and Development

The private sector typically has limited capabilities and little or no incentive to carry out R&D on broad market organizational problems, hence, public sector efforts are required. In the Eastern Caribbean Region effective and concerted efforts are needed to provide the applied research and the related educational and administrative efforts to undergrid the development of a more efficient, progressive and equitable system of producing and marketing food crops. However, these publicly supported agricultural production and marketing research and extension programs need to be accompanied by aggressive private sector efforts to identify new markets, to develop new organizational arrangements to exploit market opportunities, and to develop new products and more technically efficient operations. Larger scale, more regionally oriented private sector firms would have the ability and interest in undertaking needed research and market development work.

C. A Proposed Project

project consists of establishing a commercial trading company to engage in direct buying and selling of agricultural commodities grown in the Region. Thus, the central concept is to initiate market system reforms through the innovative actions and behavior of a profit motivated firm that will increase the volume of commodity trade in the Region.

The Caribbean Agricultural Trading Company (CATCO) is in the initial stages of organization. The basic ideas for this enterprise have emerged over a period of years and were shaped, in part, by studies underwritten by AID and by related discussions with private investors and the Directors of the Caribbean Food Corporation. The mixed public/private equity structure of CATCO is particularly suitable for the venture proposed. Private entrepreneurs and commercial banks are reluctant to invest in the activities proposed by CATCO primarily because of the inherent high risk associated with perishable commodities, the substantial amount of capital required, and the predilection of regional governments to intervene in the food marketing activities. CATCO will provide an opportunity for the private investors and public sector officials to jointly identify and expand commercial trading activities on a rational basis. The enterprise is being launched with sufficient capital to undertake major start-up costs, which include the recruitment and training of staff, the development of a business plan and aggressive efforts to initiate profitable commodity trading activities. The CATCO operation is designed to overcome many of the market constraints identified earlier in this paper. It is more comprehensive in scope than previous marketing improvement efforts, and will directly complement other AID funded projects that strengthen institutional support for agricultural research, extension, credit and inter-island transportation.

CATCO will be market oriented rather than production oriented. This orientation will be a sharp contrast to most existing traders who typically wait to see what is produced and then find a market. In contrast, CATCO will aggressively identify markets, anticipate demands, and actively promote production of the kind and type of produce needed. This behavior will be a major step towards providing the necessary linkage between markets and farmers. As a result, more stable supply relationships can be established, and regionally produced commodities will take a larger share of existing markets.

CATCO will be a regional marketing firm and as such, its regional perspective will enable it to address the constraints now associated with geographic dispersion and insufficient specialization in the Region. CATCO will eventually establish a network of its own trading agents and permanent arrangements with local merchants in key islands who will be informed both about market requirements and supply availability. CATCO agents will work through this network to actively encourage production specialization in selected areas by offering forward contracts and other specialized marketing services.

CATCO will achieve cost savings by eliminating the need for multiple inspections of small lots of produce and by reducing losses through improved physical handling. Because CATCO will have a coordinated network of field agents, once produce is purchased and packed, no further inspections will be required until it reaches the final buyer. With this improved efficiency, CATCO will be more price competitive with alternative sources of supply.

CATCO will provide market leadership for selected high volume commodities produced in the Region. Since CATCO will have the information, skills and working capital to trade in relatively large volumes of selected commodities (i.e. bananas, plantains), it will be able to establish the norms regarding size, quality, packing standards and other commodity attributes that will facilitate routine procedures for exchange. This leadership to establish more routine and efficient movement of commodities will enable CATCO to gain a greater market penetration as well as assure markets for regional growers. CATCO will provide leadership, and other marketing traders will be under competitive pressure to change their behavior to compete in an evolving market system.

D. Relationship of the Project to Host Country Priorities and to the CDSS

1. Relationship to Regional and Host Country Objectives

Government leaders throughout the Region are focusing their attention and resources on ways to improve their weakening economic positions highlighted by steadily worsening trade deficits. This has been brought about in part by increases in food imports, losses in foreign exchange earnings due to recent natural disasters, and weakening market demands for traditional export crops.

Governments in the CARICOM region have responded to these problems by directing their resources into developing a Regional Food and Nutrition Strategy and into improved research, extension and infrastructure systems to support agricultural development. Equally important, they have transformed policy commitments into reality by capitalizing and creating in 1977 the Caribbean Food Corporation to undertake specific commercial ventures in agricultural production, marketing, and processing; these are all aimed at stimulating agricultural development and food production. The CFC has a special mandate to operate in such a way as to ensure the participation of the private and public sectors, regionally and extra-regionally. After a 5 year development phase, CFC has now entered their Project Investment Phase, and through their 1982 - 84 Investment Program plans to emphasize commercial projects, involving primarily the private sector. All projects, including developmental projects, are designed to be financially self-sustaining from either external donor sources of funding or internally generated funding. The CATCO Project is the lead initiative of CFC in its 82 - 84 Investment Program.

2. Relationship to AID Objectives and Other AID Supported Projects

Agriculture plays such a cruical role in earnings of foreign exchange and employment generation in the Caribbean Region, that the performance of the agricultural sector is of central concern to RDO/C's development assistance strategy. RDO/C's specific long-term objectives in the agricultural sector are to increase the per capita output of food and other marketable commodities and to expand employment opportunities for rural families thereby increasing farm family income. The focus of this program as outlined in the CDSS is to:

- promote commercial agricultural diversification to increase food production for regional requirements and to establish new commercial opportunities; and
- increase the production efficiency of traditional export commodities.

RDO/C's ongoing projects to implement the strategy noted above have sought to bring about incremental changes in the existing agricultural sub-systems of research, extension, credit and infrastructure development.

The CATCO Project responds specifically to RDO/C's developmental focus by providing direct support to private sector initiatives to stimulate increased agricultural product trade, and the production linked to it, to both regional and extra-regional markets. In addition to the monitary income benefits which will accrue to business and farm families through increased profitability of their enterprises, the CATCO Project is also expected to contribute to overall USAID objectives of employment generation in the trade, transport and farming sectors of the participating Caribbean nations.

Existing and anticipated RDO/C projects which have important implications for the successful implementation of CATCO (and vice versa) are as follows:

a) Agricultural Research

Since 1978 the RDO/C Small Farm Multiple Cropping Systems Research Project (SFMCP) has been working through the Caribbean Agricultural Research and Development Institute (CARDI) to develop proven and economical production technologies which farmers can readily adapt. Several important technologies developed at CARDI's Trinidad experiment station have been tested on the various Eastern Caribbean islands through efforts of the SFMCP. These include disease free yam stock, heat-treated cabbage seed, improved legume and peanut cultivars. (15). Research proven technologies like those mentioned will enable commercial production of commodities that are competitive with extra-regional sources from a quality, consistency of supply, and cost perspective. As CATCO provides firm market guidelines, CARDI research capabilities can be directed at solving clearly identified production or handling problems that retard market growth.

b) Agricultural Extension

The five year RDO/C Caribbean Agricultural Extension Project began in 1980 and is being implemented in Phase I by UWI in collaboration with the Midwest Universities Consortium for International Activities (MUCIA). The two phases of this project are designed to assist selected governments of the CARICOM LDCs in improving the overall effectiveness of their agricultural extension services. Phase I established and staffed two extension outreach stations in the Region and assisted participating local governments in formulating comprehensive national extension improvement plans. Phase II activities will focus on implementing these plans and in conducting various scholarship and training programs to upgrade extension agent skills. There will also be, where necessary, the purchase of extension vehicles and equipment.

As CATCO identifies markets and seeks to contract for local production, extension services will be important to assist growers in learning new skills and production techniques required to meet more rigorous production standards. CATCO field agents will work closely with these strengthened extension services in order to identify necessary extension agent and farmer training needs for variety specific cropping and post-harvest handling practices. CATCO field agents will also provide valuable planning targets for the country level extension planning and execution sub-committees which are being established under the Extension Project.

c) Agricultural Production Credit

The CATCO Project does not contemplate providing agricultural production loans to participating farmers because these services are already available through the RDO/C Integrated Agricultural Development Project. This small farmer development program was established in the Caribbean Development Bank and cooperating national and regional direct lending institutions. Innovative features allow farmers to obtain agricultural production credit without using an official land title as loan collateral. More secure marketing arrangements which will be facilitated through CATCO efforts will greatly assist farmers and local lending institutions in negotiating and managing loans.

d) Agribusiness Development

There are two RDO/C agribusiness projects that both facilitate and complement actions planned by CATCO. The first of these is being implemented through the Caribbean Development Bank and involves both grant and loan funds. The grant portion provides technical assistance for planning, sub-project development and design, special studies and implementation. Loan funds have established an "Agribusiness Development Fund" within CDB for loan and equity investment over a five year period. A recent activity supported under this project was to examine the feasibility of a banana ripening room operation in Barbados. This pilot project has provided valuable information for CATCO business planners, and has pointed the way for CATCO to select bananas for ripening and sales in Barbados and Trinidad as a priority trading product.

A second project "Agribusiness Expansion" began in late 1980, seeks to more directly initiate private agribusiness development in the Caribbean Basin. The Latin American Agribusiness Development Corporation (LAAD) will implement the project and is committed to targeting at least US$4 million to the English-speaking Lesser Developed Countries of the Caribbean. LAAD has established a sub-regional office in Barbados to promote and initiate projects in the English-speaking Caribbean in the areas of food production, processing, packaging, storage, transportation, and marketing.

The CATCO Project will undertake modest capital investments in new and promising marketing, processing and transport arrangements which are directly related to CATCO trading opportunities. Since these investments would largely be joint ventures, the private sector investment partners may look to the CDB or LAAD for necessary business planning and loan assistance. Thus, CATCO and other RDO/C funded Agribusiness Projects will be mutually reinforcing and help to extend new investment opportunities to a wider audience of potential private sector investors.

3. Relationship to Activities of Other Donors

a) Inter-American Development Bank

In 1981 the Inter-American Development Bank approved a grant of US$454,000 for the Caribbean Food Company, who in turn allocated all of these resources to contracting for consulting services to support the establishment of CATCO. The technical assistant contract was awarded to a joint venture undertaking between Tropical Agricultural Services International (TASI) a wholly owned Barbadian firm, and Deloitte, Hoskins and Sells Associates, a wholly owned Canadian partnership. Some 48 person months of short-term consulting will be provided to CATCO in the areas of market intelligence, transport, marketing, contracts and services, and training over the period March 1982 through February 1984.

b) Commission of the European Communities - European Development Fund

The European Development Fund (EDF) has been a major source of loan and grant funding support for the Caribbean Food Corporation. In 1981 some US$450,000 in technical assistance was provided to assist CFC in project development and implementation. In 1982 an additional US$600,000 was approved for similar purposes. Currently CFC is undertaking preliminary discussions with EDF regarding the possibility of loan and grant funding for the input side of CATCO business plans. The activities which might be undertaken with inputs could go substantially beyond those anticipated in the present business plan, in that EDF resources might be used to sell inputs on long-term credit to major regional buyers, and to improve input storage and handling capabilities of CATCO clients on the different islands. If these plans are materialized, much of the EDF grant and technical assistance support would be directed towards the strengthening of CATCO's capabilities in financial management and credit worthiness analysis.

c) West Indian Shipping Corporation (WISCO)

With assistance being provided by the EDF, WISCO has plans to improve regular feeder shipping services to the LDCs in the Region. The improved WISCO services are geared primarily to facilitate transshipment of general cargo to the LDCs from Barbados and Trinidad. Nevertheless, CATCO plans to utilize this improved service when available and compatable. CATCO will still need to utilize other shipping arrangements to achieve the frequency and routing required.

III. DETAILED PROJECT DESCRIPTION

A. Goal and Purpose

1. Goal

The goal of this project is to increase the total volume of trade and consumption of agricultural commodities produced by small farmers in the Less Developed Countries of the Region. This constitutes a strategy of achieving greater regional food self-sufficiency via increasing the volume of intra-regional agricultural trade. As shown below, this goal is consistent with the CARICOM Food and Nutrition Strategy and the RDO/C FY 83 CDSS.

The Draft Regional Food and Nutrition Strategy, adopted by CARICOM in August 1980, is a plan of action to "improve the health of all Caribbean peoples, as well as promote increased regional economic self-sufficiency and self-reliance" (2). It acknowledges that improving the regional marketing system, along with appropriate support services like transportation, is a key link in achieving both production and consumption/nutrition objectives.

The RDO/C FY 83 CDSS advocated two parallel areas of focus which are consistent with AID policy:

> First, the strategy focuses heavily on activities aimed at increasing traditional export commodities. Second, over the longer run, the strategy is to promote commercial agricultural diversification both to achieve greater food production for regional requirements and to establish new commodities aimed at extra-regional trade (10).

The CATCO project represents a strategically important component of the activities being funded to implement the Mission's strategy.

2. Purposes

The project purpose is to create a commercial trading company which can: a) remove key marketing constraints, b) promote and develop new marketable products produced by farmers in the LDCs of the Region, and c) sustain financially viable operations. The project clearly has a double focus, e.g. stimulating private sector involvement in agriculture and attacking some of the externalities which constrain broad-based agricultural development in the Region, especially within the LDCs.

Achievement of these two tasks requires close cooperation between the public and private sectors in the Caribbean. Indeed the rationale for undertaking a joint enterprise is succinctly stated in the CFC/CATCO Aide Memoire:

> Both the public and private sectors agree that partnership in agricultural production under the umbrella of the CFC, and partnership in marketing and distribution under the umbrella of CATCO, would bring together the expertise and experience of the private sector, simultaneously with the

putting of agricultural pursuits on a commercial and competitive basis, while at the same time permitting a level of public sector involvement to safeguard the regional public interest (4).

Likewise, stimulating the agricultural sector to meet the food needs of the Region's growing populace and to enhance export earnings is a cornerstone of the recently declared Caribbean Basin Initiative (14).

B. End of Project Status, Outputs and Inputs

1. End of Project Status

By September FY 87, CATCO will be a fully operational, financially viable trading company. Standard operating procedures for measuring, packing and shipping should be well-known by CATCO's field staff and trading partners. Having received practical training through technical assistance provided in this project and gained five years of experience, the CATCO market analysis staff and field traders should be able to perform their functions without further assistance.

The improved marketing services and innovations introduced by CATCO will clearly benefit the Region as a whole. Specifically, by adopting export market grading and packing procedures for fruits and vegetables, consumers in the Region will gain the benefits of more stable, better quality produce. Innovations supported by the selected capital investments such as banana ripening rooms and peanut dryers will stimulate volumes in commodities currently not widely traded in the Region, or allow the introduction of new commodities for intra-regional trade.

The CATCO project should also contribute significantly to AID's knowledge about/and experience with private trading companies in the agricultural sector.

2. Outputs

In addition to the institutional structure and improved intra-regional marketing procedures and systems mentioned above, CATCO should generate several specific outputs which can be traced directly to their increasing level of operations over time.

The CATCO trading strategy may be summarized as a three staged process. Initial trading will be concentrated in well established commodities that are readily available in the Region (bananas, plantains, grapefruit, and oranges). In the early years CATCO will gradually promote and develop intra-regional trade in a wider array of commodities some which inherently more risky (peanuts, carrots, cabbages, tomatoes, mangoes, onions, pigeon peas). Then, beginning in the third year of operations, CATCO will start to develop an extra-regional market for a few carefully selected items. Based on this strategy, CATCO should achieve a volume of output trade of at least US$15 million by the third year and increase operations to US$30 million in the fifth year.

Given heavy start-up and market development costs, CATCO may not achieve a break-even trade volume until early in the fourth year of operations. Trade and financing projections indicate that CATCO will make a profit after taxes of about US$1 million in the fifth year. Fifth year profits yield a 5.6 percent return on gross sales. At this level of operations, CATCO will become a financially viable enterprise and shows a 19 percent internal rate of return over its first 10 years of trading.

3. Inputs

The proposed AID inputs to CATCO is a US$4 million loan. The primary purpose of the loan funds is to provide the necessary operating capital for initial trading and market development. Up to $500,000 of the $4 million operating capital can be used by CATCO to make selected capital investments that will support the development of new, innovative services such as banana ripening, peanut drying, pre-cooling of produce at the producer or packing house level, or specialized equipment essential for improved handling of perishable products. Each investment would require review and approval by the RDO/C, and no single investment could exceed $50,000. CATCO's initial operations will be devoted to expanding the restructuring intra-regional trade and reinforcing other USAID developmental activities (Part II - D), the terms of the loan should be significantly concessional. A 15 year loan with a 5 year grace period on principal at 4 percent interest for the first 5 years and 7 percent thereafter should provide CATCO ample assistance to engage in the initial developmental activities.

C. Beneficiaries

The immediate and primary beneficiary is of course CATCO itself, a commercial company dealing in agricultural trade. Consequently, as a beneficiary, CATCO is wholly consistent with two of AID's priority concerns. Being a trading company, CATCO will, by definition, directly benefit all other parties with whom trade is conducted. Thus it is likely that a wide range of farmer groups, other traders, commodity associations, and individuals who sell to CATCO will directly benefit. Likewise the wholesalers, retailers, processing firms, and institutions who buy from CATCO will directly benefit.

Additional benefits will accrue from increased trade volumes indirectly at the production level to individuals employed in farming operations, as well as service firms supplying inputs or firms engaged in packing, transporting, sorting, and storing commodities. There is also reason to believe that a portion of any cost savings achieved by CATCO is likely to be passed on to each participant in the marketing channel so that ultimately final consumers will indirectly benefit.

D. Detailed Project Description

1. The Implementing Institution

The Caribbean Agricultural Trading Company, Ltd. (CATCO) was incorporated in Barbados on October 16, 1981. The majority shareholder is the Caribbean Food Corporation (a corporation wholly owned by CARICOM governments) which provided 51% of current paid-up share capital. The remaining

49% of the paid-up share capital in CATCO has been subscribed by Grace, Kennedy & Company Ltd. (GKC). Current paid-up share capital in CATCO amounts to $200,000, with a second equity call for an additional $550,000 scheduled after August 1, 1982. It is anticipated that the CFC will maintain its majority shareholder position by subscribing 51% of the additional equity call. On the other hand, it is anticipated that GKC will dilute its portion of equity shareholdings by inviting other regional firms to purchase equity in CATCO.

The corporate goals of CATCO are:

(a) To reduce the Region's food imports;
(b) To provide agricultural trade information, and
(c) To be financially viable.

Thus the primary focus of CATCO will be to establish and expand a profitable trade in agricultural commodities grown in the Region.

A core staff has been recruited and is on-board. They are actively involved in refining the business plan, conducting market analysis of identified trading opportunities, and conducting pilot trading activities (e.g. small-scale shipments of bananas to test the feasibility of a "ripening room" to produce a premium quality fruit).

The organizational structure of CATCO is functionally divided into two major management units, as shown in Figure 1. The trading unit carries the major operational functions of the business, while the financial control unit will facilitate the specific trading transactions. The financial unit will also play a major role in conducting short-term credit worthiness analysis to orient the frontline CATCO traders in their client selection process, and in assisting the General Manager in assessing the financial viability of new business decisions, and of the desired venture investments.

Grace, Kennedy & Company is responsible for management of CATCO. Under the terms of the three year management contract, the Grace Kennedy & Company has the authority and responsibility to hire personnel, determine trading/shipping patterns, and set pricing policies for CATCO. The current Acting General Manager of CATCO is a GKC employee and will continue to devote a significant share of his time to supervising the GKC management contract after a full time general manager is hired.

The market research and development unit will serve the overall needs of CATCO management in assessing the desirability and likely profitability of new products, marketing services and selected capital investments. It will also play a key role in coordinating CATCO trading plans with country and regional research, extension and other specific agricultural development projects. Much of the technical assistance for CATCO will be to strengthen the capability of this unit.

The CATCO personnel hiring schedule is shown in Table 2. The plan is to begin operations with some 15 different positions, although 5 of these will not be filled until the second half of year one. Thus, the total projected staff for the first year of trading is 12½ persons. As the volume of trading activities increases in years 2 and 3, the full time employees will be brought into the indicated positions. By years 4 and 5 the staff will reach a total of 22 persons.

Figure 1. CATCO ORGANIZATIONAL STRUCTURE

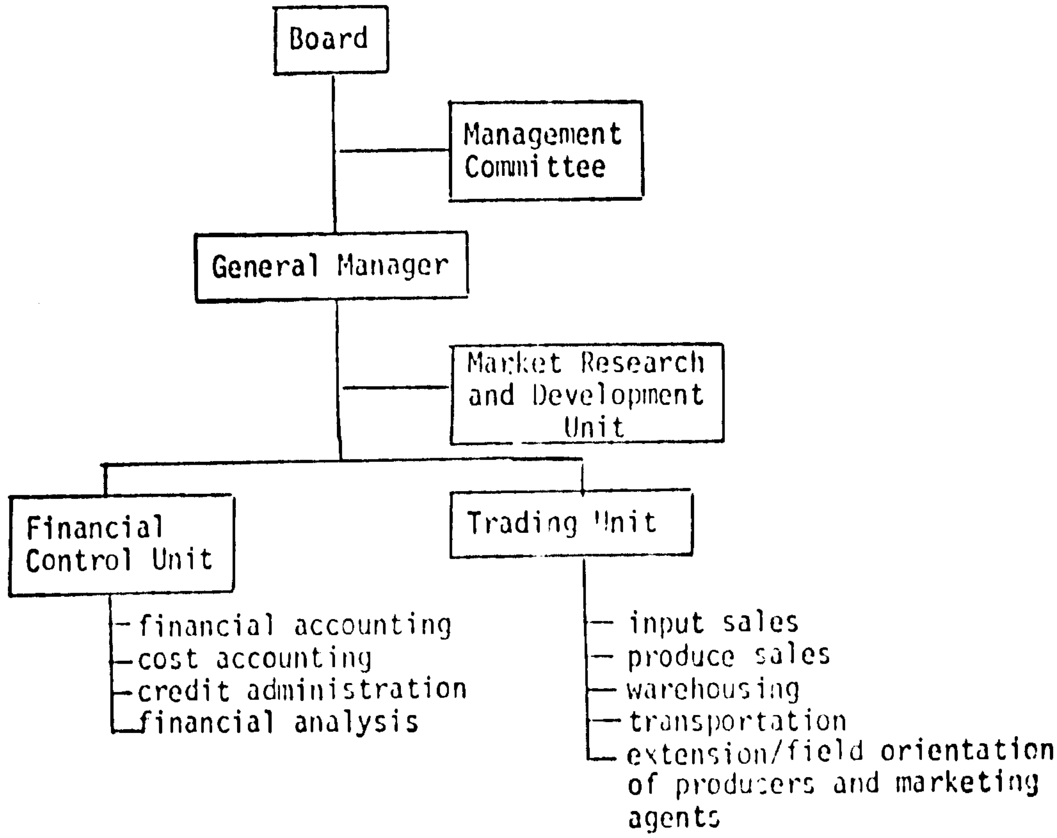

Table 2 CATCO Personnel Schedule

Position	Total Number of Personnel Per Year				
	Year 1		Year 2	Year 3	Years 4 & 5
	Number	Salary 1/ US$ 000			
General Manager	1	37.5	1	1	1
Trade Manager	1	27.5	1	1	1
Input Manager	½	18.0	1	1	1
Output Manager	1	18.0	1	1	1
Field Officers 2/	3	49.5	3	3	3
Warehouse Supervisor	½	6.0	1	1	1
Porter	½	4.0	1	1	1
Accountant	1	16.5	1	1	1
Assistant Accountant	½	11.0	1	1	1
Market Analyst	½	18.0	1	1	1
Traffic Officer	-	12.0	1	1	1
Extension Officer	-	16.5	½	1	1
Secretary/Clerk	-	7.5	1	1	1
Admin. Officer	1	11.0	1	1	1
Driver	1	5.5	1	1	1
Maid	1	2.0	1	1	1
Traffic Clerk	-	6.0			1
Market Research Asst.	-	9.0			1
Secretary	-	7.5			1
Accountant Assistant	-	9.0			1
Total Persons	12½		17½	18	22
Total Costs	275,185		407,685	483,695	623,510

1/ a. 15% increases in remuneration assumed annually.
   b. Fringe benefits are included at the level of an additional 30% to basic salary according to the following items:

- 7½% National Insurance
- 5% Group Life Insurance
- 2½% Pension & Medical Scheme
- 15% Pre-requisite (non-taxable).

2/ Field Officer will remain in Barbados for training, and will be moved moved to the field officer station when cost-effective.

The core trading staff includes an overall trade manager, an output and an input manager, and the field agents. As the volume of business expands in a given country, a field agent may be permanently stationed there, but in the beginning months of trading these staff will be based in Barbados and travel extensively throughout the Region on a as need basis.

2. The Project Strategy

a) Market Channel Leadership Role

CATCO has a major leadership role to play in transforming a high cost and poorly coordinated production-marketing system for fruits and vegetables in the Eastern Caribbean. The basic approach will be to identify market opportunities and then attempt to align production and marketing activities with the identified markets. The anticipated scale of operations, the available capital and management skills will enable CATCO to undertake activities that have been beyond the capabilities and risk-taking abilities of existing small-scale inter-island traders. Once new market channels have been opened and new organizational and technical procedures have been proven viable, it is expected that other private sector entrepreneurial initiatives will follow from CATCO's developmental leadership.

As a practicing trading firm and with access to a modest amount of capital, CATCO will also have the capability to work with selected innovative firms to jointly invest in new business activities which could be instrumental ... successfully introducing to regional consumers a new product or service, and thereby developing production opportunities for farmers of the Region.

b) Business Expansion Strategy

The market development objectives that will give direction to CATCO's operations are as follows:

(1) To substitute regionally produced fruits and vegetables for extra-regionally produced items now being imported to meet existing local demands.

(2) To expand intra-regional demand by delivering higher quality fruits and vegetables at lower prices.

(3) To increase the quantity and number of regional food products which are exported to existing and/or new extra-regional markets.

CATCO will follow a phased business strategy to achieve the above objectives by selecting new products, services and target markets as opportunities are identified and as experience is gained in operating the business, at a profit, to fulfill these demands. The operational strategy will be to give priority to objectives 1 and 2 during the first three years of operation. This will enable CATCO to work through initial organizational and technical problems. Also, it is considered essential that producers of potential export crops have sufficient time to adopt new varieties and production practices that will enable their products to compete in extra-regional markets such as the U.S., Canada. and the Western Europe as well as potential markets in the greater Caribbean area.

Initial priority will be to build trading volume for a few major fruits (bananas, plantain, oranges and grapefruit) in carefully selected intra-regional markets. Concurrently, developmental efforts will begin to promote the production of selected vegetable crops and to arrange for the local availability of critical production inputs, such as seeds for desired varieties of vegetables, and pesticides.

As CATCO staff gains operational experience the number of commodities handled will expand, new market outlets will be sought out and additional supply sources will be arranged. These activities will require a continuing research and development effort which can be supported with grant funded technical assistance working in close collaboration with the CATCO manager and staff. In some instances it may be necessary for CATCO to invest in special equipment and facilities, to enter into joint ventures with private entrepreneurs or to assist private sector investors in preparing projects to be submitted to banking institutions, such as CFC, CDB and LAAD for funding.

3. Project Activities

a) Trading Activities

(1) Outputs

The projected annual tonnage of fresh produce that will be merchandized by CATCO over the period 1982/83 to 1988/89 is shown in Table 3. In its first year of operation, CATCO will merchandize 2,540 tons of fresh produce (about 50 tons per week) within the CARICOM Region. The annual volume will increase substantially in year 2 to exceed 11,000 tons (217 tons per week) and, by year 6, annual trade volume will be 23,475 tons (about 450 tons per week).

The general trading policy of CATCO will be to purchase fresh produce from existing producer organizations (such as the Dominica/Jamaica/Belize Citrus Growers' Associations, the Windward Island Banana Growers' Association) on a contractual basis for the four core commodities - oranges, grapefruit, bananas and plantains. Other produce items will be grown for CATCO, frequently under contract, by producer organizations (for example, O.R.D. or Georgetown Cooperative in St. Vincent, the Barbados Agricultural Society in Barbados, large-scale farmers like, Beauchamp Estate in St. Lucia, Union Estate in St. Vincent), and central marketing corporations in supplying countries. Additional 'spot' purchases will be made to supplement [illegible]tages in contractual volumes. (Produce will be bought from groups and/or individuals who can meet CATCO quality requirements and who are satisfied with CATCO buying prices).

CATCO does not intend to establish a network of warehouses in the CARICOM Region, rather space in existing facilities owned by the private and public sectors will be rented when and if required. CATCO field officers will liaise with the produce suppliers in the key source of

TABLE 3.

PROJECTED ANNUAL SHIPMENTS OF FRESH PRODUCE BY CATCO, YEAR 1 (1982/83) - YEAR 6 (1988/89)

(Tons)

Commodity Category	Year 1 1982/83	Year 2 1983/84	Year 3 1984/85	Year 4 1985/86	Year 5 1987/88	Year 6 1988/89
Bananas	1,050	5,900	6,490	6,749	7,019	7,785
Plantains	470	2,250	2,970	3,164	3,373	3,598
Oranges	600	1,000	1,705	2,416	2,590	2,779
Grapefruit	420	1,450	1,595	2,220	2,388	2,494
Mangoes	-	-	400	1,200	1,380	1,486
Vegetables	-	660	2,841	3,542	3,889	4,253
Exotic Produce	-	-	500	750	900	1,080
Total	2,540	11,260	16,501	20,041	21,539	23,475

supply centers to ensure that contractual terms are satisfied and that packaging and shipment requirements are met. The field officers will be responsible for ensuring that export documentation is accurate and in place.

CATCO will take title to the fresh produce at point of supply (i.e. when produce has been graded and the quality meeting grade requirements checked). Title will be relinquished either at the import dockside (c.i.f.) or delivered to the warehouse of the buyer, with the exception of highly perishable produce for extra-regional markets which may well be sold f.o.b. supply country wharf/airport.

The customers of CATCO will be drawn from the private and public sectors, that is, private sector importers/wholesalers/distributors or public sector agencies such as the School Nutrition Company in Trinidad or central marketing agencies. Sales will be made on the basis of firm advance orders from the CATCO clientele. CATCO field officers in major markets will represent the commercial interests of the company at wharfside/airport and through to delivery of the produce at the warehouses/delivery points of customers.

The principal activities associated with CATCO fresh produce trade are outlined in Table 4.

(2) Farm Inputs

Agricultural inputs supply is not a major trading activity for CATCO. Trading in inputs will be undertaken to the extent required to assure local distributors have sufficient physical stocks of the inputs required to achieve high husbandry standards and produce high quality commodities. Therefore, input trading is geared to directly support and complement output trading objectives.

In Tables 5 and 6, projected CATCO sales of farm inputs, by farm input category and by country, are presented. In the first year of operation CATCO projects that it will merchandize close to $300,000 of farm input supplies; this volume will increase to around $1.5 million by year 3 (1984/85). Barbados and St. Kitts/Nevis will account for the major share of sales volume in the first 3 years. It is anticipated that fertilizer sales will represent around 60 percent of the total dollar volume over this period, with crop/pest chemicals and short-line equipment accounting for 27 percent, and vegetable seed 13 percent of sales volumes.

At present, no one farm input distribution company operates on a region-wide basis; CATCO will operate in this capacity and service the existing distributors in the Region. CATCO will purchase inputs in bulk from extra-regional sources and then channel the products to the farm level through established wholesalers and retailers. A summary of the distribution channels for each CATCO market country is shown in Table 7.

4. CATCO Coordination With Public Marketing Agencies and Government Policy

An important management concern for CATCO will be close coordination with CARICOM government policy for selected commodities

TABLE 4. PRINCIPAL ACTIVITIES IN CATCO FRESH PRODUCE TRADE

Activities	Activity undertaken in: CATCO Head Office	Producing Country	Consuming Country
1. Planning strategies	X		
2. Determine extra-regional imports	X		
3. Identify regional markets	X		X
4. Identify production sources	X	X	
5. Obtain preliminary producer costs	X	X	
6. Obtain preliminary buyers price	X		X
7. Perform viability procedure	X		
8. Obtain intention to purchase from buyer	X		X
9. Obtain intention to produce from producer and price ranges	X	X	
10. Persuade buyer to take sample consignment			X
11. Agree on terms	X	X	
12. Confirm order with buyer			X
13. Confirm order with producer		X	
14. Production and monitoring of production		X	
15. Post - harvest monitoring		X	
16. Grading and packaging		X	
17. Storage of commodity		X	
18. Pre-shipment documentation	X		
19. Overland shipment in exporting country and corresponding post-harvest control		X	
20. Shipment by air/sea and corresponding post-harvest control	X	X	X
21. Overland shipment in importing country and corresponding post-harvest controls			X
22. Payment process from payer and accompanying documentation	X		X
23. Payment process to producer and accompanying documentation	X	X	
24. Claims service of losses, spoilage, etc.	X		X
25. Extraction of shipment information for MIS	X		
26. After-sales service for wholesale markets and [illegible] markets			X
27. Arbitration service for dissatisfaction (poor quality, inferior goods, etc.)	X		X

Table 5 PROJECTED CATCO SALES OF FARM INPUTS BY FARM INPUT CATEGORY, YEAR 1 (1982/83) TO YEAR 3 (1984/85)

Farm Input Category	Year 1 1982/83 $'000	Year 2 1983/84 $'000	Year 3 1984/85 $'000
Fertilizer	204	782	989
Vegetable Seed	45	172	218
Crop Chemicals & short-line	93	359	454
Crop Equipment			
TOTAL	342	1,313	1,661

Table 6 PROJECTED CATCO SALES OF FARM INPUTS BY COUNTRY, YEAR 1 (1982/83) TO YEAR 3 (1984/85)

Country	Year 1 1982/83	Year 2 1983/84 ($ '000)	Year 3 1984/85
St. Lucia	10	44	54
St. Vincent	15	43	55
Dominica	17	27	36
St. Kitts/Nevis	58	259	326
Antigua/Barbuda	27	120	153
Montserrat	12	38	48
Barbados	158	610	771
Trinidad	45	172	218
TOTAL	342	1,313	1,661

TABLE 7 DISTRIBUTION CHANNELS FOR CATCO IN THE FARM INPUT MARKET

Country	Methods
St. Lucia:	- Existing distributors (Stanthur Co., and St. Lucia Marketing Board. Direct sales to Ministry of Agriculture station at Union.
St. Vincent:	- Existing distributors (St. Vincent Marketing Board, Green Finger, etc.). Direct sales to Arrowroot Association, Ministry of Agriculture, and farmers' coop.
Dominica:	- Direct sales to Cooperative Citrus Growers Association. Existing distributors - John Charles and Co. (City Drug Store).
St. Kitts:	- Direct sales to National Agricultural Corporation. Existing distributor - Central Marketing Corporation (CMC). CATCO will design and stock a retail farm and garden shop for CMC.
Antigua/Barbuda:	- Existing distributors - Private Sector and Central Marketing Board.
Montserrat:	- Existing distributor - Development Finance Marketing Corporation.
Trinidad & Tobago:	- Existing distributors. New distributors - Central Marketing Agency Chain of Depots.
Barbados:	- Existing distributors - Da Costa and Mussons, Geddes Grant. New distributors - Barbados Agricultural Society Trading Company.

covered by the Agricultural Marketing Protocol (AMP). Only about 40% of the volume of projected CATCO trade in outputs by year 3 are subject to the terms of the AMP, but this portion is very important to achieving the development impact desired. Thus, CATCO as a joint venture between public and private investors, is uniquely positioned to help achieve the purposes embodied in the AMP which are to increase regional food supply security and provide stable financial incentive to regional farmers. The specific fresh produce items identified as AMP commodities are:

Peanuts	Cinnamon	Carrots
Tomatoes	Cloves	String Beans
Red Kidney Beans	Cabbages	Onions
Black Peppers	Plantains	Pineapplies
Sweet Peppers	Okra	Pigeon Peas
Garlic	Fresh Oranges	Potatoes (Sweet and non sweet)

These items are subject to import and export licenses, whereas other commodities do not require a license for either import or export. Trade in the AMP commodities is typically administered by the Central Marketing Agencies in each CARICOM state; although a license to import/export on behalf of such agencies may be (and has been) given. The trigger that, ostensibly, stimulates trade is the periodic declaration of surpluses/deficits in the AMP commodities by the member countries; prices are established in advance and are cost of production based.

The AMP Agreement has had only very limited success in fostering an increase in intra-regional trade, reflecting a lack of commitment to the principle and inflexibility both in the identification of trading opportunities and in price formation. The failure of the Agreement to meet its stated objectives is recognized by all signatories.

There is a recent thrust to "ameliorate the AMP Agreement*". In essence, the proposed thrust is to make the AMP more market oriented, and to widen its scope to include non-AMP commodities:

- The declaration of surpluses and deficits and the fixing of prices are to be abandoned over time (2 - 3 years).

- Intra-regional imports are to be assigned a higher priority when releasing import licenses for fresh produce if produce of equivalent quality to extra-regional commodities is available.

- Prices should be market based, reflecting negotiations between buyers and sellers, rather than administratively established.

- Marketing Corporations in the CARICOM countries will have the responsibility of informing each other as to potential trading opportunities. In turn, the private sector will approach the Corporations to gain access to this market information.

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* See "Schedule VIII, 26th Meeting of the Officials of the AMP, Georgetown, Guyana, April 1982

- The private sector, then, can apply for import/export licenses through normal channels.

The implications of this change in emphasis of the AMP are positive from a CATCO standpoint, viz: intra-regional supplies of produce will be given preferential treatment over extra-regional produce (with an important caveat on equivalence of quality); pricing is to be market based; and the private sector is being encouraged to participate in intra-regional trade. However, the key administrative agency to police fresh produce movement in the Region will likely remain the central marketing agency in each state. Such agencies, under the proposed changes to the AMP, can still exercise their right to be the sole importers/exporters of the expanded range of fresh produce items, although the intent of the AMP: 'improvements' are to expand the role of the private sector in the fresh produce trade.

The overall conclusion is that the activities of a regional trading agency such as CATCO are consonant with current regional marketing policy and do not conflict, indeed, complement the trade regulation role that is a major focus of the powers of the Central Marketing Agencies in each CARICOM state.

CATCO staff have undertaken preliminary discussions with certain Central Marketing Agencies in the Region (for example, the St. Lucia Marketing Board) and envisage that the company will act as an agent for the agencies in input and output trade -- undertaking contractual agreements to buy produce from and sell produce to these public sector organizations. In the event of disagreements between CATCO and importing/exporting Central Marketing Agencies as to the interpretation or practice of regional marketing policies and/or programs, then, the company will request its public sector shareholder (CFC) to negotiate with the national agencies and regional associations to resolve the trading problems and points at issue.

5. Market Research, Management, and Development Activities

The market assessments already undertaken have established that there are significant opportunities to expand the production and sale of a selected range of Caribbean agricultural commodities to displace existing food imports, to satisfy a potentially larger intra-regional demand and to capture a larger export market. But this expanded volume can only be achieved through a systematic attack on market organization problems to be advanced concurrently with closely related programs to stimulate the efficient production of high quality commodities. CATCO will work to overcome market organization constraints through its anticipated larger scale of operations, its larger pool of capital and its improved management skills. Yet considerable experimentation and business learning are required before the expanded resources available to CATCO can open new market channels, and develop new organizational and technical trading procedures. Considerable applied business and market research, management assistance and training, and practical extension activities are needed to develop new marketing methods for perishables in the Eastern Caribbean. Major experimental efforts will also be required by CATCO staff and available technical assistance to work with farmers and business clients in order to convince them to adopt new production and marketing methods.

All of these market research and development needs are particularly difficult to accomplish in the Eastern Caribbean where few farmers and traders have had the opportunity to gain new experiences and knowledge with perishable food commodities. At the same time many of the models of perishable market trading from more developed regions of the world are not directly transferable due to the small size of Eastern Caribbean producing and consuming countries, and the transportation barriers of distance and time. For these reasons during CATCO's first five years of operation major technical assistance activities are planned.

Seven functional areas have been identified where applied research and development activities are particularly crucial for CATCO success. In Table 8 the functional areas are listed and the level of technical assistance planned for each is presented.

TABLE 8 ANNUAL LEVELS OF SPECIALIZED TECHNICAL ASSISTANCE TO CATCO, BY FUNCTIONAL AREAS

FUNCTION	YEAR					
	1	2	3	4	5	Totals
	(Work-months)					
1. Trading Operations	6	6	4	3	-	19
2. Post-Harvest Handling	3	6	2	2	1	14
3. Market Research	3	4	3	2	2	14
4. Financial Analysis	4	3	1	1	1	10
5. Credit Control	3	2	1	-	-	6
6. Management Systems	5	3	1	1	-	10
7. Evaluation	2	4	6	4	7	23
TOTAL WORK-MONTHS	26	28	18	13	11	96

Trading Operations is the heart of CATCO's business and will require substantial experimentation and learning in the early years. This functional area includes all the procedures, tasks, and arrangements associated with the physical logistics of assembly, transport, storage, and distribution of commodities. Equally important are the procedures to insure timely and reliable communications between supply points and target markets. Attention to establishing such procedures will dominate the time of CATCO field staff in the early years, and continue to demand innovative adjustment as experience is gained and a wider range of commodities is traded. To provide CATCO staff with training in methods of trading operations used in other markets and to assist with practical application to Caribbean conditions, a total of 19 work-months of technical assistance is planned over the life of the project.

Post-Harvest Handling is an area of obvious crucial importance to CATCO operations. Losses attributable to post-harvest spoilage are known to be a major problem in the Region. CATCO can take measures to control spoilage and shrinkage of produce during the period the produce is under its direct control. But the key to achieving dramatic reductions in spoilage is to improve handling at each stage in the marketing chain. This requires collaboration with growers, truckers, packaging suppliers, shipping agents and any other market participant that physically handles the commodities. In other words, behavioral changes on the part of firms and individuals outside of CATCO will reduce physical losses in the marketing system and substantially improve market efficiency. The project design envisions CATCO as being well placed to provide the "channel leadership" to facilitate the needed procedural and behavioral changes. A total of 14 work-months of expert TA is planned over the life of this project.

Market Research is the third functional area where technical assistance is planned. As pointed out previously, one of the major differences between CATCO and traditional traders will be its aggressive market orientation. CATCO will actively seek ways to expand market demand for produce currently traded, as well as attempt to establish new markets for additional commodities. There are several means to influence market volumes and expand market share, but in all cases it is dependent on understanding both the market consumers and understanding the likely competition for CATCO products. Since CATCO will sell to other wholesale firms, retail stores, and institutions, it will be necessary for CATCO to expend efforts to understand the needs of these clients and assist in meeting these needs. For example, CATCO could work with a major retail food store to experiment with alternative pricing, presentation, or promotional sales strategies. This kind of marketing technique for food is not widely practiced in the Region. CATCO has both the opportunity and the challenge to precipitate such innovations. The project design has planned 14 work-months of technical assistance to help CATCO staff conduct applied market assessments and experiment with innovative sales strategies.

Financial Analysis and Credit Control are both crucial operational functions for CATCO. The amount of money tied up in inventory, the velocity of cash turn over, and the perishable nature of the commodities all conspire to threaten CATCO's financial viability if not well attended. Likewise, credit control is particularly important due to the nature of CATCO's business. To help establish appropriate review procedures and to train CATCO staff in the application of financial analysis and credit control in the fresh produce business, a total of 16 work-months of experienced TA is planned over the life of the project.

In a similar vain, CATCO Management Systems will need to be examined as experience is gained and growth occurs. The proven management of Grace Kennedy & Company is expected to shoulder most of this functional responsibility. However, prudent design dictates that additional technical assistance be planned to provide training and to work with CATCO management procedures. Therefore, 10 work-months of management systems TA is planned over the life of the project.

Finally, Evaluation is seen as an essential function to enhance the developmental impacts foreseen in the CATCO project. The very complexity of CATCO operations provide an unusual opportunity to initiate multiple innovations at most steps in the perishable food marketing channels. While many innovations will prove profitable, some undoubtedly will fail. Both the successes and failures need to be understood and shared, so that the workable innovations can be replicated and the unworkable avoided. The project plans for a full 23 work-months of technical assistance to assist CATCO perform evaluation and extend their findings.

6. Project Costs and Financing

a) Project Costs

Total costs for the 5 year project are estimated to be $6,690,500, of which 77% would be expended for working capital costs and the balance for longer term investment capital costs. The relatively high content of working capital costs reflects the basic purpose of the project which is to promote and facilitate the establishment of a commercial company which will trade agricultural commodities. A major need in such an undertaking is the working capital required to pay operating expenses, carry an adequate inventory and offer sufficiently attractive services so as to attract supply clients and purchasing customers.

Generally there are four components to the project:

	Amount	Percent
Start-up Costs	$ 343.5	5.1
Market Enhancement Investments	500.0	7.5
Technical Assistance	659.0	9.8
Working Funds	5,188.0	77.6
	$6,690.5	100.0

The various components are explained below and are shown in further detail in Table

(1) Start-Up Costs ($343,500)

CATCO is essentially being created by the project. As such, the project costs associated with the institution are its total start-up costs and not the incremental costs after the company begins its actual trading with the assistance of USAID resources. As of June 30, 1982 CATCO will have spent $270,500 of its own equity on start-up costs including:

$210,000	-	in operating expenses since November, 1981 including $40,000 expended by Grace Kennedy and to be reimbursed by CATCO;
$ 22,000	-	in formation expenses; and
$ 38,500	-	in office improvements and equipment.

TABLE 9 PROJECTED CATCO PROJECT COSTS *
BY YEAR OF IMPLEMENTATION
($000)

Items	Start-Up	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Investment Capital							
1. Start-Up							
a) CATCO Expenses	170						170
b) GKC Reimb.	40						40
c) Formation Expenses	22						22
d) Bldg. Improvements	27	50					77
e) Office Equipment	11.5	23					34.5
2. Market Enhancing Investments		250	125	125			500
3. Technical Assistance							
a) AID Grant (Evaluation)		15	40	60	40	70	225
b) IDB Consultants		217	217	—	—	—	434
Sub-total - Investment		825.5	382	185	40	70	1,502.5
Working Capital							
4. Working Fund		1,829	1,375	875	440.5	668.5	5,188
Sub-total - Working Capital		1,829	1,375	875	440.5	668.5	5,188
TOTAL		2,654.5	1,757	1,060	480.5	738.5	6,690.5

See CATCO financial summary in the Financial Analysis section for derivation of these amounts.

volume. To assure that CATCO has access to a reliable means to shipping, it may be desirable for the company to invest (on a ole- or joint-ownership basis) in a carrier capable of transporting fresh produce. The estimated range of capital costs for such a venture are:

	US$
- second-hand schooner (less than 10 years old). 50 tons carrying capacity (40 ton d.w.). Cooling facility in hold;	30,000
- second-hand schooner (less than 10 years old). 250 tons carrying capacity (75 tons d.w.). Cooling facilities in hold;	80,000
- new schooner. 50 tons carrying capacity (40 tons d.w.). Cooling facilities in hold.	120,000

In the first year of operation, a second-hand 50 tons carrying capacity schooner may be the most commercially expedient investment, followed by a new schooner of similar size in the second year of business, giving a total investment in sea transportation of $150,000.

(iii) Peanut Dryer and Sheller

Peanuts are identified in the CATCO Market Analysis as a commodity showing strong market potential in the Region. At the point of production, drying and shelling facilities will be required to convert the harvested crop into a marketable commodity. The purchase (for rental/lease to farmers or use by CATCO alone) of drying/shelling machinery is expected to be a necessary investment for CATCO to undertake. The estimated capital costs for such a venture are outlined below:

	US$
Mobile peanut shellers x 8	24,000
peanut dryers x 4	26,000
	50,000

(iv) Additions to Infrastructure in Supplying Countries

While it will be CATCO policy to work within existing infrastructure of the countries supplying fresh produce for intra- and extra-regional trade, initial field visits indicate that as CATCO expands its business to include more perishable items (such as soft fruits and some vegetables), then investment in some physical plant will be necessary; including:

- dry storage space
- cool room facilities in supply countries
- trucks
- grading machinery

Another $73,000 will be spent early in year 1 to provide additional office accommodation and equipment, partially to accommodate the IDB consultants to CATCO but also to provide for increased staffing of CATCO. Existing facilities are crowded and inadequate for the type of operation envisaged. The additional office space will be located in the same building that CATCO now occupies.

(2) Market Enhancing Investments ($600,000)

There are certain deficiencies and/or opportunities in the marketing system which must be addressed if CATCO is to succeed. Given the riskiness of these investments and the current lack of perceived markets, it is difficult to attract private sector involvement. Providing investment capital to CATCO to allow them to take leadership in starting selected new trading related services as joint ventures will help attract other private sector involvement. The type of investment envisaged would result in an improvement of some specific aspect of CATCO's marketing program. Four examples of prototype investment of this nature are outlined below. All specific investment requests of this type would be considered on their own merits. For purposes of estimating project costs it is assumed that CATCO and other private investors would share equally in the total investments, inclusive of the required operating capital. Any individual investment on CATCO's part exceeding $50,000 must receive review and concurrence from the RDO/C. The total of the projects listed below represent an estimated $1,000,000 in investment.

(i) Ripening-Room Facilities for Bananas and Tomatoes

Successful penetration of the banana and tomato markets within the Region is contingent upon the establishment of ripening-room facilities for these commodities. Financial pre-feasibility studies indicate that the purchase and operating of such facilities (either sole-ownership or joint-venture) appear to be attractive investment opportunity. The estimated range of capital costs for such a venture are outlined below:

	US$
Holding-room and ripening-room; Eyhylene generator, voltage modifier; Installation costs:	
5 tons capacity	32,000
10 tons capacity	50,000
20 tons capacity	83,500

In the first year of commercial operation, CATCO will be required to invest (either solely or jointly) an estimated $250,000 in 3 to 4 banana ripening-rooms to be located in Barbados and Trinidad, if the projected sales volumes for bananas in years 1 and 2 are to be attained.

(ii) Transportation Facilities for Fresh Produce

The dearth of adequate transportation facilities for fresh produce in the Region is a major constraint to the growth in trade

- loading machinery (hand and fork lift trucks etc)
- selected packaging containers

A conservative estimate of the cost of an infrastructural package as outlined above for one supply source is around $180,000. As many of the LDC's who will be supplying CATCO have inadequate collection, assembly or handling facilities, it is likely that CATCO will find it profitable to invest (solely or jointly) in 3 to 4 countries, an estimated $540,000 to improve the basic fresh produce infrastructure.

(3) Grant Funded Technical Assistance ($659,000)

A total of 71 work-months of grant funded TA for CATCO is planned over the five year life of project.

CATCO will receive about 48 work-months of TA, valued at $434,000, funded by a grant from the IDB. This TA will be provided, under contract, by a local firm, SYSTEMS, and a Canadian firm, Deloitte, Haskins, and Sells Associates; and will be performed during 1982 and 1983.

An additional AID grant of $225,000 will be used to perform frequent and intensive evaluations of CATCO activities over the life of project.

It should be noted that additional TA requirements projected in years 3, 4, and 5, in functional areas other than evaluation, (see Table 8), will be procured directly by CATCO using AID loan funds. The projected cost of loan funded TA ($250,000) is included in working funds described below.

(4) Working Funds ($5,188,000)

It is projected that CATCO will have total sales of $2 million in year 1 of the project, increasing to $34 million by year 5. CATCO will be a new trading company operating with dual objectives of trading existing products and developing new production for potential, yet unexploited markets. As such it must undergo a relatively slow start-up process on the sales, side, while simultaneously investing aggressively from the beginning in market and production development costs. This is necessary in order to have greater assurance that sales volumes will, in fact, grow in later years. As the income statement in Section IV C shows, substantial, although declining losses will be incurred in years 1 through 3. CATCO must have sufficient working capital to carry these operating costs until such time that sales volume and profits increase sufficiently to allow recovery. Likewise, working capital for accounts payable and inventory will be high because CATCO is a new business and will be required to pay cash for inputs and outputs which it purchases. In order to be competitive as a seller it will also need to offer normal business terms on accounts receivable from sales. Finally because of seasonal and other unforeseen variations in cash requirements, working capital is needed to underwrite a contingency cash reserve equal to 1 to 2 months of annual operating costs.

TABLE 10. PROJECTED CASH ACCOUNT AND CUMULATIVE CASH FLOW NEEDS

($000)

ITEM	YEARS					
	START	1	2	3	4	5
1. Sales		1,984	9,733	18,113	26,744	34,053
2. Profit After Tax		(873)	(917)	(194)	1,330	1,337
3. Net Cash Flow 1/		(1,827)	(1,123.5)	(1,024)	440.5	668.5
4. Equity Call		550	-	-	-	-
5. AID Loan		1,250	1,375	875	-	-
6. Cash Account	29	2	253.5	104.5	545	1,213.5 2/
7. Cumulative Cash Flow Needs		(1,827)	(2,950.5)	(3,974.5)	(3,534)	(2,865.5)

1/ The amounts in years 1, 2, and 3 are different than the amounts shown in Table 16 for the same years because the "investment" item has been subtracted.

2/ This is before a $94,500 payment is to be made on a shareholder loan.

Estimated working capital funds total \$5,188,000, as shown in Table 9. The requirement for this amount of working capital over the 5 years of the project is determined by summing peak cumulative cash flow needs (\$3,974.5 million) and peak cash account balances (\$1,213.5 million). These peak values are shown in Table 10. Information from the income statement and proforma cash flow statement in Section IV C are used in this Table to determine the peak values. The sales and profit after tax figures in lines 1 and 2 are from the income statement and show the large yet declining losses as sales volumes increase. Line 3, net cash flow, is from the proforma cash flow statement. The indicated cash flow needs are much higher than projected business losses in year 1 through 3 because accounts receivable, inventories and market enhancing investments use up cash as the business start-up proceeds. In year 1 the cumulative cash flow needs will be met with equity resources from CATCO shareholders, and with funds from the USAID loan. In year 2 the cumulative cash flow needs increase to \$2.950.0 million and are met with additional draw downs on the USAID loan. The peak of cumulative cash flow needs is reached in year 3 (\$3,974.5 million). In this same year net cash flow needs are met with additional USAID loan and CATCO cash account funds. During years 4 and 5, positive net cash flow results from trading profits, and these funds are retained within the business to provide operating capital and build up the cash accounts. The peak value of the cash accounts in year 5 (\$1,213.5 million) is thus the second component of working capital.

b) Project Financing

Total project cost of $6,690,500 will be financed by a combination of equity, loan, and grant funds:

	Amount		Percent
Equity Funds			
- CFC	$ 382,500		
- Private Investors	367,500		
CATCO Earnings	1,187,000		
Sub-Total		$1,937,000	29.0
Loan Funds			
- AID Loan	$4,000,000		
- Shareholder Loan	94,500		
Sub-Total		$4,094,500	61.2
Grant Funds			
- IDB	$ 434,000		
- AID	225,000		
Sub-Total		$ 659,000	9.8
TOTAL PROJECT		$6,690,500	100.0

The various funds and sources of funds are detailed in Table 11 and discussed below.

(1) Paid Shareholder Equity ($750,000). By the end of 1982 CFC and private companies in the Region will have contributed $750,000 in cash for equity in CATCO. As of June 30, 1982, $200,000 of this amount has been paid. A Shareholders Agreement sets out the rules of ownership and management and it allows CFC to maintain its existing 51% of ownership. Future growth in equity will likely result from retained earnings rather than from equity payments in addition to the $750,000.

(2) Shareholder Loans ($94,500). The June 30, 1982 financial position of CATCO is expected to be:

Assets:	Cash	$ 29,000
	Start-Up Investments	270,500
		$299,500
Ownership:	Accounts Payable	$ 5,000
	Paid Equity	200,000
	Grace-Kennedy Loan	94,500
		$299,500

The loan from Grace-Kennedy was required to assist in financing the start-up operations prior to June 30, 1982. The intent is that this loan will be converted to equity in the future but this will be in addition to the pending equity call for $500,000. For financial planning purposes, the $94,500 is shown as a shareholders loan for the duration of the project.

(3) Retained Cash ($1,187,000). CATCO retained earnings will contribute to a net cash surplus during the 5 years of the project, amounting to $1,187,000, all of which will be available to finance CATCO operations.

The source and timing of the retained cash is as follows:

Opening Cash Balance	$ 29.0
Year 4 Operations	440.5
Year 5 Operations	668.5
Start-Up Cost Shortfall	49.0
	$1,187.0

The $49,000 shortfall in start-up costs is calculated as follows:

Total Start-Up Costs	$343,500
Paid Equity	200,000
Shareholders Loan	94,500
Difference	(49,000)

It is assumed that this deficit will not be paid out of the next equity call ($550,000) or from AID funds. As such, it will be financed by accounts payable or other short-term sources, i.e. the $49,000 is not in fact a cash surplus generated by CATCO operations; it is short-term funding acquired by CATCO from one of several sources. For presentational purposes however, it is included here as retained cash.

(4) USAID Loan ($4,000,000). These funds will be loaned to CATCO on 15 year terms with a 5 year grace on principal. Interest will be at 4% for the first 5 years and at 7% on the remaining 10 years, calculated on outstanding balances.

Up to $500,000 of the loan may be used to finance capital investments, either jointly owned by CATCO and a private investor or wholly owned by CATCO. All such investments will be evaluated on their own merits and subject to the approval of USAID. Funds from this category can be reallocated to working capital if required.

The remaining $3,500,000 will be available as working capital to pay operating expenses, carry on adequate inventory, and offer sufficiently attractive services to attract customers, and hire specialized technical assistance for problem solving or staff training. The working capital funds will be disbursed on the basis of pre-established guidelines.

(5) IDB Grant ($434,000). A contract for technical assistance to CATCO has been funded by IDB for the years 1982 and 1983 and is now underway. (See Project Costs Section).

(6) AID Grant ($225,000). These grant funds provided by AID will be used to perform evaluations over the life of project. Due to the anticipated quick disbursement of AID funds, frequent reflows, and the risky nature of the project, process evaluations are planned to begin in year 1 and continue over the five year period. In addition, indepth impact evaluations are planned in year 3 and year 5.

TABLE 11 CATCO PROJECT FINANCING SOURCES BY PLANNED UTILIZATION

USE OF FUNDS	COSTS	SOURCE OF FUNDS						
		CATCO				AID		IDB GRANT
		SHAREHOLDER EQUITY		SHAREHOLDERS LOAN	RETAINED CASH			
	TOTAL	CFC	PRIVATE COMPANIES			LOAN	GRANT	
Investment Capital								
1. Start-up	343.5	175	168.5			500		
2. Investment Capital	500						225	434
3. Tech. Assist.	659							
Working Capital								
4. Working Fund	5,188	207.5	199	94.5	1,187	3,500		
TOTAL	6,690.5	382.5	367.5	94.5	1,187	4,000	225	434

IV. PROJECT ANALYSIS

A. Technical Analysis

1. Market Assessment

The assessment of the markets for fresh produce outputs and from inputs in the CATCO market area was undertaken by CATCO staff and IDB consultants. The method of assessment entailed three major steps, viz: a search and content analysis of previous relevant studies and series of available trade statistics; field visits to selected potential supply and market countries - St. Kitts and Nevis, Antigua, Montserrat. Dominica, St. Vincent, St. Lucia, Barbados, Trinidad and Tobago; and the synthesis and analysis of information elicited in the desk and field research components to provide market share and market volume estimates that CATCO can capture over the period Year 1 to Year 6.

The range of market participants interviewed during the field visit component of the market assessment study included farmers, farmer organizations, extension officers, farm input retailers and distributors, fresh produce importers, wholesalers and retailers, institutional buyers hotel and restaurants, central marketing agencies, government departments (agriculture, trade, etc.) regional agencies, (for example, C.F.C., I.I.C.A., C.D.B.) and the regional offices of extra-regional aid agencies (for example, USAID Barbados, IDB Trinidad). The result of this survey indicated that there was a general awareness of greater market potential in the Region for agricultural commodities, and that given more orderly marketing arrangements, production could increase accordingly.

The analyzed supply and market data was compiled and presented in a CATCO document "An Overview of Trade, Production and Market Structure For Fresh Produce and Farm Inputs In Selected Eastern Caribbean Countries." A synopsis of the conclusions of this market assessment study are outlined below.

a) Fresh Produce Outputs

The two market countries that offer the most immediate potential for CATCO in its fresh produce trading capacity are Trinidad/Tobago, and Barbados. Other markets within the region that show good market potential in the short - medium term are Antigua/Barbuda, Guadeloupe, Martinique, Aruba, Curacao and Bonnaire. Field visits to the latter three countries have not been completed. However, the prima facie evidence, reflected in the trade analysis and discussions with food importers and wholesalers in these Dutch West Indies nations, is that a ready market exists for certain fresh produce.

Exports of produce to extra-regional markets have strong potential in the longer term (when CATCO has established its market position within the region). Initially, St. Vincent, St. Lucia, Dominica and to a lesser extent, Barbados have been identified as the countries offering the best supply potential for fresh produce, with Guyana/Jamaica/Belize acting as a supplementary source of supply when inadequate volumes are available from the Eastern Caribbean LDC's. The Leeward Islands (St. Kitts/Nevis, Antigua/Barbuda, and Montserrat) are considered a medium-term supply source.

Four commodities have been identified that offer strong market potential in the region and these have been selected as the core items that CATCO will trade in its first year of operations. These core commodities - bananas, plantains, oranges, and grapefruit will form the 'critical trading mass' that is necessary to establish CATCO as the major trading participant in the intra-regional fresh produce market. In the second year of trading, other commodities will be added to the CATCO trading list, and the company will gain the benefits of transportation economies generated by the four relatively high volume core commodities.

In Table 12 , the projected sales volumes (tons), by market country, for the commodities that will be traded by CATCO in Year 1 through Year 6 are presented.

In Year 1 of its trading activities, the two key markets for CATCO are Trinidad/Tobago, and Barbados.

(i) Citrus Produce

Trinidad: Citrus production has declined sharply in Trinidad in recent years. In 1974, 12,000 tons of oranges and 19,400 tons of grapefruit were produced. Production is certainly less than half and, probably, one-third of this level now. Extra-regional imports are precluded from entry. The size of the orange and grapefruit markets are estimated to be 4,000 and 5,000 tons respectively. With a reduction or removal of entry barriers to the market and availalbe and reliable sources of supply, estimates of mature fresh market size are 8,000 tons for oranges and 7,000 for grapefruit.

There is unsatisfied demand for citrus in Trinidad, in particular, for oranges. This fruit is, likely, a closer substitute for the high priced extra-regional imported fruit than is grapefruit. With assured market access, CATCO can capture 10% of the orange market and, say, 6% of the grapefruit market in Year 1. This is equivalent to a total importation figure for 1982/83 of 400 tons of oranges (8 tons/week) and 300 tons of grapefruit (6 tons/week). CATCO's share of the Trinidad market could reach 15% or better in Year 2 for both oranges and grapefruit and be maintained at this percentage level in a growing market, i.e. CATCO import tonnage is projected to be 750 tons each for oranges and grapefruit in 1983/84. This market share will be maintained through to 1988/89, when CATCO's volume of shipments will be over 1,000 tons for each of the major citrus products.

Barbados: The size of the orange market in Barbados in 1981 was around 1,000 tons - a small proportion was supplied from domestically grown produce (say 15%), over half the import volume came from intra-regional sources (Jamaica, some from Trinidad, and relatively small quantities from the Windward Islands), and about one-quarter from outside the region.

It is expected that in Year 1 CATCO will have an annual trading volume in oranges of 200 tons (4 tons per week), comprising about 20% of total market share. As a result of the uncertainty surrounding source of supplies, Year 2 CATCO sales volume is expected to remain at 200 tons, increasing sharply to 330 tons in Year 3 as the CATCO staff gain experience in assessing scarce supplies, and thence, climbing relatively slowly to reach close to 400 tons in 1988/89 and maintaining a market share of around 25% in that year (i.e. Year 6 total market volume will be around 1,600 tons).

Table 12, Projected CATCO Regional Commodity
Sales By Country Over the First Six Years of Operation

Commodity and Country of Sales (1)	Sales per Year in Tons					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Regional Sales						
Bananas						
- BDS	300	1000	1100	1155	1213	1273
- TT	750	2500	2750	2887	3031	3183
- ABC	-	2000	2200	2244	2288	2334
- ANU	-	400	440	462	485	509
TOTAL TONS	1050	5900	6490	6749	7019	7785
Plantains						
- BDS	150	300	330	346	363	382
- TT	320	1000	1100	1210	1331	1464
- ABC	-	750	825	841	858	875
- ANU	-	200	220	231	242	255
TOTAL TONS	470	2250	2970	3164	3373	3598
Oranges						
- BDS	200	200	330	346	363	382
- TT	400	500	825	907	998	1098
- ABC	-	300	550	561	572	583
- ANU	-	-	-	100	105	110
- REG	-	-	-	500	550	605
TOTAL TONS	600	1000	1705	2416	2590	2779
Grapefruits						
- BDS	120	300	330	363	381	400
- TT	300	750	825	907	998	1048
- ABC	-	400	440	448	457	466
- REG	-	-	-	500	550	577
TOTAL TONS	420	1450	1595	2220	2388	2494

Table 12. Projected CATCO Regional Commodity
Sales by Country Over the First Six Years of Operation

Commodity and Country of Sales (1)	Sales per Year in Tons					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Other Commodities						
Peanuts						
- BDS	-	50	100	110	115	121
- TT	-	100	200	240	264	290
- REG	-	-	-	100	120	144
TOTAL TONS	-	150	300	450	500	555
Carrots						
- TT	-	100	600	660	726	799
TOTAL TONS	-	100	600	660	726	799
Cabbage						
- TT	-	100	150	180	216	238
- REG	-		50	60	66	73
TOTAL TONS	-	100	200	240	282	311
Tomatoes						
- TT	-	200	400	440	462	509
- BDS	-	50	75	79	83	92
- REG	-		200	400	440	484
TOTAL TONS	-	250	675	919	985	1056
Mangoes						
- TT	-	-	100	300	360	400
- BDS	-	-	100	300	330	350
- REG	-	-	100	300	330	340
TOTAL TONS	-	-	300	900	1020	1090
Onions						
- TT	-	-	500	600	660	726
TOTAL TONS	-	-	500	600	660	726

Table 12, Projected CATCO Regional Commodity Sales by Country Over the First Six Years of Operation

Commodity and Country of Sales (1)	Sales per Year in Tons					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pigeon Peas						
- TT	-	60	66	73	76	80
TOTAL TONS	-	60	66	73	76	80
Extra-Regional Sales						
Mangoes						
- XREG	-	-	100	300	360	396
TOTAL TONS	-	-	100	300	360	396
Sweet Peppers						
- XREG	-	-	500	600	660	726
TOTAL TONS	-	-	500	600	660	726
Assorted Exotica						
- XREG	-	-	500	750	900	1080
TOTAL TONS	-	-	500	750	900	1080

(1) Key to Point of Sale:

BDS - Barbados
TT - Trinidad & Tobago
ABC - Aruba, Bonnaire, and Curacon
ANU - Antigua
REG - Other Regional
XREG - Extra-Regional

The grapefruit market in Barbados was around 300 tons in 1981 - substantially smaller than the market volume prevailing in the late 1970's when it was a similar size to the orange market, that is, 1,000 tons. In recent years, there has been a consistent shortage of grapefruit on the market reflecting, in part, the sharp curtailment in supplies of produce from Dominica after Hurricanes David and Allen. In Year 1 it is estimated that CATCO can capture about one-third share of the Barbadian grapefruit market (120 tons - 1982/83 total market volume will be around 360 tons). Shipments of around 6 tons per week in late 1982/early 1983 from Dominica will make up the bulk of CATCO sales volume. In 1983/84 CATCO should make significant in-roads into the grapefruit market - satisfying demand that currently is latent through gaining access to grapefruit from the Dominica Citrus Growers' Association as output levels approach pre-hurricane days. The likely market volume attained by CATCO will be 300 tons (or 6 tons per week) which will represent a market share of around 66%. The CATCO market volume should reach 400 tons (8 tons per week) by 1988/89 out of a total market volume of around 1,000 tons, giving a 40% market share.

Supply Sources: The major factor constraining growth in CATCO orange volume will be the absence of secure supplies of produce. In the first year or two, it is anticipated that there will be a scramble for supplies - relatively small quantities coming from the Windward Islands, sporadic shipments from Jamaica when Jamaican supplies exceed the very buoyant demand for oranges in that state, and two supply sources where potential has not been assessed in-depth, Guyana and Belize. In the longer term, Dominica will be a major source of supply for grapefruit and, as their Tree Crop Program comes into place, an important supplier of oranges to regional markets. The other Windward Islands will be residual suppliers of citrus. Sources of supply in Belize and Guyana are being investigated.

(ii) Bananas

Trinidad: In the late 1960's, banana marketings in Trinidad were Over 4,000 tons per annum - banana production is now estimated to be only about 500 tons per annum. The Central Marketing Agency in Trinidad, until the early 1970's, used to room-ripen over 50 tons of bananas per week. However, internal management problems resulted in the termination of this business.

There is strong market potential for room-ripened bananas. Supermarkets contacted expressed interest in merchandizing this product. The School Nutrition Company (S.N.C.) perceived that from Octover 1982, around 15 tons would be required per week for their school meals program. Street vendors in Port-of-Spain sell imported fruits (such as apples, pears) at around 50c - 75 c per piece. Quality supermarkets price ripened bananas of indifferent quality at over $1 per lb. A quality, golden yellow, room-ripended banana retailing at less than 25c a piece or, say 60c per lb, would seem attractively priced in relation to other fruit competitors.

It is reasonable to assume that the room-ripened banana could achieve a similar market size that the ripened and unripened banana market attained in the late 1950's, i.e. over 4,000 tons per year. The market would likely build to this same level over a 3 - 4 year period. Assuming that banana ripening facilities are in place by late 1982 (say December), then CATCO can reasonably expect to build up to a weekly throughput of 50 tons (a volume figure attained by C.M.A. in the very early 1970's) by the end of Year 1. The total expected volume of bananas transported and ripened in 1982/83 is estimated to be 750 tons i.e. shipping 25 tons per week or less in the first four months of 1983 and building up to 50 tons per week in May and June 1983. In Year 2, CATCO should average shipments of 50 tons per week and, at this stage, very likely will be the sole supplier of room-ripened bananas to the Trinidad market. From Year 3 through to Year 6, CATCO weekly volume will grow relatively slowly and market share may slip from 100 percent down to around 70 percent.

Barbados: The present market for banana in Barbados is about 650 tons per year, of which over 80 percent are produced domestically. King Agro Foods in association with CATCO, has been testing the market for room ripened bananas. A five tons capacity room has been in operation for some months. Weekly shipments have been ripened and merchandized via the retail trade, the hotel and restaurant sector, the cruise liner market and the school meals program. Consumer acceptability has been very strong.

In the formative year (1982/83) of market penetration, it is expected that CATCO, in association with the ripening room owner, will merchandize 300 tons. In 1983/84, the annual volume merchandized during the year will be 1,000 tons, however, to attain this volume the present ripening room capacity will have to be doubled. It is anticipated that the room-ripened banana market in Barbados will grow very quickly, once consumers are exposed to the products on a continuous basis. From Year 3 through Year 6 market size will at least double from the projected level of 1,000 tons in 1983/84 to reach 2,000 tons per year (17 pounds per capita) in 1988/89.

Supply Source: Supplies of bananas are available from the Windward Islands - this is quality produce that does not meet extra-regional market requirements and, currently, is simply dumped. Supplementary supplies may also be drawn from the domestic banana producing sectors in Trinidad and Barbados.

(iii) Plantains

Trinidad: The size of the plantain market in Trinidad is about 3,200 tons. Most plantains, both domestic and imported, are sold on the stem. Spoilage can be very high (40% or more). Major wholesalers are reluctant to handle plantains because of the poor quality of produce; fresh produce managers from the supermarket sector exhibit similar reluctance. Both sets of market participants expressed enthusiasm about the importation of regular supplies of quality produce packed in suitable containers (cardboard boxes as per bananas).

It is estimated that CATCO could quickly capture 10% of the market for plantains by focusing on the top quality segment, that is currently not being satisfied. Domestic production is on the decline, thus, the market potential for CATCO produce will expand; and more importantly, the consistent availability of quality plantains at competitive prices will foster an expansion of the present level of demand. In Year 2 total market volume will grow to around 4,000 tons of which CATCO should capture 25%, i.e. 1,000 tons. In Years 3 through Year 5 CATCO will at least maintain and, likely, slightly increase its market share in a growing market.

Barbados: The current size of the market for plantains in Barbados is around 730 tons, the bulk of which are imported from St. Vincent. As per Trinidad, the plantain trade is characterized by a high degree of product spoilage and, generally, low quality fruit. In Year 1, CATCO can capture 20% of the market for plantains in Barbados - the focus will be on the provision of reliable supplies of boxed quality produce largely to the supermarket trade (around 3 tons per week). Satisfying this segment of the market will stimulate growth in the size of the overall market for plantains. In Year 2, market size will grow to around 900 tons, of which CATCO can expect to capture one-third, again through servicing the quality end of the market. In Years 3 through 6, the market is expected to grow relatively slowly, but CATCO will maintain market share.

(iv) Mangoes

A ready market exists for quality, well packaged mangoes in Trinidad and Barbados, particularly when local produce is not in season (the mango season is from May-July). The size of the mango markets in Trinidad and Barbados is difficult, if not impossible, to discern. Domestic production is unknown but, certainly, the projected 100 tons CATCO import volume to each country would represent a very small proportion of total supply. Local supplies of quality, packaged mangoes are not available. The production and marketing system for local mangoes is, at best, rudimentary.

CATCO produce would be directed towards the supermarket and hotel/restaurant sectors of the two markets. Supplies of suitable mangoes are available now in sufficient quantities to meet the anticipated CATCO 1984/85 requirements. Year 3 has been scheduled for first shipments because the very perishable 'soft' nature of mangoes requires a high degree of fresh produce marketing expertise - this will be acquired by the CATCO team by Year 3.

In Year 4, trading volume in mangoes will increase to 300 tons in each of the selected markets and will attain a level of 400 tons in Trinidad and 350 tons in Barbados by 1988/89. The increasing annual volume of CATCO mango sales will reflect strong penetration into the 'quality' fresh produce sector and an expanding overall market as increasing marketing efficiency lowers unit prices and expands the demand for the product.

It is expected that CATCO will also penetrate the 'other regional' mango market over this same time period (i.e. selling to the Leeward Islands, French and Dutch West Indies). By Year 6, sales to this composite market will be around 350 tons.

(v) Tomatoes and Other Selected Vegetables

Trinidad and Tobago imports large volumes of onions, carrots, peanuts, and to a lesser extent, tomatoes and cabbage, mainly from extra-regional sources.

In Trinidad, the extra-regional imports of tomatoes can be displaced if tomatoes of equivalent quality can be merchandized from within the region. When the banana ripening rooms are in place, or using specifically built tomato ripening rooms, facilities will exist to ripen intra-regional or local tomatoes (picked green) using ethylene gas, that can compete with the imported produce. Small-scale field trials, using the Barbados banana pilot project ripening room, have proved very successful. It is estimated that CATCO can supply 200 tons of room-ripened tomatoes to the Trinidad market in Year 2, using both local and imported intra-regional produce. This would represent a 4%

total market share, or a 40% share of the imported tomato market. In Year 3 CATCO sales volume will increase to 400 tons - an overall market share of about 8% and around 60% of the anticipated expanded imported tomato market. By Year 6, expected CATCO trading volume in room-ripened tomatoes will have reached 509 tons.

Barbados also affords a tomato market opportunity for CATCO. Imports of tomatoes from extra-regional sources account for about 2 percent of the total volume of imported fresh and processed fruits and vegetables into Barbados. Annual tomato imports in 1981 were about 340 tons, representing 26% of the total market volume of around 1,400 tons. It is estimated that CATCO will merchandize 50 tons of room-ripened tomatoes in Year 2, utilizing the room-ripening facilities which will be put in place to service the room-ripened banana market. In Year 3, the volume will increase to 75 tons, representing a CATCO market share of around 5% (or 20% market share for imported produce), and by Year 6, the annual CATCO market volume will reach close to 90 tons. Very likely, the green tomatoes processed through the ripening room will be produced in Barbados itself.

Antigua, St. Kitts and the French and Dutch West Indies are significant importers of tomatoes from extra-regional sources. It is projected that by Year 3, CATCO will penetrate these regional markets with room-ripened tomatoes, once experience has been gained in the Trinidad and Barbados markets. Expected CATCO market volumes of room-ripened tomatoes delivered to regional markets identified above are: Year 3 - 200 tons; Year 4 - 400 tons; Year 6 484 tons.

Uniform carrots that are suitable for the Trinidad market can be produced in the region - particularly in Barbados and Antigua. The major constraints to servicing this market from the region are agronomic, but the constraints can be removed with suitable extension support and with the availability of suitable carrot seed. In Year 1, CATCO can contract for the production of 100 tons of carrots to supply the Trinidad market. This would represent a miniscule proportion of total market supply. Having established with the trade that regional carrots can meet the quality standard set by extra-regional imports, CATCO trade in Year 3 will expand rapidly to reach 600 tons for the year (12 tons per week) and capture around 15% of the total market. By Year 6, CATCO trading volume in carrots will have reached 800 tons (15 tons per week) and will represent a share of about 17% of the total market.

The market for fresh pigeon peas in Trinidad is estimated to be about 2,000 tons. This labor intensive crop is currently in short supply. When CATCO has gained experience in merchandizing highly perishable produce (as are fresh pigeon peas), then the company can take advantage of this growing market opportunity. In Year 2, it is estimated that CATCO will supply the Trinidad market with 60 tons of fresh pigeon peas from Windward Islands and the annual CATCO market volume will increase to reach 80 tons by Year 6.

Small volumes of dried peanuts are exported from St. Vincent to the Trinidad market. Organized farmer groups have been contacted who are enthusiastic to undertake contractural production of peanuts to meet Trinidad specifications. New hybrid peanut varieties which have been tested in the Eastern Caribbean show substantial yield increases over previous seed stock. In Year 2, CATCO will contract for the production of 100 tons of peanuts for sale in Trinidad (and 50 tons for sale in Barbados). The contractual volume is expected to double in Year 3, (200 tons to Trinidad and 100 tons to Barbados) and reach around 555 tons in Year 6 (120 tons for Barbados).

Imported produce enters the Trinidad market in the low season for local supplies, that is, the last six months of each year. Within the region, in particular in St Vincent, St. Lucia and Barbados, cabbage can be grown of equivalent quality to the imported produce. Further, growers have expressed a strong interest in producing cabbage for export to Trinidad at or around the farm price level that CATCO has identified as being Trinidad market competitive. In Year 2, CATCO will contract for the production of 100 tons of cabbage for the Trinidad market. By Year 6, CATCO will supply around 240 tons to the Trinidad market, representing less than a 5% share of the total market size, but a 40 percent share of the imported cabbage volume. Intra-regional exports to other markets within the region will be around 70 tons in Year 6, and will be made up of relatively small shipments to the Leeward Islands to supplement requirements in the off-season.

Trinidad is a major importer of onions. During the 1970's, Barbados exported 500 tons and more to this market. Disease problems and poor marketing scheduling destroyed this trade. In 1982, under the guidance of B.M.C., onions production was successfully resurrected in Barbados. A small export surplus is planned for 1983. In Year 3, CATCO will contract with producers for 500 tons of onions for sale to Trinidad. This trade will grow to reach about 720 tons by Year 6. This will represent a 10% market share for CATCO intra-regional produced onions.

(iv) Extra-Regional Exports of Fresh Produce

A substantial market exists outside the Caribbean region for produce that can be grown in the CATCO supply area, not least in Europe and North America. However, competition in these markets is stiff and quality requirements are very high. In the first 2 years of trading, it is not planned that CATCO will attempt to penetrate extra-regional markets, but by Year 3 sufficient expertise in merchandizing perishable produce and satisfying demand for high quality produce will have been attained.

The major vegetable item identified for extra-regional trade is sweet peppers - destined for European markets in their "off-season" (November-March). A Dutch importer has already expressed firm interest in undertaking field and shipping trials - once the production and marketing feasibility has been attested (and initial indications are very encouraging), then the expected requirement from this one company is estimated to be 320 tons. Year 3 has been conservatively selected as the first full year of shipment; the projected CATCO volume for this year is 500 tons, increasing to around 700 tons by Year 6.

Mangoes are an item that already are exported from the region, from St. Lucia, St. Vincent and Dominica to European markets. However, the export trade is disorganized and sporadic. It is projected that CATCO will export 100 tons of mangoes, largely from St. Lucia and St. Vincent, to Europe in Year 3. This annual volume will increase sharply in Year 4 and attain a level close to 400 tons in Year 6; this will represent about 4% market share in the European region.

A range of exotic product is exported from the Eastern Caribbean to extra-regional markets; again, the trade is disorganized and sporadic and includes such items as breadfruit, hot peppers, yams, tannias, eddoes, sweet potatoes, passion fruit, etc. Using sweet peppers and mangoes to form a nucleus for an extra-regional marketing thrust, CATCO will add-on other exotic product to the tune of 500 tons in Year 3. It is anticipated that this volume will double by Year 6, to reach around 1,000, or 20 tons per week.

A more comprehensive assessment of the market for key CATCO fresh produce commodities as projected sales volumes from Year 1 to Year 6 are presented in Annex D, Exhibit 1.

b) Farm Input

The assessment of the farm input market by CATCO indicates that there is sales potential in this sector for the company in most Eastern Caribbean countries. Projected sales volume, by country, in the first 3 years of CATCO's business operations are presented in summary form in Table 6, and in detail in Table 13. The range of inputs that will be merchandized by CATCO include:

Fertilizers	Rodenticides
Vegetable Seed	Short-line Farm Equipment
Chemicals	

The largest $ volume category is projected to be fertilizer, with fertilizer sales in two markets - Barbados and St. Kitts - accounting for 55% of total farm input sales in both Year 1 and in Year 3.

CATCO has identified two major problems that plague the farm input market in the CARICOM trading area: first, the lack of availability of farm input supplies in the LDC's in the Eastern Caribbean; secondly, inappropriate quality farm inputs supplies in the LDC's and the MDC's and the absence of skilled personnel in the farm input trade to discern farmers' problems and design farm inputs 'packages' that can solve these problems.

The CATCO strategy to be employed in marketing farm inputs is based on two broad objectives: to raise the level of technology used in farming in order to increase yields and to demonstrate effective crop protection with the use of low mammalian toxicity pesticides.

If CATCO is to trade in substantial volumes of intra-regional produce which is, currently, imported in large volumes from outside the region, or procure high quality produce for extra-regional markets, then the level of technology used in CARICOM agricultural production must be raised. Poor yields for many crops grown in the Caribbean have been attributed to, among other things, old varieties, inadequate amounts of fertilizer and not enough attention paid to crop protection resulting in high losses both in field and after harvesting.

CATCO intends to identify and make available the improved varieties (especially in vegetables) needed for effective import substitution, along with the required formulations of fertilizer and crop protection pesticides, needed by farming groups growing these crops. Pesticide products will be chosen for (1) low mammalian toxicity, (2) high pesticide efficacy, (3) and wide enough spectra to reduce the number of products with which the largely unsophisticated farmers of the region must become familiar.

TABLE 13

PROJECTED SALES OF AGRICULTURAL INPUTS BY CATCO YEAR 1 TO YEAR 3 ($000)

COUNTRY	PRODUCT GROUP	Year 1 1982/83	Year 2 1983/84	Year 3 1984/85
Antigua	Fertilizer	13	50	63.5
	Vegetable Seed	8	30	38
	Chemicals	6.5	25	31.5
Barbados	Fertilizer	117.5	450	569.5
	Vegetable Seed	8	30	28
	Chemicals	13	50	63.5
Trinidad	Vegetable Seed	13	50	63.5
	Vegetable Chemicals	26	100	126.5
St. Kitts	Fertilizer	47	180	227.5
	Vegetable Seeds	2	7.5	9.5
	Chemicals	6.5	25	31.5
	Equipment, Vegetable Fertilizer, etc.	3.5	12.5	16
Dominica	Vegetable Seed	1	4	5
	Chemicals	4	15	19
	Rodenticides and Equipment	1.5	5	6.5
St. Lucia	Vegetable Seeds	3.5	12.5	16
	Chemicals, Rodenticides, Equipment etc.	6.5	25	31.5
St. Vincent	Vegetable Seeds, Chemicals, Rodenticides, Equipment, etc.	6.5	25	31.5
Montserrat	Vegetable Seeds, Chemicals	8	30	28

CATCO intends to penetrate the farm input market within the Region with the minimum disturbance to existing business. Farm inputs and support services will be merchandized through existing farm input distributors.

The estimated size of farm input markets in the CATCO trading area that are realistically penetrable by the company are shown in Table 14. CATCO estimates that the vegetable seed market shows high potential but relatively low dollar volume. The high volume fertilizer market has high barriers to entry - in Trinidad and Barbados because of local competition and inaccessible supply channels, in the Windward Islands because of unique financial requirements (see later). The crop/pest chemical market show good potential for CATCO, particularly in the Windwards, Leewards, and in Barbados.

In Table 13, estimates of CATCO's market volume in selected farm input markets, by country, are presented. In percentage terms, the range of market shares are from 50% for crop chemicals in St. Kitts/Nevis down to 1% for the same commodity category in Barbados. Of course, the wide range reflect differences in market conditions: in St. Kitts/Nevis, the Central Marketing Agency has approached CATCO to establish, stock and supply a major farm input retail store which will be owned and operated by C.M.A.; in Barbados, the bulk of the crop chemicals are utilized by large plantations for sugar cane and, to a lesser extent, vegetable production and these large scale units have their own secure sources of product supply.

The major users of farm inputs, specifically, fertilizers and pesticides, in the CATCO market region are the banana growers of the Windward Islands. The BGA's present the umbrella organization WINBAN with annual input requirements, and WINBAN calls for bids on tender from interested firms on behalf of the BGA's. In recent years, the financial status of the BGA's has been, at best, shaky. Source of supplies of inputs have been tied closely to the countries of the donors that have supplied extended credit or even direct grants. CATCO does not consider this portion of the market to be accessible, and is not included in projections.

2. <u>Cost of Trading and CATCO Selling Prices</u>

The major trading cost categories and the ¢ per lb. trading costs, and the estimated CATCO selling prices for selected fresh produce commodities are presented in Annex D, Exhibit 2. The major assumptions underlying the cost/price calculations are:

- CATCO estimated selling prices are at levels that are competitive with produce of equivalent quality in each market country.

- Each commodity will be packed in units that are the norm in the existing fresh produce trade:-

TABLE 14

ESTIMATED MARKET SIZE FOR SELECTED FARM INPUT

CATEGORIES BY COUNTRY

($000)

Country	Fertilizer	Vegetable Seed	Crop/Pest Chemicals and Miscellaneous Short-line Equipment
		Farm Input Category	
St. Kitts/Nevis	600	30	75
Antigua/Barbuda	250	85	125
Montserrat	-	7.5	75
St. Lucia	*	37.5	75
St. Vincent	*	30	75
Dominica	*	15	57.5
Trinidad & Tobago	**	600	5,000
Barbados	3,000	400	4,500

Source: CATCO Business Plan

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* Fertilizer usage in the Windward Islands is largely associated with banana production. Access to this large volume market ($5.5 million for fertilizers and $500,000 pesticides) is contingent upon the availability of a credit package for the B.G.A.'s in each country. See text.

** Trinidad is a relatively large producer of nitrogenous fertilizers. CATCO perceives that, for the short-medium term, access to this market in closed because of local competition.

bananas	30 lbs.	pigeon peas	100 lbs.
plantains	40 lbs.	carrots	50 lbs.
oranges	33 lbs.	onions	55 lbs.
grapefruit	33 lbs.	tomatoes	33 lbs.
peanuts	150 lbs.	mangoes	10 lbs.
cabbage	50 lbs.		

- packaging charges are based on actual costings for packaging material. High quality materials are quoted as it is anticipated that the CATCO packaging strategy will be to emphasize quality to support the quality produce image.

- Freight costs are based on existing schooner rates in the Region.

- Shrinkage is estimated at 5% for all items except bananas and plantains for which a 10% shrink allowance has been assessed.

- Labor rates reflect current packer and stevedore rates in the Region.

The cost of sales, margins accruing to CATCO, and the dollar value of sales for each major farm input commodity category, and for each market country, are presented in Annex D, Exhibit 3. In contrast to the cost of sales for fresh produce, farm input sales costs are on a c.i.f. basis for the volume commodities. That is, CATCO's buying price for, say, fertilizers is c.i.f. Basseterre (St. Kitts). For high value - low volume items such as vegetable seeds, some central warehousing costs (in Barbados) may be incurred.

In determining cost of sales estimates, the following assumptions were made with regard to the CATCO margin:

	CATCO Margin as a Percent of Sales Price
Fertilizers	3
Vegetable Seed	15
Crop/Pest Chemicals	10-15
Equipment and Miscellaneous	15

With a volume of sales of $1.3 million from farm inputs in Year 1, cost of sales are estimated to be $1.2 million, and the CATCO margin $89,000 (representing and average margin on all commodities of 6.8%).

3. Transportation and Handling

The transportation requirements of CATCO to move fresh produce and farm inputs within and outside the region will be dynamic - as weekly trading volumes increase and new supply sources ar ' markets are added then so will the transportation requirements change. For example, in the first year of trading activity, weekly shipments of fresh produce to Barbados will average 15 tons, and 37 tons to Trinidad, and there will be no CATCO produce movement outside the region. By Year 3, the Barbados and Trinidad average weekly volumes will increase to 50 and 150 tons, respectively, and extra-regional shipments will be around 7 tons per week.

In the initial period of CATCO's commercial life, small-scale carriers will be utilized to move the relatively small volume of produce and inputs to market centers. These will include air shipments by Caricargo, chartering small fishing vessels to move produce overnight from St. Vincent and St. Lucia to Barbados, the existing unscheduled inter-island schooner trade, and schedule services such as the bi-weekly service linking St. Lucia, Dominica and Barbados (The MV Uleunsuang).

As weekly trading volumes approaches 50 tons for Trinidad and Barbados combined (projected for January/February 1983), CATCO will switch from ad hoc transportation arrangements to a firm voyage charter basis, using a vessel such as the Dominica based Miss Orva (50 tons plus cargo capacity).

Transportation of farm inputs, while vitally important, presents less of a problem for CATCO than fresh produce. High value - low volume items (some herbicides, pesticides, seeds, etc.) will be shipped air-freight, and the high volume commodities (fertilizers, some field chemicals) will be transported in dry cargo space on scheduled carriers from extra-regional sources, or in small lots on CATCO voyage charter boats.

Needless to say, the perishable nature of fresh produce demands that the availability of appropriate transportation facilities is a fundamental prerequisite for CATCO to become established as a successful commercial trading concern. An IDB consultant to CATCO has reviewed the availability of alternative transportation facilities to move fresh produce and farm inputs in the region; the summary report is presented as Annex C, Exhibit 2.

The handling of, in particular, fresh produce has been given close attention in the development of the CATCO business plan. Establishing a reputation as a reliable supplier of quality produce is contingent upon having a handling system in place that preserves the quality of the produce from point of supply to market. While this may be axiomatic, the commercial reality is that handling costs must be paired to ensure that CATCO produce is competitive in the market place. The company is planning to use top quality packaging materials to support their desired quality produce image but, in the initial period, it will stress simplicity of handling methods. Palletisation will be the preferred direction which is less expensive than using reefer containers, and is more suitable for loading and unloading at docks with very limited crane facilities and for transporting on ships with relatively small capacities that were not designed for carrying reefers.

As trading experience is gained, trading volumes increased, and new markets are tapped, then, handling practices will be changed to meet the requirements of these new markets. C.F.C. is having 'mini-containers' with cooling units built to test for suitability in the regional fresh produce trade (the mini-containers are designed to fit on existing inter-island schooners). CATCO will test the containers in actual commercial operations during Year 2. Produce shipped to extra-regional markets by boat will likely be transported exclusively in refrigerated reefer containers.

B. Institutional Analysis

1. Background

In 1976 the Caribbean Food Corporation (CFC) was established by the twelve member governments of CARICOM to increase regional self-sufficiency in food through promotion, investment and implementation of agricultural and agro-industrial projects. The CFC has a special mandate to operate in such a way as to ensure the participation of the private sector, regionally and extra-regionally. After a 5 year development phase, CFC has now entered a "Project Investment Phase" in which they plan to emphasize commercial projects, involving primarily the private sector. The CATCO project is the lead initiative of CFC in its 1982 - 84 Investment Program.

2. CATCO - The Implementing Institution

In October 1980 the CFC Board of Directors authorized the establishment of CATCO, a mixed public/private stock corporation to be located in Barbados. It was established to provide agricultural marketing capabilities which are commercially viable and responsive to the Region's development needs. Its specific mandate was to:

- trade agricultural outputs (such as fresh and processed produce) linking producers, processors, wholesalers and markets in country A, within and outside the Region with those in countries B, C, etc., within and outside the Region;

- trade agricultural inputs (such as fertilizer, chemicals, seeds, light equipment, etc.) linking manufacturers and distributors of inputs in country A within and outside the Region with distributors and markets in countries B, C, etc., within the Region; and

- to provide input to a CFC sponsored Agricultural Trade Information Service for selected agricultural items.

The creation of CATCO as a regional marketing agency was based on a growing awareness of the problems related to agricultural production and marketing in the Eastern Caribbean. While there has been little systematic effort to exploit the intra- and extra-regional marketing opportunities, a number of marketing studies have identified the need to develop such a capability. From these studies emerged a consensus that a marketing agency should be developed.

CFC's Board authorized that the agricultural marketing and trading subsidiary be managed under contract by a "suitably experienced regional organization" skilled in agricultural trade. It further provided that this trading company would have an authorized capital of US$5.0 million with CFC having 51% and private sector organizations have 49% of the shares. CATCO was thus incorporated in October, 1981 with an initial capital contributed of US$200,000 (CFC provided US$102,000 and Grace Kennedy & Co., acting on behalf of private sector organizations, provided $98,000). Figure 2 shows the major participants in the formation and implementation of CATCO.

CATCO's joint public/private equity structure will provide several advantages. CFC's sponsorship of CATCO will: (1) coordinate CATCO's marketing activities with other regional agricultrual development efforts, (2) provide CFC member governments with practical insights on their own marketing activities and trade regulations, (3) facilitate exchange of national currencies, assignment of national personnel, (4) foster CATCO's participation in selected regional marketing protocol agreements, and (5) provide a developmental framework for CATCO's entrepreneurial activities.

It is equally important that CATCO have participation from the private sector and conduct itself like a commercial enterprise (to make a profit commensurate with its entrepreneurial risks). If CATCO is to be a vehicle for demonstrating the commercial viability of selected marketing activities it must not be seen as abusing its public sector sponsorship (i.e. the project would not encourage other traders to emulate CATCO's innovations if it was seen as making a profit only because of its access to concessional funding).

To assure that CATCO was organized and managed as a commercial enterprise rather than public sector institution, CFC turned to a private company to operate CATCO under three year management contract. CFC selected Grace Kennedy & Company (GKC) of Kingston Jamaica, to provide management services and to act as the initial private sector shareholder. GKC was selected for this role because of its varied and successful experiences in agro-industrial, trading and shipping activities, regionally and extra-regionally. Under the terms of the management contract GKC has authority to appoint personnel, select marketing strategies and conduct all normal operations The Board of Directors exerts no direct influence over CATCO's day-to day management, its focus is on policy issues and control of major capital expenditures. The Board of Directors is made up of three public and two private sector representatives, reflecting the equity distribution of the company.

The members of the CATCO Board of Directors are:

- Mr. Carlton Alexander, Chairman (GKC)
- Mr. John Goddard, Member (Goddard Enterprises, Ltd.)
- Mr. Dennis Noel, Member (CFC)
- Mr. George Fuller, Member (CFC)
- Mr. Ray Fuller, Member (CFC)

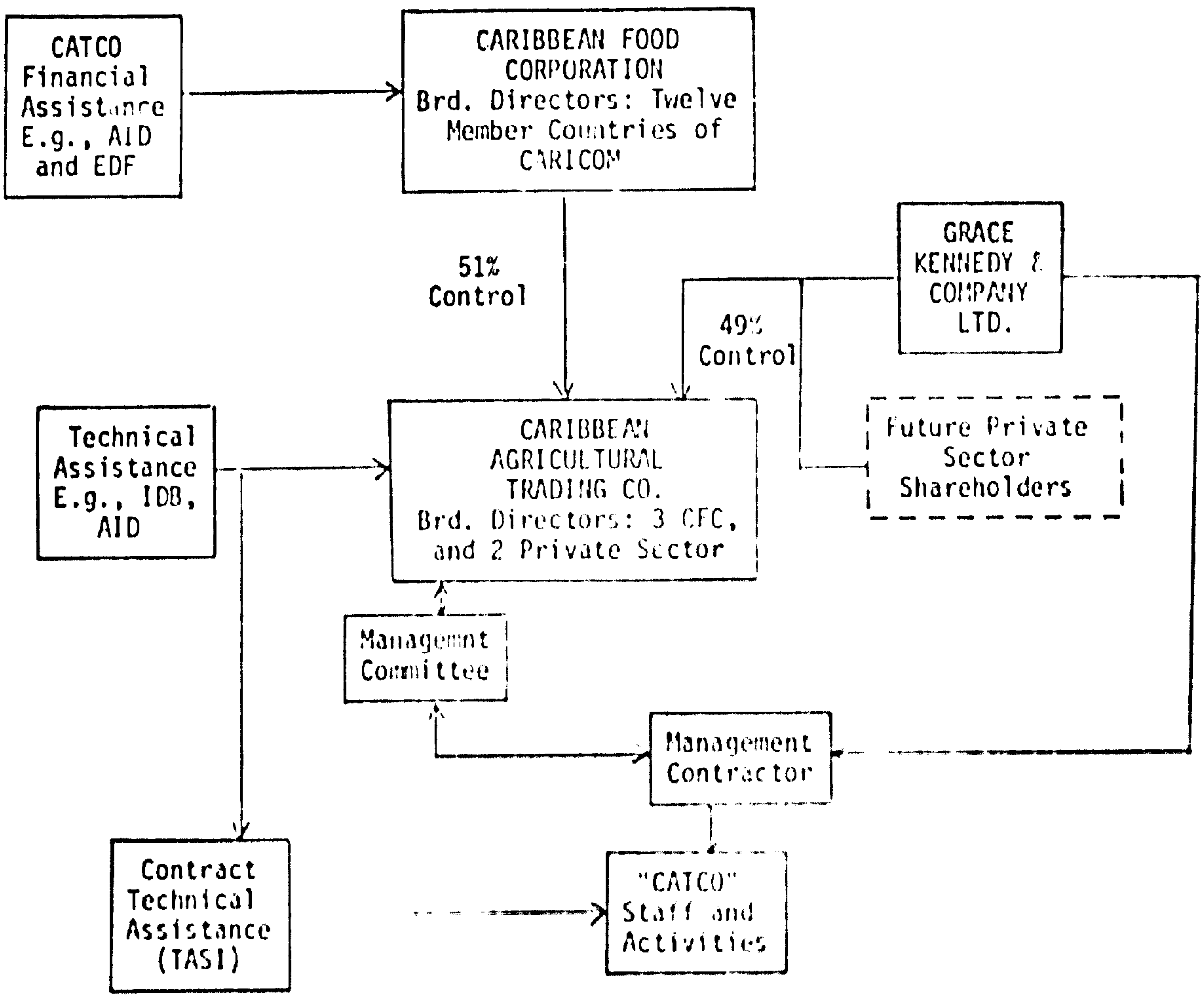
A core staff has been recruited and is onboard. They are actively involved in refining the business plan, conducting market analysis of identified trading opportunities, and conducting pilot trading activities (e.g. small-scale shipments of bananas to test the feasibility of a "ripening-room" to produce a premium quality fruit). In addition to the resources of GKC to carry out start-up and developmental activities, CATCO has access to technical assistance through a US$454 thousand IDB Grant. These funds provided much of the short-term and specialized assistance required to do initial market assessments and business plan projections.

3. Critical Institutional Issues

The establishment of a commercial enterprise by a public sector institution is a complex process involving the use of mixed public/private sector organizations. These so called third-sector institutions, properly

Figure 1 - Participants in the

Formation and Implementation of CATCO



organized, can serve to integrate the public accountability of a developmental institution with the initiative and efficiency of private commercial enterprise. Third-sector institutions, such as CATCO, involve a balancing of potentially conflicting organizational objectives and required behaviors; for example, CATCO must allocate resources and attention between short-term, high margin, trading opportunities and longer term development of marketing mechanisms which have a higher innovation risk and may benefit CATCO's trading competitors.

CATCO was established to demonstrate that it is commercially feasible to provide the type and scale of marketing functions needed to stimulate the Region's agricultural development. With the exception of selected export crops (e.g. bananas to the United Kingdom) the commercial sector serving agriculture has little experience with: (1) trading by description rather than inspection, (2) simulating quality and timely production of vegetables through forward contracting and enforced grading and packing standards, or (3) expanding consumption through lower consumer prices, resulting from the economies of scale. These are innovation risks greater than the commercial sector is prepared to accept given the lack of successful models. A CATCO is needed to test the profitability of these marketing innovations. A lot of learning and experimentation will have to take place before proven models or commercial mechanisms for improved marketing will exist. It is this development process which warrants concessional financing to CATCO.

It is crucial however that CATCO, and its collaborating institutions, do not let developmental support invalidate the commercial feasibility it is trying to demonstrate. CATCO must seize market opportunities and make a significant profit; however, it must do so in a fashion which provides expanded opportunities for producers, consumers and other traders. This organizational challenge has implications for how CATCO is structured, managed and supported. The following are important dimensions of CATCO organizational arrangements.

a) <u>CFC Maintaining Controlling Interest in CATCO</u>

CATCO is a private stock corporation; the equity investment of CFC represents a joint venture with the private sector to undertake commercial activities which will develop agricultural marketing capabilities within the Region. For CATCO to be successful it must combine entrepreneurial risk taking and profit motivation with the developmental accountability of a public sector organization. This balancing of activities will present opportunities and challenges throughout the life of CATCO.

The primary thrust of CATCO will be to act as a commercial enterprise. To facilitate this, CFC has delegated broad operational discretion to GKC under a three year management contract. This, plus the forty-nine percent interest held by private shareholder will encourage hard-headed attention to profitability, provide additional market place intelligence and serve to counterbalance any tendency by CFC to add perpherial activities to CATCO's agenda. At the same time the fifty-one percent ownership of CATCO by CFC will ameliorate the risks of innovation and start-up inherent in CATCO's Mission. It is these risks of uncertainty which have prevented commercial firms from undertaking similar venture on their own.

Specifically, CFC's sponsorship will allow CATCO to have: (1) access to concessional financing that would otherwise not be readily available (e.g., IDB funds), (2) the ability to more easily exchange foreign currency from trading activities and to assign staff without regard to nationality (i.e. resident visa restrictions), (3) the opportunity to provide feedback on the trading regulations of CFC member governments, (4) the benefit of co-ordination with other regional agricultural development projects (e.g., right of "first refusal" to trade commodities from CFC's agro-business projects), and (5) access to technical and managerial assistance through CFC (e.g., EDF/CFC's institutional support activities).

There are potential negative implications of CFC's controlling interest in CATCO. These include: (1) CATCO being tempted by CFC, and the availability of concessional funds, to undertake inappropriate activities (e.g., strictly public sector efforts such as a comprehensive market information service), (2) political pressure by members of CFC's Board of Governors to give special treatment to a particular country's marketing problem (e.g., to bail out a Marketing Board's mistakes), and (3) the risk of CFC's more bureaucratic management style affecting CATCO's conduct.

The management contract with GKC and forty-nine percent ownership by the private sector (representing some of the leading commercial firms within the Region) will substantially ameliorate these potential implications of CFC's controlling ownership. On balance, it is only through CFC leadership that such a venture as CATCO could be started. In time, it is anticipated that some of the activities proved by CATCO's experience will be emulated by other private sector firms without any public or CFC involvement. Indeed it is possible that CFC will not continue to exercise its right of fifty-one percent ownership and majority on the Board of Directors. It is too early to tell if and when CFC should consider divestiture of its controlling interest. For the foreseeable future, CFC should retain its interest in, and commitment to, CATCO's development.

Therefore, the requirement of fixed rate of divestiture by CFC would not be an appropriate or relevant condition precedent for the proposed AID financing. This issue should be addressed in the future if additional assistance were made available and experience with CATCO operations provided greater clarity as to the preferred mode of ownership of CATCO and management of its activities.

b) CATCO Capitalization and Divestiture Process

CATCO was incorporated in October, 1981 as a private stock company by CFC and GKC. It has an authorized capital of US$5.0 million. To provide start-up funds an initial call of US$200 thousand on authorized shares was made in December, 1981. At that time CFC provided US$102,000 for 51 percent ownership, and GKC provide US$98,000 for its 49 percent ownership. Shares were sold at their par value of US$50 per share. This initial paid-in capital was cash, shares were not purchased by in-kind contributions or by capitalization of pre-incorporation expenses.

By the terms of the Shareholders Agreement, GKC was to pay for and hold the 49 percent interest in CATCO on behalf of future private sector investors. Because CATCO is a private stock company, it can not publicly trade its shares. It was intended that GKC would privately sell, or divest itself of, its 49 percent interest to private sector firms selected by CFC's Board of Directors. GKC is now selling those shares to private investors (large commercial firms which have the risk capital and long-term time perspective such an investment requires). By Shareholder Agreement the geographical representation of private sector shareholders would follow that of member country contribution to CFC. This would result in the following allocation of private sector shares: Jamaica 14%, Trinidad and Tobago 14%, Guyana 14%, Barbados 5%, Belize 1% and LDC's 1%.

To raise additional equity capital to finance CATCO's operations in addition to requested loan financing, CFC's Board of Directors is soliciting a second call on shares to provide an additional US$550 thousand in capital. Of this amount, CFC would provide US$280,500 in cash to maintain its 51 percent ownership position, and new private investors (not GKC) would subscribe US$269,500 for the remaining 49 percent interest. This would result in a total capitalization, excluding loan funds, of US$750,000 after August of 1982. These equity funds be paid in cash prior to any disbursement of the proposed AID loan.

The infusion of additional equity capital beyond the US$750 thousand planned for this year, would depend as in any commercial venture-- upon CATCO's ability to demonstrate the need for additional funds to finance sound commercial activities and the ability to demonstrate its strategy for profitability. In any subsequent private sale of shares, CFC retains the right "to subscribe for and hold up to 51 percent of the issued shares, but may elect not to do so".

c) Should Divestiture be Required and How Would the Process Work?

Because CATCO is a private stock corporation (less than fifty shareholders) it can privately trade shares without the rigorous legal requirements of a public stock prospectus. Thus, GKC has already begun the process of selling or divesting its original shares in CATCO to a limited number of private firms. These firms are established commercial enterprises which have the risk capital and time perspective to invest in such a venture. The firms to which GKC is selling its shares have been approved by the Board of Directors of CFC. It is anticipated that GCK will significantly reduce its current forty-nine percent holding in CATCO by the fourth quarter of 1982.

However, as noted in response to items (a) & (b) above, it would not be appropriate or helpful for CFC to divest itself of its interest in CATCO. Were that thought desireable it could be achieved in several ways. One approach would be to have a requirement that CFC divest itself of a certain number of shares, or percentage of ownership, over a specific time period. For example, the Board of Governors could decide that it would help private sector involvement should CFC commit itself to a planned reduction of its controlling interest over a ten year period. This would provide needed public sector support during CATCO's development period and would encourage the building of a viable commercial enterprise which could stand on its own within a realistic time period. Assuming that CATCO would be a commercial success within this period, CFC progressive divestiture of its shares would provide funds for other CFC projects.

The above scenario is not unacceptable to CFC and its Board of Directors. It is felt however, that there are too many uncertainties about the future to build in a rigid divestiture formulae at this time. Given CFC's growing portfolio of development and commercial projects, it is likely that CFC would be willing to phase out of CATCO to redirect its resources to other projects were that feasible and desireable in the years ahead.

d) Possible Effects of a Changing Ownership Pattern

It is anticipated that as CATCO becomes better known, and successful in its commercial trading activities, private sector investment will increase. This will broaden the equity base and provide working capital to underwrite its continued growth. As private sector involvement in CATCO grows the lessons learned from its trading activities will be disseminated to a wider circle of participants. This will facilitate the emulation of selected CATCO activities, or mode of operations, by other traders, commercial firms and regional agencies.

However it is possible that only larger companies, such as Goddards of Barbados or Geddes Grant of Trinidad & Tobago, will have sufficient risk capital to invest in CATCO. This means that shareholders would be firms which have a strong existing position in the retail food marketing sector. While this will provide CATCO with access to leading firms in the private sector, it could also present conflict-of-interest issues. An example of such an issue is CATCO's possible investment in a "ripening-room" to process bananas. Such "forward integration" would allow CATCO to demonstrate the feasibility of offering a quality fruit product through commercial ripening techniques. Access to these bananas, which bring a significant premium, could be an important competitive factor at the retail level. Should CATCO give, or appear to give, exclusive access or preference to this commodity to one of its shareholders, who is a major actor at the wholesale level? This is an example of where CATCO will need to balance the need to be profitable with the risk of monopolizing a market function. Other possible issues include: the selection of shareholders, the constraints on CATCO's freezing-out competition, and use of concessional funds to underwrite a commercial service.

e) The Desirability of Both Grace Kennedy & Company and CFC Divesting Itself of Ownership and Management Over Time

The question of Grace Kennedy and Company's divestiture of its original shares has been addressed above.

The desirability of CFC divesting itself of ownership has also been addressed above. Whatever the ownership pattern of CATCO, public and private sector investors would have a direct stake in there being sound business management of the operations: that is the management decision processes, staffing and performanced based incentives need to reflect the entrepreneurial nature of CATCO. If CATCO organizes itself like a public agency or takes on significant development activities (non-revenue producing) it will not be able to achieve its primary purpose: demonstrating the commercial viability of needed regional marketing mechanisms.

CFC has taken a major step in establishing the entrepreneurial nature of CATCO's operations, by its management contract with GKC. The broad delegation of authority to GKC by CFC (see Annex E, Exhibit 1. GKC Management Agreement) provides a necessary infusion of commercial experience and a buffer from CFC's operation. GKC has the authority to recruit and manage staff, to identify and act upon market opportunities. It is important that CATCO and GKC leadership have the ability to move quickly and to undertake business risks without repeated reference to the CFC Board of Directors. This management contract will provide for appropriate differences in the type of CATCO staff and their rewards from CFC existing operations. In time it may be appropriate to amend the three year GKC contract to provide performance incentives for demonstrated CATCO success. These performance incentives for GKC, as well as those provided CATCO staff, will need to balance short-term profitability with longer-term developmental objectives.

After the three year management contract expires, neither commercial nor developmental objectives would be achieved were the GKC, or a similar experienced management firm not retained to assist in CATCO management. For this reason it is recommended that a covenant of the USAID loan be that CFC and other CATCO shareholders shall retain some type of private sector management contract during the life of the loan.

f) External Assistance to CATCO

Another important dimension of CATCO's institutional growth lies in the area of external assistance. Because of the risk and uncertainties associated with developing new markets and trading mechanisms, some concessional financing and technical assistance are necessary. It is important that this external assistance be made available in a way which fosters commercial success, not developmental dependency. Because CATCO's operations will cut across a number of areas needing development assistance (e.g. production credit, inter-island transportation, wholesale facilities, and market information systems), there is the risk of overloading CATCO with these requirements. Outside donors, as well as CFC, should be careful not to distort CATCO's purpose and managerial attention by inappropriate subsidizing of commercial activities (e.g. low cost credit to producers) or ancillary development activities (e.g. regional marketing information services). The concessional assistance as called for in this Project Paper is to subsidize the: (1) innovation risk of starting a new venture, (2) development of appropriate commercial models for agricultural marketing, and (3) needed technical expertise not readily available in the Region. Other needed development assistance to strengthen the Region's self-sufficiency in food should be coordinated with CATCO, but should be channeled through other, more appropriate vehicles.

C. Financial Analysis

1. Introduction

The following financial analysis draws together information from the market assessment, and the operational and institutional review conducted in the process of determining the CATCO business plan. An income statement, a cash flow statement, and a balance sheet are presented to examine the financial viability of the proposed CATCO operation. Assumptions regarding the volume of sales of output and inputs, the costs of trading, and operational policies are based on material analyzed and presented in the Technical Analysis, and in Annex C. All projections are made for a ten year period, although after the first five years of operation the only projected changes in sales revenue and costs of sales are from inflation. Starting with year 1 of the project it was assumed that inflation increases 15% annually.

2. Financial Statements

a) Income Statement

The projected income statement for CATCO is shown in Table Starting at the top of this Table revenue is determined from the sales of outputs and inputs. Total revenues are dominated by output sales and are projected to reach some $34,000,000 by the fifth year of operation and then due mainly to inflation, reach $74,760,000 by 1991. Major costs of sales (these are mainly variable costs) for both outputs and inputs, and for common costs, are then allowed for, to obtain CATCO margins.

The three major common costs shown in Table 15 are obtained as follows:

i) Warehouse Costs for Inputs: Assumed 7,000 sq. ft. total, with 1,000 of this air conditioned for seeds. The cost is estimated at 25¢/sq. ft./month, with CATCO providing its own air conditioning units (3 units are included in the capital budget).

ii) Agency Commission: This allows for the cost of expediting particular transactions using agents rather than the field officers when this would be more cost effective. A nominal amount is included for this item.

iii) Trading Contingency: This is an allowance providing for the risks associated with trading when taking title to the goods, foreign exchange risks, the risk associated with forward contracting and say, disaster risks. This is projected as being relatively high in the first year of operation and tapers off somewhat thereafter. The estimate included here represents 5% of total revenue in year 1, then 3% in year 2 and 2% thereafter.

TABLE 15

PROJECTED CATCO INCOMES STATEMENT FOR TRADING YEARS 1982-1992

($000)

	1	2	3	4	5	6	7	8	9	10
ITEM	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Resources										
Sales of Outputs										
Bananas	318	3344	4229	5058	6049	7717	8874	10205	11736	13496
Plantains	273	1507	2288	2803	3436	4215	4847	5574	6410	7372
Grapefruit	334	1326	1678	1929	3088	3819	4392	5051	5809	6680
Oranges	317	914	1793	2922	3602	4445	5112	5878	6760	7774
Other Regional	-	1329	4279	8289	10493	13098	15063	17322	19920	22908
Other Ex-Regional	-	-	2185	3641	4848	6386	7344	8446	9713	11170
TOTAL	1642	8420	16452	24642	31516	39680	45632	52476	60348	69400
Sales of Inputs										
Fertilizers	204	782	989	1252	1511	1824	2098	2413	2775	3191
Seeds	45	172	218	275	332	401	462	531	610	702
Chemicals	73	282	356	451	544	658	756	869	1000	1150
Miscellaneous	20	77	98	124	150	181	208	240	275	317
TOTAL	342	1313	1661	2102	2537	3064	3524	4053	4460	5360
TOTAL REVENUES	1984	9733	18113	26744	34053	42744	49156	56329	63008	74760
Less Cost of Sales										
Cost of Outputs										
Bananas	471	3040	3845	4598	5499	7015	8067	9277	10668	12269
Plantains	276	1634	2068	2533	3106	3809	4381	5038	5794	6663
Grapefruit	306	1214	1535	1766	2826	3497	4021	4625	5318	6115
Oranges	473	837	1642	2675	3298	4069	4679	5382	6188	7117
Other Regional	-	1113	4089	6862	8689	10853	12480	14352	16505	18981
Other Ex-Regional	-	-	1748	2913	3878	5109	5876	6757	7771	8936
TOTAL	1526	7838	14927	21347	27296	34352	39504	45431	52244	60081
Cost of Inputs										
Fertilizers	198	739	959	1214	1466	1770	2036	2340	2692	3096
Seeds	38	146	185	234	282	291	392	451	518	597
Chemicals	66	253	321	406	490	591	680	783	900	1035
Miscellaneous	17	66	84	106	128	154	177	204	234	269
TOTAL	319	1224	1549	1960	2366	2806	3285	3778	4344	4997
Common Costs										
Warehousing	21	23	26	28	30	34	37	41	45	50
Agency Commission	3	9	10	11	13	13	16	18	22	25
Trading Contingency	99	292	362	535	681	855	983	1130	1300	1495
TOTAL	123	324	398	574	724	902	1036	1189	1367	1570
TOTAL COST OF SALES	1968	9386	16874	23881	30386	38060	43825	50398	57955	66648
EQUALS CATCO MARGIN	16	347	1239	2863	3667	4684	5331	6131	7053	8112
Less Other Operating Costs	[illegible]	1324	[illegible]	[illegible]	[illegible]	1763	2005	2274	2584	2934
Equals Gross Profit	[illegible]	(977)	[illegible]	[illegible]	2061	2919	3326	3857	4469	5178
Less Interest	[illegible]	120	160	160	160	280	252	224	196	168
Extraordinary Expenses	77	77	[illegible]	-	-	-	-	-	-	-
Plus Grants										
IDB	217	417	-	-	-	-	-	-	-	-
[illegible]	[illegible]	43	[illegible]	[illegible]	[illegible]					
Equal NPBT (preliminary)	(873)	(917)	[illegible]	[illegible]	[illegible]	2639	3074	3633	4273	5010
Plus Other Income	-	-	23	37	50	50	50	[illegible]	50	50
Total Taxable Income	(873)	(917)	[illegible]	[illegible]	[illegible]	2689	3124	3683	4323	5060
Less Taxes	-	-	-	-	884	[illegible]	1562	1841	2161	2530
Equal NPAT	(873)	(917)	[illegible]	[illegible]	[illegible]	1344	1562	1842	2162	2530

The CATCO margin is then determined by subtracting total cost of sales from total trading revenues. This is then applied to other operating costs to determine a gross profit figure. The estimates of other operating costs are shown (in Barbados Dollars) in Annex F, Exhibit 1. These costs are made up largely of personnel and general management related expenses. Costs of travel and projected technical assistance needs are also included.

A number of additional expenses items are then subtracted from the gross profit estimate. These include a projected interest payments based on a 4% interest charge for 5 years, and 7% for the balance of the 15 year USAID loan repayment period. This also includes an estimate of extra-ordinary expenses from the amortization over a 3 year period of the pre-implementation costs $420,000 and formation costs of $44,000.

Finally, a preliminary estimate of net profit before taxes is obtained by adding the anticipated CATCO grant from IDB to pay for certain technical assistance services. This estimate is considered preliminary because it still does not include anticipated revenues from the selected investments which CATCO plans to make in order to obtain certain needed marketing services. These investments include banana ripening rooms, drying facilities, product cooling facilities, and shipping equipment, etc. In the income statement revenue from these is called other income and represents an estimated 10% per annum return on invested capital, starting two years after making each investment.

CATCO's total taxable income is then determined and an estimated 50% tax rate (based on current tax law in Barbados) is applied to this to obtain a projected net profit after taxes (NPAT). These results indicated that CATCO will sustain substantial, although quickly declining losses during the first three years of operation. After the volume of business reaches a breakeven point in year 4, the business turns positive and reaches a profit after taxes of some $1.3 million in the fifth year of operation. By year 10 inflation will have increased these profit levels to some $2.5 million. A sensitivity analysis of the CATCO business strategy reflected in the income statement is presented after the pro forma cash flow and balance sheet are examined below.

b) Pro Forma Cash Flow Statement

The projected cash flow statement for CATCO is shown in Table 16. The major contributors to the business's cash flow are shown in the first sub-group of figures in the statement. These include: income after taxes which is derived directly from the income statement; depreciation which is for office equipment; and amortization which represents payments for leasehold, pre-implementation and formation costs. Derivations of the changes in accounts payable and taxes payable (these are paid quarterly in arrears) are shown in Annex F, Exhibits 3 and 7.

The next sub-group of figures in the Table represent cash uses. CATCO will experience laps between the sale of goods and the actual receipt of funds arising from those sales, and the absolute size of accounts receivable goes up as business volume increases. The yearly additions to

TABLE 16

PROJECTED CATCO PRO-FORMA CASH FLOW STATEMENT FOR TRADING YEARS 1982-1992

($000)

ITEM	END OF YEAR BEFORE START UP	AT THE START OF YEAR 1	AT THE END OF YEARS									
			1	2	3	4	5	6	7	8	9	10
Income after Tax		-	(873)	(917)	(194)	1,330	1,337	1,344.5	1,562	1,841.5	2,161.5	2,530
Depreciation		-	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3
Amortization			103	103	103	-	-	-	-	-	-	-
Change Taxes Payable		-	-	-	-	-	171	165	54	70	80	92
Change in A/Payable			(22)	899.5	225	284	281	306	332.5	343.5	395	455
TOTAL			(788.5)	89	137.5	1,617.5	1,729.5	1,819	1,952	2,258.5	2,640	3,080
Less												
Change in A/Receivable			222.5	807.5	756.5	792.5	682	811.5	611	702.5	808	929.5
Change in Inventories		170	564.5	404	404	383.5	441	374	411	473	544	625
Change in Prepaids		7.5	1	1	1	1	1	1	1.5	1.5	1.5	1.5
Capital Expenditure												
Leaseholds		50	-	-	-	-	-	-	-	-	-	-
Equipment		23	-	-	-	-	-	-	-	-	-	-
Investments		-	250	125	125	-	-	-	-	-	-	-
TOTAL		250.5	1,038	1,333.5	1,286.5	1,177	1,124	1,186.5	1,023.5	1,167.5	1,353.5	1,556
NET CASH FLOW		(250.5)	(1,826.5)	(1,248.5)	(1 149)	440.5	668.5	632.5	928.5	1,081.5	1,286.5	1,524
Financed by:												
Change LT Debt			1,500	1,500	1,000	-	-	(400)	(400)	(400)	(400)	(400)
Change Equity		550		-	-	-	(94.5)	-	-	-	-	-
Residual Cash Balance		299.5	(326.5)	251.5	(149)	440.5	574	232.5	528.5	681.5	886.5	1,124
Cash Account	29	328.5	2	253.5	104.5	545	1,119	1,351.5	1,880	2,561.5	3,448	4,572

account receivable are therefore shown. Inventories increase likewise and changes are shown. Both of these items are explained in detail in Annex F, Exhibits 4 and 5. Capital expenditures are for leaseholds and equipment in year 1, and the investments are for the selected items to facilitate CATCO's trading operations. (Discussed in detail in Section III D).

The net cash flow is negative in years 1 - 3, turning positive and reaching some $1.5 million by year 10. Funds to finance the operations in the early years come from increases in long-term debt (the USAID Loan) and from CATCO's own equity resources. Starting in year 5, a shareholder advance is repaid and in year 6 USAID loan repayments are started.

c) Pro Forma Balance Sheet

The projected balance sheet for CATCO is shown in Table 17. Current asset estimates are derived from the cash flow statement, and from the projections of accounts receivable and inventories shown in Annex F. Prepaid expenses are for insurance. Other assets include those acquired at or before start-up through pre-implementation costs, leasehold improvement costs and CATCO business formation costs. Investments and office equipment are also included.

Major liabilities are the outstanding accounts payable, taxes payable and long-term debt (USAID loan). Equity contributions are from an advance by Grace Kennedy to cover operating costs, private and public sector shareholder equity, and retained earning of the company.

By year 10 the estimates are that CATCO will have acquired some $16 million in total assets, liabilities and equity. Some $2 million of the USAID loan remains to be paid off, while CATCO will have accumulated over $10 million in retained earnings if all the assumptions of the business strategy hold true. In the following section we will examine the sensitivity of the proposed CATCO operation to changes in certain of the critical assumptions.

3. CATCO Financial Summary and Sensitivity Analysis

In order to analyze the financial results of CATCO's anticipated business strategy, the information gained from the previous financial statements was used to calculate a number of strategic financial indicators. These include the following:

Current Ratio	= Current assets/current liabilities
Acid Test Ratio	= Cash and accounts receivable/current liabilities
Debt/Equity Ratio	= Long-term debt/equity capital invested
Debt/Networth Ratio	= Total debt/tangible networth
CM/OE Ratio	= CATCO's margin/operating cost
Return on Equity	= Earnings after taxes/networth
Internal Rate of Return	= Internal financial return or the discount rate at which the net present worth is zero

TABLE 17

PROJECTED CATCO PRO-FORMA BALANCE SHEET FOR TRADING YEARS 1982-1992

($000)

ITEM	END OF YEAR BEFORE START UP	AT THE START OF YEAR 1	AT THE END OF YEARS									
			1	2	3	4	5	6	7	8	9	10
ASSETS												
Cash	29.0	328.5	24.0	253.5	104.5	545.0	1,119.0	1,351.5	1,880.0	2,561.5	3,448.0	4,572.0
A/Receivable	-	-	222.5	1,030.0	1,786.5	2,579.0	3,261.0	4,072.5	4,683.5	5,386.0	6,194.0	7,123.5
Inventories	-	170.0	734.5	1,138.5	1,542.5	1,922	2,367.0	2,741.0	3,152.0	3,625.0	4,169.0	4,794.0
Prepaid Expenses	-	7.5	8.5	9.5	10.5	11.5	12.5	13.5	15.0	16.5	18.0	19.5
TOTAL C/Assets	29.0	506.0	989.5	2,431.5	3,444.0	5,057.5	6,759.5	8,178.5	9,330.5	11,589.0	13,829.0	16,509.0
Formation Costs	22.0	22.0										
Lease Costs	210.0	210.0	206.0	103.0	-	-	-	-	-	-	-	-
Leaseholds	27.0	77.0										-
Investments	-	-	250.0	375.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0
Office Equipment	11.5	34.5	31.0	27.5	24.0	20.5	17.0	13.5	10.0	6.5	3.0	3.0
TOTAL ASSETS	299.5	849.5	1,476.5	2,937.0	3,968.0	5,578.0	7,276.5	8,692.0	10,240.5	12,095.0	14,332.0	17,012.0
LIABILITIES												
A/Payable	5.0	5.0	5.0	882.5	1,107.5	1,386.5	1,672.5	1,978.5	2,311.0	2,654.5	3,049.5	3,504.5
Tax/ Payable	-	-	-	-	-	-	171.0	336.5	390.5	460.5	540.5	632.5
LT Debt	-		1,500.0	3,000.0	4,000.0	4,000.0	4,000.0	3,600.0	3,200.0	2,800.0	2,400.0	2,000.0
EQUITY												
Advance	94.5	94.5	94.5	94.5	94.5	94.5	-	-	-	-	-	-
Grace Kennedy & Others	98.0	367.5	750.0	750.0	750.0	750.0	750.0	750.0	750.0	750.0	750.0	750.0
CDC	102.0	382.5										
Retained Earnings	-		(873.0)	(1,790.0)	(1,984.0)	(653.0)	683.0	2,027.0	3,589.0	5,430.0	7,592.5	10,125.5
TOTAL LIABILITIES & EQUITY	299.5	849.5	1,476.5	2,937.0	3,968.0	5,578.0	7,276.5	8,692.0	10,240.5	12,095.0	14,332.0	17,012.0

• Cash: The cash balance at the end of Year 1 reflects the additional $22,000 that must be held available to purchase four months' supply of inputs on sight draft.

Results of these calculations are shown in Table 18. If all the assumptions about sales and cost hold true, CATCO has a positive net cash flow in its 4th year of operation. Results from the cash flow statement did show a low cash balance at the end of the first year, yet the current ratio and acid test for this year are particularly favorable, off-setting the possibility of a cash crisis actually arising. The debt/equity ratio remains below 5:1, except during year five when it reaches a peak of 5.3:1. In this same year the debt/networth ratio has dropped to 4.08:1 and continues to fall through year 10.

The return on equity is extremely high in the 1st year that CATCO achieves a positive net profit after taxes, but this is largely due to the fact that the early year losses have significantly reduced the company's networth. By year 10 the company is projected to achieve a 23% return on equity, which is quite favorable, if it can be achieved. The nominal internal rate of return for this base CATCO projection is 20.6% which is low for current business practices in the Region. If inflation falls between 10 and 15%, then the real long-term rate of internal return (after taxes) is only 6 to 11%. Given the risky nature of business investments in developing countries it normally takes somewhat higher expected returns to attract private sector investors. In CATCO's case the public/private sector joint investment strategy, the willingness of USAID to participate in the project and the important longer-term need to promote increased agricultural trade in the Region has been sufficient incentive to attract potential investors.

In addition to the above financial review a sensitivity analysis is presented in order to examine the likely effect of critical assumptions about sales and costs of trading not holding true. Five alternative assumptions are made regarding key elements of the business plan, as explained below:

Assumption 1: More favorable terms on the AID loan is assumed, with a similar pattern of draw downs and the same 10 year payback period at 7% interest on the outstanding balance but with 2% interest during the first 5 years.

Assumption 2: Both sales and the cost of goods sold are reduced by 10% to reflect a decrease in the projected volume of business.

Assumption 3: The trading contingency line item from the income statement is doubled in order to deal with a higher level of risks (bad debts, foreign exchange, disaster, etc.) associated with trading perishable commodities. This places the rate at 10% of total revenue in year 1, then 6% in year 2 and 4% thereafter.

Assumption 4: Revenue from commodity sales is reduced by 2%, but all costs are maintained at base level rates. This could represent a squeeze on CATCO's margins or an increase in physical product losses (shrinkage).

Assumption 5: The basic business plan calls for major volumes of trading in other regional and extra-regional commodities (largely vegetables and more exotic fruits) in the 3rd and 4th years of operation. After the 1st year of trading in these products rather significant increases in volume were projected for succeeding year. To examine the effect of not increasing volume so rapidly, a 50% drop in both sales and costs of trading for other regional

TABLE 18: RATIO AND OTHER FINANCIAL ANALYSIS OF CATCO'S BUSINESS PLAN

FINANCIAL RATIOS AND OTHER INDICATORS	END OF YEAR									
	1	2	3	4	5	6	7	8	9	10
Current Ratio	197.9	2.75	3.11	3.65	4.04	4.13	4.04	4.37	4.53	4.71
Acid Test	49.3	1.45	1.71	2.25	2.62	2.74	2.84	2.99	3.16	3.34
Debt/Equity	1.78	3.55	4.74	4.74	5.33	4.8	4.27	3.73	3.2	2.67
Debt/Networth	-	-	-	28.13	4.08	2.13	1.36	0.96	0.72	0.56
CR/GE	0.02	0.27	1.01	2.03	2.39	2.65	2.66	2.7	2.73	2.76
Return on Equity	-	-	-	6.95	0.93	0.48	0.36	0.3	0.26	0.23
Net Cash Flow 1/ ($000)	(1,826.5)	(1,248.5)	(1,149)	440.5	668.5	632.5	928.5	1,081.5	1,286.5	1,524
Cash Flow For Discounting 1/ 2/ ($000)	(1,766.5)	(1,128.5)	(989)	600.5	828.5	912.5	1,180.5	1,305.5	1,482.5	1,692
Internal Rate of Return (Nominal)	20.6%									

1/ Not shown is the net cash flow at the beginning of year 1 ($250,500) plus the additional capital of $270,500 expended on project start-up costs.

2/ Cash flow for discounting includes net cash flow plus projected interest payments.

and extra-regional products was assumed in the years following the 1st or base year of trading of the respective commodity group.

Results of the sensitivity analysis are shown in Table 19. The first case examined of more favorable loan terms has little effect on income or cash flow, or on the internal rate of return. Moreover, if the business actually achieves the projected level of profitability, interest rates could be increased during the 5 to 15 year period and adequate cash balances would exist to meet such obligations.

The second case of a 10% reduction in volume of sales and costs of trading does reduce the IRR to 19% but still can be judged to have relatively little effect on the profitability of the business, inspite of the fact that operating costs such as personnel remains the same.

The remaining cases all tend to significantly reduce the financial vigor of the project, reducing real internal rates of return to near zero (assuming 15% rates of inflation). Each of these three cases reflect the highly risky nature of trading in perishable agricultural commodities. The base year projections of margins, trading contingencies and vegetable supply response in years 4 and beyond are reasonable, given existing knowledge. Yet in this business it is reasonable and prudent to also expect each of these items to contribute to management difficulties and long-term financial viability. The last case of significantly reduced rates of growth of sales of other regional and extra-regional commodities is particularly serious because it not only places CATCO in precarious financial conditions, it also means the objectives of expanding production opportunities for farmers in the Eastern Caribbean are not being achieved as rapidly as planned.

In summary, the sensitivity analysis shows quite clearly that CATCO could be a very successful company if projected sales and costs are close to their mark. Yet it also shows the degree to which CATCO's success is dependent upon managing risks and contingency costs of trading, as well as achieving the target levels of sales and production expansion. Considerable management effort, business experimentation, and market development effort will be required to keep CATCO on target.

TABLE 19: PROJECT SENSITIVITY ANALYSIS

($000)

ALTERNATIVE ASSUMPTIONS 1/	EXTERNAL RATE OF RETURN	YEARS										
		0	1	2	3	4	5	6	7	8	9	10
					Effects on Income From Operations							
0		-	(873)	(917)	(134)	1,330	1,337	1,344.5	1,562	1,841.5	2,161.5	2,530
1		-	(843)	(857)	(114)	1,410	1,252	1,344.5	1,562	1,841.5	2,161.5	2,530
2		-	(877)	(952)	(318)	1,044	1,390	1,111	1,296	1,535	1,809	2,124
3		-	(972.5)	(1,209)	(556)	795	1,340	1,218	1,071	1,276.5	1,511.5	1,782.5
4		-	(912.5)	(1,112)	(556)	795	1,340	1,140	1,070.5	1,276	1,511.5	1,782.5
5		-	(873)	(917)	(289)	253	761	928	556.5	676.5	822	990
					Effects on Cash Flow							
0	20.6	(250.5)	(1,826.5)	(1,248.5)	(1,149)	140.5	666.5	632.5	928.5	1,081.5	1,286.5	1,524
1	19.8	(250.5)	(1,796.5)	(1,188.5)	(1,069)	520.5	624.5	591.5	928.5	1,081.5	1,286.5	1,524
2	18.1	(233.5)	(1,750)	(1,332.5)	(1,179.5)	243.5	734	450.5	724	860	1,068	1,153.5
3	14.7	(250.5)	(1,926)	(1,540.5)	(1,511)	(94.5)	703.5	576.5	466	496.5	615.5	752.5
4	13.74	(250.5)	(1,861.5)	(1,427.5)	(1,497)	(77.5)	514	480.5	458	511	631	771
5	9.9	(250.5)	(1,826.5)	(1,163)	(1,049.5)	(270)	1[illegible].5	273	184	86.5	139.5	207

1/ Assumption 0 = Base results from pro-forma financial statements.

1 = More favorable terms on debt service.

2 = 10% drop in sales and cost for trading, operating costs remaining same.

3 = Trading contingency doubled.

4 = 2% drop in sales.

5 = 50% drop in sales and costs of trading for other regional and extra-regional commodities after the base year volume is achieved.

4. AID Loan Terms

As is clear from the financial analysis, CATCO's cash position is extremely weak during its first years of operation. This growth period requires an equivalent grace period for amortization payments and a highly concessional interest rate. RDO/C believes this level of concessionality is fully justified by the development returns we anticipate from the project and the fact that CATCO will not make all its business decisions based on profit maximization alone. Rather, it will and must expend considerable resources in terms of operational costs and management time to foster changes in the marketing system beyond CATCO's direct control. A significant portion of costs in the first two years of the project will be required to set in place the market and producer agreements to move into fresh vegetable trade in the region and from the region to the U.S. and European markets beginning in year three. The diversification of CATCO into these higher risk commodities is a fundamental development rationale for AID's support of the project. Without concessional resources, CATCO could not move into this area to any significant degree.

Beyond the grace period, the "base case" cash flow indicates that CATCO could sustain close to commercial interest rates for the amortization period of the AID loan. However, the sensitivity analysis indicates that at a fifty percent reduction in trade volume of key commodities, CATCO could not absorb significantly less concessional rates than seven percent.

RDO/C reviewed this issue at length. Our objective was to set loan terms which were reasonable in terms of CATCO's ability to pay without excessive concessionality or windfall profits to shareholders. Several alternatives were considered as described below.

Regarding interest rates and loan repayment schedule, a clause in the loan agreement permiting AID to readjust either or both was reviewed and rejected as being one-sided and difficult if not impossible to negotiate. A repayment clause which would automatically shift interest rates upward triggered by achievement of specific financial objectives also was considered and rejected because it could induce CATCO to alter its behavior to avoid an automatic shift in interest rates.

A third alternative was to link the payment of dividends to renegotiation of the interest rate on the AID Loan. It is proposed that AID approval will be required before any dividends are paid to shareholders. At the time of such a request, AID will review CATCO's overall financial position and may request an adjustment in the loan interest rate up to the prime lending rate prevailing in Barbados at the time of the adjustment. Agreement on the adjustment of the rate would be subject to mutual agreement.

In recommending the loan terms proposed and the renegotiation clause outlined above, we believe that the best balance has been struck between AID's objectives in supporting CATCO, the concerns of CATCO's investors, and the potential impact CATCO can have in expanding the market for regionally-produced agricultural commoditic

D. Economic and Social Analysis

The long-term goals of this project stress the developmental role of a regional trading company (CATCO) in expanding the volume of output and consumption of selected food crops grown by small farmers in regional LDCs. Related goals are to reduce dependence on imports and to increase sales to extra-regional markets.

The effects of CATCO operations on supply response, marketing efficiency and employment will be examined. A summary description of the impacts of CATCO's activities on different food system participants provides a conjectural overview of the positive results to be realized by the project, as well as some of the competitive adjustments that will likely occur.

1. Market Potentials

Trinidad/Tobago and Barbados are the primary consumer markets in the Eastern Caribbean with Trinidad/Tobago being by far the largest in terms of both population and income, Table 20.

TABLE 20

POPULATION AND PER CAPITA GDP

SELECTED EASTERN CARIBBEAN COUNTRIES

COUNTRY	POPULATION 1981 THOUSANDS	PER CAPITA GDP 1981 US$
Trinidad/Tobago	1,127	4,000
Barbados	251	3,710
St. Lucia	122	1,070
St. Vincent	112	660
Dominica	86	804
Antigua/Barbuda	76	1,650
St. Kitts/Nevis	50	1,030
Montserrat	12	1,680

SOURCE: IBRD Economic Memos for 1982, and Barbados Economic Report for 1981.

The food commodities which are imported almost entirely from outside the Region are wheat, rice, deciduous fruits and white potatoes. Other commodities that are imported in substantial quantities are pulses, dry onions, processed vegetables, beef and pork. Significant quantities of fresh citrus, carrots, tomatoes and other vegetables are also imported. This last set are items that can be produced in the Region and traded intra-regionally by CATCO as a means of increasing regional self-sufficiency.

The estimated imports of fresh produce by Eastern Caribbean countries during 1979 provides a rough estimate of the size of the market within which CATCO will establish its primary trading operations. (Table 21). However, the potential volume of trade is probably underestimated because these data are based on official trade statistics, which apparently do not account for unlicensed product movements. Furthermore, recent developments in Trinidad indicate significant increases in consumer demand for food commodities while local agricultural production has failed to respond. Consequently, market assessments by CATCO consultants have identified sizeable market opportunities in Trinidad for imported bananas, plantain and citrus. In the banana case there is an opportunity to redevelop what was once a sizeable market for room ripened bananas. CATCO has conservatively estimated their banana sales in Trinidad at 50 tons per week by year 2 of their operations. Although the CATCO volume may grow in succeeding years, they project a declining market share as other firms become competing suppliers of "room ripened" bananas.

TABLE 21

ESTIMATED IMPORTS OF SELECTED FOOD COMMODITIES;

EASTERN CARIBBEAN COUNTRIES, 1979

COUNTRY	VEGETABLES	ROOTS	FRUIT[a/]	PULSES
	(TONS)			
Trinidad/Tobago	6,542	20,529	245	1,542
Barbados	1,926	8,358	2,437	567
St. Vincent	139	174	-	109
St. Lucia	530	-	-	54
Dominica	158	114	-	133
Grenada	261	475	-	47

a/ Does not include bananas or deciduous fruits

SOURCE: (12) - Systems - 1980 Study for CDB.

The CATCO management staff and their IDB financed consultants have made preliminary projections of product sales potentials for Trinidad/ Tobago and Barbados. Secondary Caribbean markets will include the Dutch Antilles, the French W.I. Islands, the Virgin Islands and possibly Puerto Rico. (For details see the Technical Analysis, IV-A and Annex C). Much additional market investigation and sales promotional effort will be required to actually achieve these target volumes.

It is important to point out that a substantial portion of CATCO's projected sales will be net additions to the current volume of intra-regional trade. Part of the increased volume will be products that are now available but not being harvested and marketed, e.g. bananas, plantain and grapefruit. Another component of increased sales will be realized by providing more stable year around supplies of fruits and vegetables and by delivering higher quality products. This presupposes some shift in demand towards the more readily available and higher quality products. This demand will be reinforced by a continued upward trend in consumer incomes and population growth.

A potential barrier to the achievement of expanded intra-regional produce trade is the import restrictions imposed by individual countries in their efforts to encourage and protect local producers. New procedures for administering the Agricultural Marketing Protocol (AMP), discussed in III D, indicate that efforts will be made to maintain open markets among member countries. The actual implementation of the revised policies will be of importance to CATCO's intra-regional trading activities.

CATCO will develop extra-regional trading on a very limited and experimental basis beginning in year 3. The projected volumes of a few items such as mangoes, sweet peppers and assorted exotica are quite modest. The principal target markets are Europe and North America. The major difficulty in expanding extra-regional sales is the development of adequate supply sources of high quality, carefully packaged and handled produce. The accumulated experience with bananas, grapefruit and mangoes can be drawn upon as CATCO works with other producer groups.

2. Supply Response

The supplies of fruits and vegetables to be traded by CATCO will originate mostly from LDC countries in the English-speaking Eastern Caribbean. The commodities are those produced predominantly by small farmers (less than 25 acres).

CATCO s product purchases will come from three sources:

a) For bananas, the entire volume will initially come from fruit that has been produced but is not accepted for export to the U.K. Currently these bananas are typically not entering the market. Some are utilized for livestock feed.

b) For plantain and citrus, especially grapefruit, it is estimated that existing production is adequate as the initial source for CATCO's purchases.

c) For other fruits and vegetables it will be necessary for CATCO to compete in the short-run with other traders for available production. However, the volume build-up in years 3 through 5 of vegetables is highly dependent on new production that might be attracted by market incentives, including forward contracts offered by CATCO.

As has been stressed at various points in this document, the long-term success of the CATCO project rests heavily on the effectiveness of agricultural research and extension, and the coordination of CATCO field operations with these publicly supported (and AID assisted) activities. Loan funded technical assistance has been included in the CATCO project to facilitate the needed coordination. In addition CATCO has planned to offer buying services for selected inputs, such as fertilizer, seeds and pesticides that are directly related to output commodities in which CATCO will trade.

It is reported that ample land is available within the Region for expanded production of fruits and vegetables. Some of this land is not now being cultivated while additional land is likely to become available as sugar production declines and land is shifted to other crops. Various donor assisted programs now exist to facilitate crop diversification and the production of more labor intensive crops, especially fruits and vegetables. These programs can be effectively linked with CATCO's efforts to organize and develop markets.

A very important group of project beneficiaries are the small farmers in the LDC countries within the Region. A high percentage of the potential producers have five acres or less of available land. The family labor on these farms is often underutilized, hence, incomes can be increased by undertaking commercial production of fruits and vegetables.

3. Improved Marketing Efficiency and Vertical Coordination

In Part II B of this paper a series of market conditions were identified which, in the aggregate, have served as constraints to output expansion and increased consumption, and which contribute to inefficient marketing processes. The CATCO project is seen as a significant means to reduce these constraints and improve the vertical coordination of the production and marketing process.

Marketing efficiency is said to be improved if the same products and related services can be provided at a lower cost or if more desirable products can be delivered at the same cost. Under actual market conditions there will be technical and institutional innovations that tend to reduce costs while simultaneously new products and services will be developed that tend to increase costs. Hence, efficiency can be improving even when prices to consumers are stable or are trending upwards.

In the case of CATCO it is anticipated that the classification, packaging and cooling of produce will add operating costs when compared to existing methods of product handling. However, to offset the higher operating costs there will be significant reductions in product losses due to spoilage, shrinkage and deterioration. The end products which the CATCO system can provide will likely cost less and will be much better products than are typically available in the current market. On products such as plantain, mangoes and tomatoes where spoilage losses are currently very high (30 to 40%) CATCO's improved methods of handling and large scale operations should reduce overall marketing costs but aggregate reductions in excess of 10 to 15% should not be expected unless major breakthroughs in ocean shipping arrangements can be achieved.

There are undoubtedly significant opportunities to reduce the consumer price of fruits and vegetables as improved production technology and management increases yields and reduces production costs per unit of output. Improved information and better planning of production in relation to actual market opportunities will reduce risks for farmers and contribute to more stable incomes. Greater stability and dependability of markets should also reduce trading risks and over time contribute to reduced marketing margins. The combination of reduced farm production costs and increased marketing efficiency associated with the CATCO project and related efforts will benefit both producers and consumers.

4. Employment Effects

In the first 2 years of the project employment increases will occur in packing houses for bananas and plantains and citrus. Some additional labor will be required at the farm level to harvest plantains, oranges and grapefruit that may have been left unharvested without CATCO's product buying. Additional labor will also be needed in box manufacturing, ripening room operations and to some extent in loading and unloading air and vessel shipments.

Beyond year 2 the employment impacts will increase significantly as new production of vegetable crops begin to expand. These impacts will be noticed in farm input distribution, farm level production, and in all phases of the market process -- transporting, sorting, packaging, wholesaling and retailing.

The project will have only modest impacts on the many small traders operating within the various island markets. These traders will continue to assemble local produce and sell through traditional channels -- public retail markets and street vending. The volume and composition of their sales may be affected somewhat by CATCO stimulated imports from other islands, e.g. room ripened bananas, and over the longer-run their relative share of an expanding market will decline in favor of supermarkets and larger-scale produce merchants. The rate of this adjustment will be affected by alternative employment opportunities for small traders.

It is possible that some individuals who divide their time between farm production and trading may find it more profitable to shift all of their efforts to production for an expanding and more stable market.

Hucksters that specialize in inter-island trade are more likely to feel the effects of CATCO's penetration of the intra-regional market. Apparently this is not a large group of individuals and they typically trade in several products, many of which will not be handled by CATCO. Hucksters also engage in the trading of non-food items especially in arranging return trips from major market islands such as Trinidad and Barbados. It is anticipated that most of these traders will find ways to adjust to CATCO's presence in the market and will likely take advantage of any improved transportation and other services developed by or for CATCO.

5. Impact on Women

Of particular importance in the Caribbean is the contribution of women to agriculture; they play a significant economic role in food production, processing/preserving and marketing. It is estimated that much of the locally grown and marketed food is produced by women. On an island-by-island basis, women's participation in the agricultural labor force is 30 in St. Vincent, 47 in St. Lucia, and over 50 in Montserrat and Antigua. Although women comprise approximately 30 to 40 of the agricultural labor force, this type of employment is viewed as a low status occupation.

The effects of a formal trading company will be both positive, as well as negative in reference to its impact on women. Women will directly contribute to the production of fruit and vegetable crops to be traded by CATCO and employment opportunities will increase as a direct result of the expanded CATCO activity. In addition, women hucksters engaged in national level trade will be affected relatively little by CATCO's operations.

On the other hand, most food marketing among the islands is conducted by hucksters, hawkers, or street vendors; most of whom are women. CATCO's entry into intra-regional trade will compete directly with these existing hucksters, at least on some commodities such as citrus, mangoes, and vegetables. However, as mentioned earlier these women traders typically handle a wide range of commodities, as well as engage in non-food trade on return trips. Thus, it is expected that most of the traditional hucksters will be able to accommodate to competition from CATCO. Compared to the number of women engaged in agricultural production, rural assembly functions, and other related services, the number of women traders that may be negatively affected is quite small. Therefore, the impact of CATCO's proposed operations should have a positive net effect on employment opportunities for women.

6. Impact Summary - Output Trading

The anticipated effects of CATCO's output trading activities have been summarized below.

Groups Affected	Anticipated Effects
1. Producers	* producers will increase production due to encouragement from CATCO;
	* sales to CATCO of increased production and sales of produce which would otherwise spoil in the field will result in increased incomes for farmers;
	* small-scale producers represent approximately 85% of farmers in the Region but produce a substantially lower percentage of total agricultural output. Since CATCO is not specific about who it will purchase outputs from, it is possible that income of some larger scale producers will increase more than incomes of the small-scale producers.
2. Hucksters	* the hucksters, who are presently responsible for a relatively large percentage of intra-regional marketing, will lose market share to CATCO, resulting in decreased income;
	* most hucksters deal with 10 - 12 crops and, therefore, the impact of CATCO will be softened by the flexibility with which the hucksters can move in and out of different crops;

Groups Affected	Anticipated Effects
	* CATCO will be dealing in some new markets which will not affect the huckster, e.g. room ripened bananas which make up a significant portion of output to be marketed by CATCO;
	* hucksters may benefit by adopting handling practices and using transport services that are improved by CATCO market development efforts;
	* some hucksters may become supply sources for selected products in areas where no producer organizations exist or where forward sales commitments can only be met by buying product through local produce assemblers.
3. Producer Cooperatives	* producer coops are responsible for export of all citrus from Dominica. The producer coops will have increased incomes from sales to CATCO of produce which would otherwise spoil and sales of new production encouraged by CATCO.
4. Banana Growers Associations	* individual Banana Growers Associations in St. Vincent, St. Lucia, Dominica and Grenada are presently responsible for export of bananas from the individual countries. Many of the bananas which reach the Banana Growers are rejected for export sale and have no significant alternate use. CATCO will open a marketing channel for regional grade bananas, selected from those rejected for export sale and as a result, the incomes of the Banana Growers Associations will increase.
5. Wholesaler, Large Retailer	* these groups will purchase output directly from CATCO, as a result they will have: - greater availability of produce, - more secure supply and better quality of produce, and - new products, i.e. room ripened regional grade bananas;
	* as a result of the above, income will increase;
	* as risk in securing produce supplies decreases the wholesale price may decrease.

Groups Affected	Anticipated Effects
6. Retailers	* retailers who purchase CATCO output via wholesalers will have: - greater availability of produce, - more secure supply and better quality of produce, - new products, i.e. room ripened regional grade bananas, and - possibly lower costs if wholesalers' savings are passed on; * as a result of the above, incomes will increase; * smaller retailers who presently purchase most of their produce from hucksters and who continue to do so may experience a decrease in availability of some commodities and, therefore, a decrease in income as CATCO takes market share away from the huckster.
7. Street Vendors	* street vendors are, for the most part, supplied by hucksters and therefore may experience a decrease in availability of produce, resulting in decreased income, as hucksters lose market share to CATCO; they could adjust by shifting their source of supply; * as in the case of hucksters, the impact will be softened by the flexibility of street vendors to move in and out of different commodities.
8. Restaurants and Hotels	* greater availability of high quality fresh produce will improve menu selection, lower meal costs, improve profits and make local conditions more attractive to tourists.
9. Consumers	* as a result of CATCO, consumers will have access to more and better quality produce which will improve nutrition; * the improved marketing system should lead to a longer-term decrease in prices resulting in a savings to the consumer.

7. Impact Summary - Input Trading

Groups Affected	Anticipated Effects
1. Producer Organizations	* producer organizations purchase inputs by tender which are open to international and regional tenders, however, there are no regional firms who tender at the present time; * if CATCO is selected as a supplier the producer organizations may have improved service associated with their supplier being based in the Region.
2. Distributors, Distributor Sales Force, & Distributor Owned Retail Outlet	* CATCO will be supplying existing regional distributors; * these distributors will: - have access to new products, - have a more secure supply of inputs, - have inputs available at the time they are required, and - realize increased income.
3. Retail Outlets Not Owned By A Distributor	* these retail outlets purchase inputs from a local distributor; * with CATCO supplying the distributor, the retail outlet will have: - more secure supply and improved availability of inputs, - access to new products, and - increased income.
4. Producer	* producers who purchase inputs from producer organizations or distributors supplied by CATCO will have: - access to new products, - a secure supply of inputs, - inputs available when required, and - improved information concerning the use and suitability of inputs;

Groups Affected	Anticipated Effects
	* the above will result in increased production and assuming a secure market for output, increased income to the farmer;
	* if farm gate prices are currently high because of risk, as the risk involved in input supplies decreases and assuming a secure market for produce, there should be a decrease in farm gate price.

E. Environmental Analysis

1. Summary

The CATCO scheme purports to expand the trade of selected locally produced crops, and selected agricultural inputs, in eight Eastern Caribbean countries. Of 32 pesticides requested, it is recommended 23 be approved and 9 disapproved. All approved formulations are low to moderate in mammalian toxicity and will be sold to distributors already in place, not to end users of pesticides. Most pesticides approved duplicate those now available, but their shortages at critical cropping periods will be negated by CATCO inventories. Except for Barbados, regulations controlling pesticides are not enforced in the Eastern Caribbean. CATCO will subscribe to Barbados requirements, spot check pesticide residues in the produce it trades in, and provide information to pesticide users on pest management practices and pesticide safety.

2. Introduction

Initially, CATCO trading will involve the commodities bananas (and plantains), grapefruit, and oranges. Subsequently peanuts, carrots, cabbage, tomatoes, mangoes, onions, pigeon peas and other commodities are expected to be added. CATCO will also trade in seed for desired varieties of vegetables and select other inputs critical to crop production, such as fertilizers and pesticides, although sale of inputs will comprise a very small part of CATCO's total sales, and chemicals a fraction of that. The Project Paper notes that no signle distributor of farm inputs operates on a region wide basis at present. CATCO will do this. Purchases will be made in bulk, then channeled to the farm level through established wholesalers and retailers.

The Project Paper notes also the lack of availability of farm inputs, and their poor quality, as further problems in the Caribbean which will be addressed by CATCO. The Table below shows the number of pesticides used mainly in the agricultural sector, which are available now in selected Eastern Caribbean countries:

Table 22

Country	Insecticides	Fungicides	Herbicides	Other 1/
Antigua	20	11	11	4
Montserrat	32	11	24	13
St. Kitts, Nevis	7	2	9	NA
St. Lucia	8	8	8	7
St. Vincent	25	8	12	6
Trinidad, Tobago	43	16	13	7

1/ Includes rodenticides, nematicides, and molluscicides.

From "Pest and Pesticide Management in the Caribbean" Vol. III. Proceedings of Seminar and Workshop, CIPC/USAID, 3 - 7, Nov. 1980, Barbados.

In many instances the pesticides likely to be traded by CATCO duplicate those already available in some of the target Caribbean countries. Yet, availability of approved pesticides through CATCO will assure them a continuing place in the agriculture of all the countries. The Project Paper notes that "pesticide products will be chosen for: 1) low mammalian toxicity, 2) high pesticide efficacy, and 3) wide enough spectra to reduce the number of products with which the largely unsophisticated farmers of the Region must become familiar".

The Environmental Assessment addresses principally the pesticides intended to be traded by CATCO but other possible environmental ramifications are included also. It has been prepared in accordance with procedures set forth in Regulation 16 of the Code of Federal Regulations, Part 216, Environmental Procedures (effective 26 June, 1976 as amended 3 May, 1978.

3. Risk-Benefit Considerations

a) USEPA Regulatory Status of Requested Pesticides

Of the 32 pesticides which CATCO proposes for trading, 23 are recommended for approval by AID (see Table 23) and nine are recommended for disapproval by AID (see Table 24). All those recommended for approval are registered by the USEPA for use on the same or similar crops (or sites), or have an acceptable daily intake and maximum residue limit established by the Joint FAO/WHO Expert Committee on Pesticide Residues. None of the 23 has had its uses cancelled, withdrawn, or suspended in the U.S. Reasons for Recommending Disapproval of 9 pesticides are given in Table 24.

b) Basis for Selection of the Required Pesticides

Those recommended for approval were done so on the basis of low to moderate mammalian toxicity, spectrum of crop applicability, local experience which demonstrated efficacy against crop pest organisms (which vary among the eight countries, but except for three are not specifically named in the Project Paper) and because they are cleared for use on the commodities of CATCO interest by USEPA or FAO/WHO, or both. Because they are important to the crops of CATCO interest, their timely availability can be better assured whereas pesticides supplied by others are sometimes unavailable at critical points in the cropping season. It is assumed in the Environmental Assessment that end users of pesticides will conform to labeled instructions as to crop to be treated, pests to be controlled, dosage, pre-harvest interval following last application, and all safety precautions. As CATCO requires additional approved pesticides, they can be added appropriately amending the EA.

c) Extent to Which the Proposed Pesticide Uses are Part of an Integrated Pest Management Program

No mention is made in the Project Paper that integrated pest management (IPM) is an objective of CATCO. Pest threshold numbers are poorly known in the Caribbean Region, as elsewhere. Several features of the Region and of several of the pesticides selected, however, lend themselves to the IPM concept. For example, use of several systematic insecticides (e.g. Cyon, Orthene), and other selective insecticides (e.g. Kelthane, Dipel) should result in survival of a greater number of naturally occurring beneficial organisms, than traditional contact insecticides. The fact that

TABLE 23

PESTICIDES PROPOSED BY CATCO WHICH ARE AUTHORIZED FOR TRADING, ON BASIS OF CLEARANCE BY USEPA OR FAO/WHO, OR BOTH, ON TARGET COMMODITIES VOTED

Pesticide Name	Banana & Plantain	Grapefruit & Orange	Peanut[1]	Carrot	Cabbage	Tomato	Mango	Onion	Pigeon Pea[2]
Diazinon			+	+	+	+		+	+
Kelthane			-	+	+	+		+	+
Malathion			+	+	+	+		+	+
Orthene			-	-	+	+		-	-
Carbaryl			+	+	+	+		-	+
Cygon			-	+	+	+		+	+
Benlate			+	-	+	+		-	-
Captan			-	+	+	+		+	+
Difolatan			+	-	-	+		+	-
Peltar[3]			-	+	-	+		+	-
2,4-D Amine	Proposed sugar cane use is approved[4]								
Atrazine	-	Proposed sugar cane use is approved[5]							
Trimiltox Forte[6]			+	+	-	+		+	-
Mesurol		+					-		
Diphacinone	Target crops not specified. Approved for uses specified by label.								
Dipel			+	+	+	+		+	+
Diuron	Proposed pineapple use is approved								
Bromacil	Proposed pineapple use is approved								
Copper Sulfate		+							
Kocide			+	+	+	+		-	+
Mancozeb			+	+	-	+		+	-
Cypermethrin			-	-	-	+		-	-
Dacthal			-	-	+	+		+	+

1/ Peanut here considered a "vegetable", since CATCO list does not separate out peanuts.

2/ Peas and pigeon pea are considered similar uses.

3/ A combination of methyl thiophanate and maneb. Uses approved are those with tolerances for both components.

4/ Tolerances established also on sugar cane bagasse, sugar cane forage, and sugar cane molasses.

5/ Tolerances established also on sugar cane fodder and sugar cane forage.

6/ A combination of mancozeb and copper salts. Uses approved limited to those for which mancozeb is approved; most copper compounds exempt from requirement of tolerance when applied to growing crops.

TABLE 24

PESTICIDES PROPOSED BY CATCO WHICH ARE NOT APPROVED FOR TRADING

Pesticide	Crop	Reason for Rejection
Decis (decamethrin)	Vegetables	Pesticide not cleared for vegetables of interest by USEPA or FAO/WHO
Counter (terbufos)	Banana	Highly toxic material. Not yet cleared for banana by USEPA or FAO/WHO
Pay-Off (AC 22, 705)	Vegetables	Not cleared for vegetables of interest by USEPA or FAO/WHO
Prowl (pendimethalin)	Vegetables	Not cleared for vegetables of interest except temporary tolerance for peas 1/
Anthio (formothion)	Vegetables	Not cleared for vegetables of interest by USEPA or FAO/WHO
Ekalux (quinalphos)	Vegetables	Not cleared for vegetables of interest by USEPA or FAO/WHO
MSMA	Sugar Cane, banana	Not cleared for banana by USEPA or FAO/WHO. Tolerance pending (by USEPA) for sugar cane
Gramoxone (paraquat)	Vegetables, banana	Classified as restricted material by USEPA. Too hazardous for general use in Caribbean
Ridomil MS (metalaxyl & mancozeb)	Vegetables	Metalaxyl component not cleared by USEPA or WHO/FAO for use on vegetables of interest

1/ Peas and pigeon pea represent similar use.

most crops of interest to CATCO will be grown on small farms and pesticides will be delivered to crops by hand equipment, offer greater opportunity for spot spraying of threatening infestations, than do commercial sprayers (including aircraft) operating on large acreages.

d) Proposed Method(s) of Application, Including Availability of Appropriate Application and Safety Equipment

Because crops of interest to CATCO will be produced on small farms, a complete line of back-pack high volume sprayers and battery operated ULV sprayers, will be offered for sale (through distributors) to growers by CATCO. CATCO will also sell personal safety equipment and spare parts for its equipment.

e) Acute and Long-Term Toxicological Hazards, Either Human or Environmental, Associated With the Proposed Use and Measures Available to Minimize Such Hazards

With the exception of Diphacinone and Mesurol, the acute oral toxicities of approved pesticides are low. The high toxicity of technical Diphacinone is mitigated by its formulation as bait pellets of about 2% active ingredient. Further, this rodenticide is a multiple dose anticoagulant toxicant like the more familiar warfarin which has been used successfully for decades without significant deleterious human or environmental consequences. Similarly, the high toxicity of technical Mesurol is mitigated by its formulation and use as a pellet orgranule of less than 5% active ingredient, for slug control. Carbaryl, and to a lesser extent Orthene, are highly toxic to honey bees. Users must be cautioned not to spray crops in flower with these materials.

f) Effectiveness of the Proposed Pesticides for Proposed Uses

While pest organisms are not specifically named in the Project Paper, all pesticide uses are reported to be effective for the purposes intended, as demonstrated by their evaluation under conditions of local use.

g) Compatability of the Proposed Pesticides With Target and Non-Target Ecosystems

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

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

The ten Eastern Caribbean islands of St. Kitts, Nevis, Antigua, Montserrat, Dominica, St. Vincent, St. Lucia, Barbados, Trinidad & Tobago, comprising most of the Windward and Leeward Islands, lie between latitudes 10 degrees 3 minutes N and 17 degrees 20 minutes N. Including their dependencies, these small islands total only 3,135 square miles but have a population of 1,778,000 persons.

Many of these islands were transformed into hugh sugar cane estates during the 18th century and were stripped of much native vegetation to accomodate that industry. Although sugar cane continues to occupy a large proportion of some islands, other plantation type crops such as bananas, cacao, and coconuts have become widely established. Tropical rain forests persist on most islands at higher elevations, which reach to around 5,000 feet in Dominica. With an average population of 567 persons per square mile, these islands of necessity accommodate many thousands of small agricultural holdings. Little desirable wildlife exists except for birds; Dominica, for example, has 135 native species.

These islands have tropical maritime climates tempered by sea breezes. Temperatures average from 70 to 85 degrees F. Annual rainfall ranges from 35-50 inches on St. Kitts and Nevis to 70-300 inches on Dominica. Numerous streams occur on Montserrat, Dominica, St. Vincent and St. Lucia but Barbados has none. Desalinization provides potable water on Antigua and wells on Barbados and Montserrat. Soils vary from coral limestone, moderately to heavy in alkalinity on parts of Barbados; to those of volcanic origin on St. Kitts, Nevis, Dominica, St. Lucia and Tobago; to heavy clay in parts of Antigua.

Tourism is a substantial industry over this Region; those facilities and the resident population are concentrated along their coasts. Agriculture and what native vegetation remains occupy the interior of the islands.

i) <u>Availability and Effectiveness of Other Pesticides or Non-Chemical Control Methods</u>

Virtually any pesticide in the market places of North and South America, and Europe, can find its way to the Eastern Caribbean, and many of them have. Part 2 above records the numbers of pesticides now available for agriculture in six of the eight target countries. In addition, Barbados in 1970 had approved nearly 500 pesticide products of all kinds for use in the agricultural, public health, and household sectors. This number includes such products as wood preservatives, moth balls, and insecticidal dog collars, but excludes household disinfectants, bleach, swimming pool additives, etc. which according to USEPA are pesticides also. There is no more basis for questioning the efficacy of the pesticides used in the Caribbean, since all are imported from developed countries, than to doubt the efficacy of those used in the U.S.

Concerning non-chemical control methods, efforts to achieve biological control of insect pests have been most successful and significant in sugar cane production. Relatively little progress along this line has been made in the crops of interest to CATCO; however, several varieties of vegetables and fruits resistent to important pests are available.

j) <u>Requesting Country's Ability to Regulate or Control the Distribution, Storage, Use and Disposal of the Requested Pesticides</u>

<u>St. Kitts and Nevis</u>:- Its government enacted legislative, known as the Pesticides Act No. 20 of 1973, to regulate pesticides. Apart from the Ministry of Agriculture circulating a list of highly toxic pesticides, and advising against their importation, provisions of the Act apparently have not been implemented.

Antigua:- Regulations have been drafted by the Pesticide Control Unit to control pesticide importation, storage, and sales; and worker protection and produce safety from pesticide contamination. There is no functional pesticide legislation because the Regulations have not yet been acted on.

Montserrat:- The Pesticides Control Ordinance was brought into effect in April, 1975 to control importation, sales, storage and use of pesticides. To date, the Ordinance is non-operative; firms and individuals appear free to import and use pesticides as they see fit.

Dominica:- A Pesticide Control Law has been enacted to cover pesticide registration, labelling, recommendations, storage, application, residues, worker exposure and environmental impact. Apparently the law has not been enforced to date.

St. Lucia:- The Pesticides Control Act was passed in March, 1975 to regulate the manufacture, importation, sales, storage, and use of pesticides. A Pesticide Control Committee was also named. The Act has not yet been proclaimed and its regulations not yet enforced.

St. Vincent:- The Pesticide Control Act of 1973 provides for the regulation of importation, sales, storage, and use of pesticides. Its Board was never appointed and its regulations never enforced.

Barbados:- The Pesticides Control Board approves manufacture, importation, storage, use, distribution, exposure, and sales of candidate pesticidal products. It first requires information on mammalian and environmental toxicity, methods of analysis, and efficacy under tropical conditions. The Board's approval to use or market a pesticide extends for three year periods only, subject to earlier revocation for cause. The Ministry of Health regulates pesticide disposal as well as occupational health and safety aspects relating to pesticide manufacture, formulation, and commercial pest control operations.

Trinidad and Tobago:- The Pesticide and Toxic Chemicals Act, enacted in December, 1979, regulates importation, storage, manufacture, sale, use, and transportation of pesticides and toxic chemicals. Regulations under the Act have not so far been enforced.

Despite the potential hazards and other problems relating to pesticides, it is clear from the above that except for Barbados, little to nothing is being done to regulate the orderly flow of pesticides from importation (or manufacture of formulation) to proper end use and disposal. CATCO manangement has indicated that it will subscribe in its pesticides trading operations, to the requirements of Barbados law. It will also respect whatever regulations may be enforced in the future in other countries in which trading is done, and will embark on a program of spot-checking for residues in the produce it trades in. Problems of over tolerance levels will be addressed and corrected without delay.

The more stringent requirements of Barbados law do not appear to address the issue of pesticide transportation. Because CATCO will convey some pesticides by sea in its trading operations, safeguards to prevent contamination of produce or other products will be considered.

k) Provisions Made for Training of Users and Applicators

It is emphasized that CATCO will not sell pesticides directly to end users or applicators, but to distributors already in place in the private sectors of the eight countries involved, who in turn will sell to end users. Beyond extention type training available through the Caribbean Agricultural Research and Development Institute and the University of the West Indies, CATCO will provide limited training on proper pesticide use and safety to users through its field officers. CATCO plans to issue, and make available at no cost to the pesticide user, a pest management manual detailing control schedules for each of the crops in which it trades. Pesticides named will be those listed as approved in the Environmental Assessment, and its future amendments. This manual will also describe proper pesticide safety procedures.

l) Provisions Made for Monitoring the Use and Effectiveness of Pesticides

Because CATCO will be selling pesticides to distributors, who will be marketing pesticides provided by other firms. CATCO will be able to monitor pesticide sales but not their proper use by the farmers who purchase them. CATCO will engage field officers to monitor production and time-tables of crops of interest in the eight countries. These officers will be in contact with growers and pesticide users, and will likely be the persons who provide growers with the pest management manuals noted above. Efficacy of pesticides used will be evident during field visits, and very clearly apparent at harvest. It will not be in CATCO's best interests to market pesticides which are ineffective. As noted in Section (j), CATCO will spot-check pesticide residues in the crops in which it trades.

4. Other Environmental Issues

a) Over the 525 mile spread of countries involved, specific pests are discontinuously distributed. Moko disease of bananas, caused by Pseudomonas Solanarearum, for example, reportedly occurs on Grenada but not on other banana growing islands nearby and is representative of the kind of threat exacerbated by trading crop commodities. The FAO/Caribbean Plant Protection Commission drafted a model Act for plant quarantine which was approved and recommended for adoption in 1972. By 1980, however, plant quarantine services in the Region were still described as "persons". Unless strict phytosanitary measures are adopted by the eight countries involved in the CATCO scheme, pests now common to one or a few countries will quickly become common to all.

b) Assuming success of the CATCO scheme in its crop commodity trading operations, increases in acreages of the crops of interest to CATCO (except bananas) will occur. Some diversion of land use, probably from sugar cane production (because of low world sugar prices), can be expected. Because sugar cane is seldom regularly treated with pesticides, and crops of interest to CATCO will require more regular treatment, a slight though insignificant increase in the overall pesticide load in the Eastern Caribbean will result.

V. IMPLEMENTATION ARRANGEMENTS

A. AID's Role in Project Monitoring

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

The issue of adequate monitoring and accountability is complex in terms of AID's relationship to a private sector firm. CATCO, while technically a mixed corporation, will act as a private sector entity and therefore must have adequate freedom of action to respond quickly to opportunities and problems without reference to AID. While we recognize that project funds will be disbursed relatively quickly in a high-risk project, AID cannot interpose itself in the day-to-day operations of CATCO. Therefore, RDO/C proposes to approach the management of the project more like an equity partner, with formal AID approval of specific CATCO requests or actions kept to a minimum. Reporting requirements also will be limited to provide essential (and mostly financial) information. However, since CATCO is incorporated and headquartered in Barbados, informal contacts will be stressed as has been the case during the intensive review process.

The key point of reference in relation to RDO/C's monitoring will be the Business Plan to be submitted by CATCO as a condition precedent to initial disbursement. In addition to confirming the marketing strategy and approach of CATCO, the Plan will detail the initial 12 months of company operation, including quarterly cash flow projections.

The financial projections submitted with the Business Plan will be the basis for the procedures for managing project disbursement described under Section V.C. below. This procedure will permit periodic up-dating of CATCO's financial planning without requiring submission of separate reports or plans.

The Plan also will contain a list of the specific investments which CATCO intends to pursue during that period together with a description of those investments and the rationale for CATCO's involvement in them. During Mission review, consideration was given to specific AID approval prior to CATCO's use of investment funds under the AID loan. However, this procedure is not recommended given the relatively small size of the anticipated investment decision and the capability of CATCO. Our concern is to be satisfied that all investments directly facilitate CATCO's trading operations and not to pass judgement on the financial merits of each investment. Therefore, we will request that CATCO inform AID only of any additions to the list of investment opportunities contained in the Business Plan prior to their final decision to undertake that investment.

Major monitoring concern will be focussed on the financial condition of CATCO and its management. To assure timely and accurate financial data, CATCO will be required to submit a certification from its external auditors that its accounting system conforms to generally accepted accounting practices as a condition precedent to initial disbursement. Subsequently, we will require audited financial statements every six months (in addition to the quarterly financial data submitted in support of disbursement requests as described below).

The key to CATCO's success will be its management. As discussed above, CATCO will be managed under a contract with the Jamaican firm of Grace Kennedy for a period of three years. We will require that CATCO continue to be managed under a contract with a private firm for the life of the loan and any new contracts or changes in the management contract will require prior RDO/C approval. In addition, the General Manager and such key personnel as RDO/C may designate will be subject to prior approval.

Following receipt of the audited financial statements during the loan disbursement period, CATCO management and RDO/C will meet to review progress to date and problems/issues which are affecting the project. The Business Plan will be reviewed together with revised financial projections. Major changes in CATCO's strategy and/or business plan will be discussed and formally amended if necessary.

B. Evaluation

Two types of evaluations are envisioned: progress evaluation at least annually during the loan disbursement period including assessments of investment projects and an in-depth evaluation before the PACD.

The progress evaluations will look at CATCO's overall performance including: financial viability, impact on regional trading patterns, impact on production, and role as an investor to encourage others to move into regional agricultural trading. Investment projects will be evaluated and include: (a) verification of the eligibility criteria employed in the investments, (b) examination of the impact on the capital investments on CATCO's profit/loss and balance sheets, and (c) estimation as to the degree to which the investments have contributed to CATCO's purposes and operational objectives. The Project Officer will also review and evaluate the utilization of technical assistance.

The in-depth evaluation will be conducted during project year 4 and before the commencement of CATCO's 5th year of operations. This evaluation will be undertaken by individuals who were not directly involved in CATCO operations or provided TA to the project. The evaluation will explore four fundamental aspects of the project:

1. To what extent has the project contributed directly and indirectly to the goal of improving regional food self-sufficiency? Particular issues/questions to be examined include: (a) have regional, especially regional LDCs, land use patterns altered significantly toward greater production in commodities for intra-regional trade and consumption? (b) has intra-regional trade in CATCO promoted commodities increased and achieved planned objectives? (c) have extra-regional imports in the same commodities decreased or at least fallen relative to increased demand? and (d) have income levels of smal producers trading with CATCO risen?

2. Have the project purposes been achieved? The financial viability of CATCO will be analyzed on the basis of the original business plan and subsequent financial reports. These reports will also constitute the basic information source for an evaluation on changes in the consumption of traded commodities over time and at least judgemental estimates of the degree to which CATCO's market development activities have contributed to relieve regional marketing constraints.

3. Has the project increased private sector investment in agriculture and intra-regional food trade? Although it will not be possible for an evaluation to produce precise information concerning the spread or multiplier effects, an examination of investments, levels of trade, changes in trading margins and shifts in the patterns of trade over time should yield some indicators of increased private sector involvement.

4. Has the CATCO Project produced lessons which AID can use in other private sector marketing projects? Interested offices in AID/W, especially PPC/E, PRE and S&T, should be called upon to review the project strategy and implementation. Some specific areas which appear to warrant close evaluation: Has the project stimulated additional investments producing a greater regional capacity especially in transport and warehousing? Has CATCO had an impact on policies or strategies beyond the project itself, e.g., on producers' associations, other trading organizations, and public marketing boards? Has CATCO enabled RDO/C to better coordinate other Mission projects (agribusiness, extension, credit) and those of other donors to achieve the desired impact?

Approximately 23 person-months of consultant services will be required over the life of the project to perform evaluations. This includes skills such as financial analysis, economics, marketing policy and strategy, agronomics, food technology and produce handling. This is the only assistance which will be grant funded.

C. Disbursement Procedures

Disbursements will be made to CATCO in U.S. dollars. CATCO will establish an account in the Central Bank of Barbados. CATCO has made arrangements with the Central Bank of Barbados to convert the U.S. dollars to Barbadian dollars and also to act as a clearing house for CATCO's purchases and sales for which it earns foreign exchange (basically Trinidad and Tobago dollars and Eastern Caribbean Currency Authority dollars) and will freely convert these currencies to and from Barbados dollars.

To assure effective implementation, CATCO must have adequate financial resources available while permitting RDO/C to fulfill its role of project oversight. To accomplish both objectives, the following disbursement procedures is envisioned:

1. As part of the business plan, CATCO will provide a detailed cash flow projection of the first 12 months of the project by quarter. The total cash requirements of the first quarter will be used to establish an advance of loan funds for no more than 90 days of operation.

2. At the end of the first quarter, CATCO will submit a statement of actual expenses and income and a revised projection of the next quarter's expenditures. Based on that submission, the initial advance will be cleared and a second advance provided. The amount of the advance will be increased or decreased depending on CATCO's demonstrated needs.

Within the first six months, it is probable that CATCO will move to a monthly financial submission to liquidate advances and review its cash flow as a more rapid basis.

3. Disbursements for investment capital will not be included in the advance. These will be handled as separate transactions.

Accurate track of CATCO's financial condition will be maintained through the rolling advance and advance liquidation system outlined above and the requirement that audited financial statements to submitted every six months.

D. Procurement Procedures

1. Agricultural Commodities

The majority of AID resources will be used to finance CATCO's trading operations; since it is a private firm, it will seek the best terms for purchases and sales of agricultural commodities given factors such as quality, distance, risk, and profit margins. No specific application of AID's procurement rules will be applied to agricultural commodities. It should be noted that all such purchases will be made within AID Geographic Code 941.

2. Shipping Services

CATCO will use existing ocean shipping and in selected cases air freight for the movement of commodities during the early period of the project. As trade volumes expand, it will also begin to voyage and/or time charter to assure prompt movement of perishable commodities. It will utilize mostly small, inter-island schooners in the 50-100 ton dead weight category and small aircraft. It may also use the services of the West Indian Shipping Company (WISCO) if its inter-island service improves and a new air cargo carrier CARICARGO.

A review of shipping in the Eastern Caribbean indicates that total U.S. flag carriers provide service to only three of the countries which will be served by CATCO. The shipping requirements of the project (relatively small volume, highly perishable, sporadic shipping patterns) offer insufficient inducements for U.S. flag shippers to provide special services for shipment (sea or air). A determination of non-availability of U.S. flag services for this project is requested as part of the project authorization package.

In addition, AID financing of shipping costs on AID Geographic Code 935 carriers is requested under the project. Given the limited shipping service described above, the interests of the U.S. are best served by permitting financing of transportation services on ocean vessels under flag registry of Code 935 countries.

Finally, CATCO will be chartering for inter-island freight by sea and air. It is impractical to request SER/COM approval of each such charter. Since CATCO's profit margin will be directly affected by freight rates, it is reasonable to conclude that it will seek to minimize these costs taking other factors such as time and safety into consideration. Therefore, it is requested that the requirement that AID/Washington approve all ocean and air charters financed with AID funds be waived.

3. Fertilizer and Agricultural Inputs

Fertilizer procurement is subject to special rules as defined under AID Handbook 1, Supplement B, Chapter 4C8. If AID funds are used for fertilizer procurement, CATCO will follow those rules.

4. Technical Assistance

Grant and loan financed technical assistance contracts will be done in conformity with standard AID procedures.

5. Citrus

Citrus is produced in Dominica, St. Vincent and other countries within the Region. While both Barbados and Trinidad produce citrus, they also are potentially large markets which can absorb significant imports from producers such as Dominica. Dominica also is the only major exporter of citrus outside the Region. It currently exports approximately 3,840 MT to the United Kingdom and may increase to 7,660 MT in four years as a result of an AID/CDB funded citrus development project for which a waiver to PD-71 was granted by AAA/LAC in 1980.

CATCO intends to trade in citrus as a basic commodity for its initial operation within the Region and my seek limited external markets in later years. Principal markets for CATCO will be within the Caricom Region, except for exports from Dominica to the U.K. However, Dominica exports to the U.K. can occur only during a six to eight week period of the year when supplies are unavailable from Israel and other countries, including the United States. According to USDA sources, U.S. grapefruit exports during the 1979 - 80 crop year totalled 271.000 MT, of which 5,457 MT (2%) were shipped to the U.K. and 154 MT to Bermuda and the Caribbean countries. RDO/C believes the proposed project is insignificant in terms of its impact on the U.S. grapefruit market, since (1) Dominica's grapefruit exports to the U.K. occur in the fall, whereas U.S. exports grapefruit to the U.K. during other seasons of the year; and (2) the U.K. and Caribbean countries do not represent major markets for U.S. grapefruit producers.

Based on the importance of trade in citrus to CATCO and the market factors discussed above, the project will require approval to permit citrus trading under the terms of PD-71.

6. Investment Capital

It is anticipated that CATCO will take equity positions in private firms to establish support services considered essential to CATCO's agricultural trading. On these, AID procurement rules do not apply to the private firm. CATCO will not provide loan or working capital to these firms.

If, in unusual circumstances, CATCO must set up its own facility (such as controlled temperature storage space), AID procurement rules and procedures will be applied. However, in no case will procurements exceed $100,000.

E. Schedule of Major Events

- Loan Agreement Signed	August, 1982
- Reserve of $4.5 Million in Callable Shares Established	
- CATCO Business Plan Submitted	
- CATCO Has Received $750,000 in Paid-Up Capital	
- Warehouse Rented	September
- Two Field Officers Hired	
- Project Manager Hired	October
- Pre-Investment Studies Begin	
- Technical Assistance Plan Drafted	
- Shipping Arrangements Made	
- Agricultural Inputs Purchased and Stored or Sold*	November
- Citrus Produce Purchased and Sold*	
- Third Field Officer Hired, and Part-Time Personnel	January, 1983
- Short-Term Technical Assistance Begins	
- Investment in Physical Facility	March
- Five Additional Staff Hired	January, 1984
- Begin Trading in Vegetables	
- First Interim Project Evaluation	March
- CATCO Becomes Profit-Making	September
- Three More Staff Added	
- Second Interim Project Evaluation	September, 1985
- Final In-Depth Project Evaluation	September, 1987

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* CATCO will remain active in these trading activities throughout the Project.

VI. COVENANTS, CONDITIONS AND NEGOTIATING STATUS

The following conditions precedent and covenants will be negotiated for inclusion in the Project Agreement. The areas covered by these clauses have been discussed with CATCO's Acting General Manager and several members of its Board of Directors. While there is general agreement with the suggested terms and conditions specific language regarding the clauses concerning renegotiation of the AID loan terms and dividends will require further negotiation.

A. Conditions Precedent to Initial Disbursement

1. A business plan which will describe in detail the program of activities which the Borrower will undertake and include appropriate financial projections for CATCO. a description of its operational management structure and investment strategy, and assessment of regional markets and transport modes.

2. Evidence that the Caribbean Food Corporation has reserved the equivalent of Four Million United States Dollars ($4,000,000) in callable shares such that these shares can be called solely for the purpose of satisfying the terms of Loan repayment agreed between AID and CATCO.

3. Evidence that the Borrower has received paid in capital equal to no less than Seven Hundred Fifty Thousand United States Dollars ($750,000).

4. Evidence that the Borrower has established an accounting system which conforms to normally acceptable accounting procedures.

B. Covenants

Except as AID may otherwise agree in writing, the Borrower covenants that:

1. During the life of the loan, CATCO management including the General Manager, will be in the hands of a management contract signed with a private sector firm. The contractor, the terms of the contract, key personnel, and any changes therein will be subject to AID approval.

2. Borrower will not pay or declare any dividends, or make any other distribution of its assets, without the prior approval of AID. At the time of any proposed payment of dividends, Borrower and AID will jointly review the financial condition of the Borrower with a view toward modification of the terms of this Loan, which could include an upward adjustment of the interest rate and/or an acceleration of the repayment of the Loan.

3. Project funds, including reflows for a period of five years, shall not be used to finance agricultural inputs in response to requests for procurement from sugar growers' cooperatives or to entities acting in their behalf.

4. Except for short-term working capital requirements, Borrower shall not subscribe any additional debt without prior consultation with and the approval of AID. In addition, the AID debt shall not be subordinated to any debt, including short-term borrowings.

5. The Borrower shall establish by written agreement for all business transactions, rights adequate to protect the interests of AID and the Borrower.

6. Goods and services purchased by Borrower shall be purchased at a reasonable price, account being taken also of other relevant factors such as time of delviery, etc. Such goods and services shall be used exclusively in the carrying out of the project. The Borrower shall take out and maintain with responsible insurers such insurance, against such risks and in such amounts, as shall be consistent with sound business practice. Without any limitation upon the foregoing, such insurance, shall cover hazards incident to the acquisition, transportation and delivery of goods financed out of the loan of the place of use or sale, any indemnity thereunder to be made payable in a currency freely usable by the Borrower to replace or repair such goods.

7. Except as AID may otherwise agree in writing, the Borrower shall not sell, lease, transfer, encumber or otherwise dispose of any of its property or assets, except in the ordinary course of business; and shall take all action necessary to maintain its corporate existence and right to carry on operations and to acquire, maintain and renew all rights, powers, privileges and franchises necessary or useful in the conduct of its business.

8. The Borrower shall: (1) have its accounts and financial statements (balance sheets, statements of income and expenses and related statements) for each six month period audited, in accordance with sound auditing principles consistently applied, by independent auditors acceptable to AID; (2) furnish to AID as soon as available, but in any case not later than three months after the end of each such period: (a) certified copies of its financial statements for such year as so audited and (b) the report of such audit by said auditors, of such scope and in such detail as AID shall have reasonably requested; and (3) furnish to AID such other information concerning the accounts and financial statements of the Borrower and the audit thereof as AID shall from time to time reasonably request.

9. The Borrower shall not make any repayment in advance of maturity in respect of any outstanding debt which would materially affect its ability to meet its financial obligations.

C. Waiver

1. Loan funds may be used to assist in identified marketing activities for regionally produced citrus fruits.

2. Ocean shipping financied by AID shall, except as AID may otherwise agree in writing, be procured in accordance with waiver number 69, dated September 24, 2979, as amended by waiver control number 69B.

3. Charter shipment shall not require the prior approval of AID/Washington.

VII. LIST OF STUDIES AND REPORTS CITED

1 ... A.I.D. Food and Agricultural Development Policy. Draft September 9, 1981, Washington, D.C.

2 ... Caribbean Community Secretariat, Evaluation of the Draft Regional Food and Nutrition Strategy, April 1981.

3 ... Caribbean Food Corporation, Status Report 31/12/81. Caribbean Food Corporation, Port-of-Spain, Trinidad.

4 ... CATCO Aide Memoire to RDO/C, 18 December, 1981.

5 ... Commission of the European Communities. "Financial Proposal - 4th EDF - WISCO Project" VIII/1264/79-EN Brussels: EDF, November 1979.

6 ... J. Marriott "Problems in Handling and Marketing of Fresh Fruits and Vegetables in the Windward and Leewards Islands". Technical Appendix to Reports R551-R557. Tropical Products Institute.

7 ... Louis Berger International, Inc. and Systems. Small Farmer Production and Marketing Systems Study. Phase I and II Reports Prepared for the Caribbean Development Bank. Bridgetown, Barbados: Berger and Systems, November 1978.

8 ... Redma Consultants Ltd, Agricultural Marketing Corporations in the Caribbean, Volume I: Assessments and Recommendations, a report prepared for the Caribbean Community Secretariat, Georgetown, Guyana under a contract awarded by the Commonwealth Fund for Technical Corporation, London, England. October 1981.

9 ... Refugio I. Rochin and James C. Cornelius, Small Farmer Production and Marketing Systems Report. July 1979.

10 ... Regional Development Office - Caribbean, FY 83 CDSS.

11 ... Systems "An Overview of the Market for Meat, Fish, Milk, Dairy Products, Eggs and Fresh Produce in Dominica, St. Lucia, St. Vincent, Grenada, Barbados, and Trinidad and Tobago". A Report Prepared for the Caribbean Development Bank, Bridgetown, Barbados, April, 1980.

12 ... Systems "A Survey of Small Scale Agricultural Marketing Enterprises in the Caribbean". A Report Prepared for the Food and Agricultural Organization of the United Nations. Three Volumes: (1) The Research Program and Results; (2) Trade in the Domestic Market; (3) Trade in the Export Market. Bridgetown, Barbados: Systems Group of Companies, 1980.

13 ... Systems "A Survey of the Hotel, Restaurant, Supermarket and Institutional Markets for Fresh Produce in Barbados". A Report Prepared for the Inter-American Institute for Cooperation on Agriculture. Bridgetown, Barbados: Systems Group of Companies, September, 1981.

services financed by AID from loan funds shall have their source and origin in any country included in AID Geographic Code 941. Ocean shipping financed under the Loan shall be procured in the United States or in any country included in AID Geographic Code 935 except as AID may otherwise agree in writing.

Except for ocean shipping and except as AID may otherwise agree in writing or as otherwise provided in this authorization, the source and origin of goods and services financed under the Grant portion of the Project shall be the United States and member countries of the Caribbean Food Corporation.

C. Conditions Precedent to Initial Disbursement

Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement, the Borrower shall, except as AID may otherwise agree in writing, furnish, in form and substance satisfactory to AID:

(1) A business plan which will describe in detail the program of activities which the Borrower will undertake with Project financing, and include appropriate financial projections for CATCO, a description of its operational and management structure and investment strategy, and assessment of regional markets and transport modes.

(2) Evidence that the Caribbean Food Corporation has reserved the equivalent of Four Million United States Dollars ($4,000,000) in callable shares such that these shares can be called solely for the purpose of guaranteeing the Loan repayment.

(3) Evidence that the Borrower has received paid in capital equal of no less than Seven Hundred Fifty Thousand United States Dollars ($750,000).

D. Such other terms and conditions as AID may specify.

5. Waiver

A. Loan and Grant funds may be used to assist in identified marketing activities for regionally produced citrus fruits.

B. Ocean shipping financed by AID shall, except as AID may otherwise agree in writing, be procured in accordance with waiver number 69 dated September 24, 1979, as amended by waiver control number 69B

C. Charter shipping financed under the Project shall not require the approval of AID.

14 ... U.S. Department of State, Background on the Caribbean Basin Initiative, Special Report No. 97, March 1982.

15 ... USAID Evaluation Team Report, "An Evaluation of the CARDI/ USAID Small Farm Multiple Cropping Systems Research Project, No. 538-0015 - March 17 - April 8, 1982.

ANNEX A

Exhibit 1

CARIBBEAN FOOD CORPORATION
c/o Agricultural Development Bank,
86 Duke Street,
P.O. Box 154,
Port of Spain, Trinidad, West Indies.
Telephone: 62-36261-5

Regional Marketing Subsidiary,
Caribbean Agricultural Trading Co. Ltd.,
P.O. Box 83B,
Brittons Hill,
BARBADOS

18th December, 1981

Mr. William Wheeler,
Director,
US AID Regional Office/Caribbean,
Bridgetown,
BARBADOS.

Dear Mr. Wheeler,

In my capacity as Chairman of the Board of Directors of the Caribbean Agricultural Trading Co. Ltd. (CATCO), I hereby make application to US AID for financial assistance to CATCO to undertake the establishment of the organisation as a regional marketing agency for the Caricom region.

A determination as to the amount of the loan would be made after CATCO has ascertained the cost of establishment of the institution as a regional marketing agency and all that this entails in terms of market development, market promotion and the provision of an integrated set of developmental services to the Caricom farming community.

The level of financing would be a funtion of both the potential volume of trade in agricultural inputs and outputs as well as the amount of developmental services which CATCO intends to provide to the farming community. Preliminary indications are, however, that CATCO would require working capital in the amount of US $4.5 million to conduct a projected level of business totalling US $9.5 million annually and with a growth rate of 10 per cent per annum commencing in the period 1st July, 1982.

The Board of Directors of CATCO decided at their meeting held in Bridgetown, Barbados on 12th December, 1981 that the Management of CATCO during the first six months of 1982 should lay emphasis upon formulating operational plans, policies and strategies to achieve the level of activity which would result in a partial but substantial solution to the problem of establishing efficient marketing systems for agricultural products at the regional and extra-regional levels. It is planned that a series of market surveys would be conducted with a view to ascertaining the input requirements and output potential of the agricultural sectors of

/the...

the respective Caricom countries. This would provide the basis for projecting levels of business activity for CATCO from the period 1st July, 1982 and beyond. This strategy does not preclude some measure of trading in the first half of 1982 but the focus would be upon the formulation of plans, policies and operational strategies and the setting of certain realistic targets based upon analysis and interpretation of data obtained through market surveys, etc.

In order to undertake this task in the first six months of 1982, the Management of CATCO has estimated that they would require an amount of US$750,000. I therefore wish formally to apply on behalf of the Board of Directors to CATCO for a grant equivalent to US$540,000 in order that CATCO may acquire personnel and facilities to undertake these and other tasks related to its establishment on a sound footing.

I recognize that the terms and conditions of the proposed loan, the modalities of its administration, and the like would have to be mutually agreed between US AID and CATCO. However, given the proposed strategy of emphasizing trading in agricultural outputs and the provision to the Caricom farming community of an integrated set of developmental and technical services including the organisation of transportation of agricultural products to designated markets, we feel that it is reasonable to ask that the loan be granted on concessionary terms.

We understand that certain bureaucratic formalities must be completed prior to the grant of financial assistance and consequently I wish to suggest that the Management of the CFC, CATCO and Grace, Kennedy & Co. Ltd. should collaborate with your staff in the supply and analysis of whatever data would be needed for this purpose. We would, however, be most grateful if ways could be devised to expedite the grant of the loan facilities which we have indicated.

I am attaching to this letter a note which reflects some of our ideas as to the role of CATCO as a regional marketing organisation. In this note we discuss some of the fundamental issues which have been raised regarding the model on which CATCO's financial structure is based, being of mixed equity with private and public sector participation. We also discuss the rationale for the establishment of CATCO and the reason why we would need concessionary funding for the activities CATCO intends to undertake. We attempt to demonstrate that CATCO although being commercial in its orientation has the potential to introduce critical elements for the development of agriculture and agri-business within Caricom.

Grace, Kennedy & Co. Ltd. has formally commited itself to the assumption of a leadership role within the Caribbean private sector and in keeping with this objective, shall endeavour to transfer to CATCO some of its entrepreneurial skills, its managerial expertise and its long experience in agricultural trading to ensure its success. In doing so we hope to induce other private sector firms within Caricom to participate in the equity of CATCO, bearing in mind that the success of the venture would depend ultimately on the participation of all firms - large, medium and small.

/We hope ...

We hope that your staff in collaboration with the Management of CATCO, would find it possible to arrive at an early evaluation of this important project and that favourable recommendations would be made to Washington in this regard.

Thanks in anticipation for an early reply.

Sincerely yours,
CARIBBEAN AGRICULTURAL TRADING COMPANY LTD (CATCO)

....

S. C. Alexander,
CHAIRMAN.

CARIBBEAN FOOD CORPORATION

c/o Agricultural Development Bank,
86 Duke Street,
P.O. Box 154,
Port of Spain, Trinidad, West Indies.
Telephone: 62-36261-5

4

ANNEX A

EXHIBIT 2

3rd June, 1982.

Mr. D. Wheeler,
United States Agency for
International Development,
Bridgetown,
BARBADOS.

Dear Mr. Wheeler.

I would wish to formally record the willingness of the Caribbean Food Corporation to either guarantee or to borrow and sub-lend a soft line of credit for the start up of Caribbean Agricultural Trading Company Limited (CATCO) operations. The Corporation would prefer an arrangement which would support the most favourable terms of such soft loans for the operations. CATCO's operation is considered as one of the most vital regional services required at this stage of development within the Caribbean and is targeted to the high priority agricultural sector of the Region.

It was a pleasure working with your representative Mrs. May June in reviewing and determining for recommendation, the most appropriate form of guarantees in support of any USAID financial support for CATCO.

Kindest regards,

R.A. FULLER
(Managing Director)
CARIBBEAN FOOD CORPORATION

c.c. Mrs. May June

RAF/laa

ANNEX A
EXHIBIT 3

PROJECT AUTHORIZATION

Name of Entity : Caribbean Agricultural Trading Company (CATCO)

Name of Project : Caribbean Agricultural Trading Company

Number of Project : 538-0080

Number of Loan

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Caribbean Agricultural Trading Company Project for the Caribbean Agricultural Trading Company involving planned loan obligations of not to exceed Four Million United States Dollars ($4,000,000) ("Loan") and planned grant obligations of not to exceed Two Hundred Twenty-Five Thousand United States Dollars ($225,000) ("Grant") over a five year period from date of authorization, 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.

2. The Project ("Project") consists of establishing a commercially viable agricultural trading company (CATCO) which will remove marketing constraints and promote the production and consumption of regionally produced agricultural commodities.

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

4. The Project shall be subject to the following terms and conditions:

A. Interest and Terms of Repayment - Loan

CATCO shall repay the Loan to AID in United States Dollars within fifteen (15) years from the date of first disbursement of the Loan, including a grace period of not to exceed five (5) years. CATCO shall pay to AID in United States Dollars interest from the date of first disbursement of the Loan at the rate of four percent (4%) per annum during the grace period and seven percent (7%) per annum thereafter on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

B. Source and Origin - Loan and Grant

Except for ocean shipping and except as AID may otherwise agree in writing or as otherwise provided in this authorization, goods and

ANNEX A
EXHIBIT 4

5C(2) PROJECT CHECKLIST

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

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

A. GENERAL CRITERIA FOR PROJECT

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

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (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 has been prepared and will be forwarded to Congress prior to Project Authorization

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,00, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?	No further legislative action is required.
4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973?	N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?	N/A
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.	This is a regional project.

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.	Through support of a recently established private agricultural trading company, the project will directly encourage the activities described in a, b, d and e.
8.	**FAA Sec. 601(b)** Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	U.S. goods and services will be utilized in the project as appropriate.
9.	**FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507.** Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.	The borrower is providing staff, equipment and related support for this project. Local currencies are also being provided by investors in the borrower company. The U.S. does not own any local currency of the Caribbean region.

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?

Some project assistance will be directed toward the marketing of selected citrus crops. The commodities will be limited, intended primarily for consumption within the Caribbean, and will have little or no impact on U.S. producers.

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

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

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, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward

The Project will generate substantial new employment through increased labor intensive production and the application of technology appropriate to the production, processing and marketing of agricultural commodities. Project activities will benefit both rural and urban poor and will promote equally the participation of both women and men.

better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?	Project fits the criteria for Section 103 funds.
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 activitiy 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 (This is a regional project).

e. FAA Sec. 110(b). 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"?	N/A
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?	Yes.
g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective particpation in governmental processes esential to self-government.	The Project supports the initiative of a Caribbean regional institution as well as members of the private sector in the Eastern Caribbean.

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of	The Borrower appears capable of repaying the Loan at the established rate of interest.

the country to repay the loan, at a reasonable rate of interest.

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

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

3. Project Criteria Solely for Economic Support Fund

a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the extent possible, does it reflect the policy directions of FAA Section 102? — N/A

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

c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance — N/A 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?

d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

Caribbean Agricultural Trading Company | FN | 82 $4,000 | Loan-$4,000

538-0080 | X | | Five Years

X | | None | 82 | 87 | 87

Purpose: To establish a commercially viable agricultural trading company which will open new market channels and promote the production and consumption of regionally-produced agricultural commodities.

Background: The Eastern Caribbean Region is highly dependent upon imported food to meet its needs, and now imports two-thirds or more of its total supply at an annual cost of approximately $1 billion. Barbados, for example, imports 75% of its total fruit consumption and Trinidad nearly half of its root crop requirements. Significant opportunities exist to expand the production and sale of local agricultural commodities and generate a greater degree of self-sufficiency among the Caribbean LDC's, but a systematic approach to market organization problems will be necessary. Factors which have so far discouraged producers from expanding their production include: geographic dispersion of island markets; lack of reliable and routine inter-island transport; high transaction costs due in part to the lack of standard weights, measures and grades; and high physical handling costs. These and other constraints have made it difficult to assure farmers of ready markets were they to increase production.

Project Description: The Project will support the establishment of a viable commercial trading company (CATCO) designed to overcome these constraints and increase the volume of food commodity trade among CARICOM member states and in extra-regional markets. CATCO will be market rather than production oriented, and will help provide the necessary link between markets and farmers by identifying markets, anticipating demands, increasing distribution of agricultural inputs, and actively promoting production of the kind and type of produce needed. As more stable supply relationships are established, regionally produced commodities will take a larger share of existing CARICOM markets. CATCO will achieve cost savings by eliminating the need for multiple inspections of small lots of produce by reducing losses through improved physical handling. More routine and efficient gain greater market penetration and assure markets for regional growers.

Relationship of Project to CDSS: The CDSS has stressed the importance of stimulating new private sector initiatives. As a mixed public/private stock corporation, CATCO will provide an appropriate avenue for private investment in the promotion of trade and the export of regionally produced agricultural commodities. The project will also increase per capita output of food, another objective identified in the CDSS.

Beneficiaries: The Project will directly benefit all producers, distributors, wholesalers, food processors and handlers and other are in the producer-to-market channel for the agricultural commodities that CATCO will promote. The project will indirectly benefit the populations of all participating CARICOM countries through increased availability of higher quality fruits and vegetables, higher income for farmers who increase production, and a net increase in job opportunities which will be generated by CATCO activities.

Host Country and Other Donors: ($000)

CATCO	2,031	Equity and Earnings
Private Sector	500	Investment Captial
IDB	434	Technical Assistance

Major Outputs (All Years):

1. A commercially viable trading company with:
   - o Business plan, accounting procedures, management personnel and field staff.
   - o Standard procedures for forward contracting of production
   - o Standard procedures for measuring, packing and grading produce.
2. Newly marketed products which will reach 40% of total trade value by PACD.

AID-Financed Inputs: ($000)

Inventory Financing	3,250
Investment Capital	500
Technical Assistance	250
	4,000

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated
Through September 30, xxx 1982	4,000		
Estimated Fiscal Year xxx 1983			
Estimated through September 30, 1990			
	Future Year Obligations	Estimated Total Cost	
Proposed Fiscal Year 1981		L$4,000	

PRINCIPAL CONTRACTORS OR AGENCIES

Grace Kennedy and Co. holds current management contract with CATCO.

ANNEX A
EXHIBIT 5

ANNEX B
Exhibit 1

LOGICAL FRAMEWORK

Caribbean Agricultural Trading Company (No. 538-0080)

	NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Goal	Increase regional food self-sufficiency/expand volume of output and consumption of crops grown by small farmers in regional LDC's	1. Increased intra-regional food trade 2. Increased land use for food crops 3. Increased farmer income	1,3. National and regional statistical reports 2,4. Periodic monitoring by CATCO/USAID and survey research by CARDI	- National governments do not impose additional arbitrary barriers to intra-regional agricultural trade. - CFC does not distort CATCO purposes (e.g. pressure to become supermarketing board)
Purpose	Create a commercial trading company which can: 1. Remove key marketing constraints 2. Stimulate/develop new marketable products 3. Sustain financially viable operations	1,2. Value of output trade reaches at least $10 million U.S. in the third year and $15 in the fifth year. (Constant 1982 $). 2. Newly marketed products reach 40% of total trade value by year five. 3. Break even by end of year 4 and begin making profit by year 5.	1,2. National and regional statistical reports 1,2. Monitoring of trade volumes by CATCO market analysis staff 3. Inspection of CATCO financial statements 1,2 3. Management review in project year 2 and evaluation in year 4	- Adequate support services (transport, warehousing) can be contracted. - Research and extension services will make improved technology/information available to small farmers - CATCO does aggressive market development and sets up forward contracts with producers - CATCO establishes accounting system reflecting detailed transaction costs and financial planning.
Outputs	1. A regional trading company with following attributes: a. Initial management contract with experienced regional firm	1. Established company business plan and standard operating procedures	1. Condition precedent to loan agreement	- Availability of skilled key personnel

Annex B
Exhibit 1

LOGICAL FRAMEWORK
(Cond't)

Caribbean Agricultural Trading Company (No. 538-0080)

	NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Outputs	b. Standard procedures for measuring, packing and grading produce c. Standard procedures for forward contracting of production d. Field staff to implement procedures and monitor performance c. Business plan and accounting procedures to reflect transactions		1. Periodic management reports as agreed upon in loan/grant agreement. 1. Management review in project year 2 and evaluation in year 4	- Region's private sector willing and able to assume risk-taking adequately and provide innovative leadership - Producers willing and able to respond to incentives provided
	2. Increased trade in produce currently not grown or unharvested/unmarketed	2. Newly marketed products reach 40% of total trade value by year five.	2. National and regional statistical reports and monitoring of trade volumes by CATCO market analysis staff.	
Inputs	1. Loan - 4 million U.S. (Terms: 15 years, 5 year grace period, 4% interest for the first 5 years, 7% thereafter). 2. Grant - 500,000 U.S. for technical assistance.	1. Loan disbursements in appropriate amount and in time 2. 50 mms of TA provided	- periodic monitoring by RDO/C project manager - management review in project year 2 and evaluation in year 4	- AID's disbursement and control procedures do not inhibit CATCO performance - AID can marshall appropriate TA to train CATCO staff and assist in market analysis/ development

2

UNCLASSIFIED

ACTION AID INFO AMB DCM CHRON RF

STATE 090952/1

13.

ANNEX B
Exhibit 2

OFFICIAL COPY

VZCZCWNO185
PP RUEHWN
DE RUEHC #0952/01 0960503
ZNR UUUUU ZZH
P 060303Z APR 82
FM SECSTATE WASHDC
TO AMEMBASSY BRIDGETOWN PRIORITY 5995
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TOR: 1614
CN: 00083
CHRGE: PROG

AIDAC

E.O. 12065: N/A
TAGS:
SUBJECT: CARIBBEAN AGRICULTURAL TRADING COMPANY PID

1. SUMMARY: THE DAEC REVIEWED THE SUBJECT PID MARCH 25, 1982. SEVERAL AREAS OF CONCERN WERE DISCUSSED, ESPECIALLY RELATED ISSUES OF PROJECT FINANCING, THE IMPLEMENTING AGENCY, AND LOAN GUARANTY. THE PID WAS APPROVED AND THE RDO/C IS AUTHORIZED TO PROCEED WITH PP DEVELOPMENT SUBJECT TO THE GUIDANCE PROVIDED BELOW. END SUM

2. MARKETING CONSTRAINTS: ALTHOUGH PID INDICATES THAT A NUMBER OF CONSTRAINTS IN THE MARKETING SYSTEM WILL BE ADDRESSED BY CATCO, THE PP SHOULD ALSO TREAT A NUMBER OF OTHERS WHICH, IF LEFT UNATTENDED, COULD UNDERMINE THE FEASIBILITY OF THE PROJECT. SEVERAL AREAS SHOULD BE EXAMINED AS PART OF THE CONSTRAINTS ANALYSIS IN THE PP INCLUDING CREDIT, EXTENSION AND APPLIED RESEARCH, FOR DEVELOPING APPROPRIATE TECHNOLOGY PACKAGES, AIMED AT CATCO'S FARMER-PRODUCERS. THE PP SHOULD DISCUSS HOW SIGNIFICANT THESE SERVICES ARE TO PROJECT SUCCESS, WHO WILL BE RESPONSIBLE FOR SERVICE DELIVERY, AND ASSESS THEIR DELIVERY CAPABILITIES. WHILE WE ARE NOT ASKING

FOR AN OMNIBUS PROJECT ADDRESSING ALL CONSTRAINTS, THE PP SHOULD IDENTIFY THOSE WHICH ARE CENTRAL TO THE SUCCESSFUL OPERATION OF CATCO AND INDICATE HOW THESE CAN BE ADDRESSED. GIVEN THE IMPORTANCE OF TIMELY TRANSPORTATION TO CATCO'S OPERATIONAL SUCCESS, THE PP SHOULD ALSO INDICATE WHAT ACTIONS WILL BE TAKEN BY CATCO TO ENSURE THAT TRANSPORTATION OF COMMODITIES WILL BE AVAILABLE ON A TIMELY/PREDICTABLE BASIS.

3. FOCUS: WHILE RECOGNIZING THE DESIRABILITY OF FOCUSING ON THE EXPANSION OF INTRA-REGIONAL TRADE, THE PP SHOULD INDICATE WHAT STEPS ARE PLANNED TO INITIATE EXPORTS OUTSIDE THE REGION. CATCO'S OVERALL MARKETING STRATEGY SHOULD BE DEFINED IN TERMS OF INTERNAL AND EXTERNAL TRADE. IF IT IS CONCLUDED THAT CATCO SHOULD NOT ENTER INTO EXTRA-REGIONAL TRADE DURING THE EARLY YEARS, THE BASIS OF THAT CONCLUSION SHOULD BE ARTICULATED IN THE PP AND A STRATEGY FOR ACHIEVING THAT

ACTION	INFO
AGR	
DIR	✓
A/DIR	✓
PROG	
ECON	
CONT	✓
RLA	
CDO	
AGRI	
EDUC	
HLTH	
JAO	
DUE: 04/05/82	
TAKEN: NAN	
SIGN: WBau 4/14/82	

MARKET OVER THE LONGER-RUN DEFINEBAM

4. FINANCIAL ASPECTS: A NUMBER OF QUESTIONS WERE RAISED CONCERNING THE FINANCIAL STRUCTURE OF THE PROJECT. THE FINANCIAL ANALYSIS FOR THE PP SHOULD ADDRESS THE FOLLOWING CONCERNS:

-- A. GRANT - GIVEN THE COMMERCIAL NATURE OF CATCO, QUESTIONS WERE RAISED ABOUT THE PROVISION OF AID GRANT FUNDS TO IT FOR ANY PURPOSE. IF GRANT FUNDS ARE TO BE PROVIDED, THE FINANCIAL ANALYSIS SHOULD CLEARLY DEMONSTRATE THAT THESE ARE ESSENTIAL TO THE FINANCIAL VIABILITY OF THE ENTERPRISE. THE PRESUMPTION IS THAT THE PROJECT WOULD BE LOAN FUNDED AND THE PROVISION OF GRAT FUNDS WOULD REQUIRE COMPELLING JUSTIFICATION.

-- B. EQUITY - PROPOSED DEBT/EQUITY RATIO LIMITATIONS SHOULD BE ANALYZED CONSIDERING PROPOSED AID LOAN AND ANTICIPATED BORROWING FROM OTHER SOURCES. CONCERN WAS EXPRESSED ABOUT (1) THE COMMITMENT OF GRACE KENNEDY/CFC (PARTICULARLY GRACE KENNEDY) IN VIEW OF ITS RELATIVELY SMALL EQUITY INVESTMENT IN CATCO, AND (2) THE ADEQUACY OF RESERVES IN CATCO TO COVER POSSIBLE LOSSES RESULTING FROM INITIAL UNPROFITABLE COMMODITY TRANSACTIONS. DURING INTENSIVE REVIEW, RDO/C SHOULD ATTEMPT TO OBTAIN ADDITIONAL EQUITY INVESTMENT FROM GRACE KENNEDY/CFC SUFFICIENT TO ADDRESS THESE CONCERNS. WHILE A DEFINITIVE INDICATION OF HOW MUCH EQUITY WOULD BE SUFFICIENT IS NOT NOW POSSIBLE, THAT AMOUNT PLUS GUARANTY (SEE NEXT PARAGRAPH) MUST BE ADEQUATE TO PROTECT AID'S INTEREST.

-- C. GUARANTY: DURING INTENSIVE REVIEW, THE RDO/C SHOULD ATTEMPT TO OBTAIN ADEQUATE GOVERNMENTAL GUARANTY. MOST DESIRABLE WOULD BE A FULL FAITH AND CREDIT GUARANTY FROM SOME OF THE MEMBER COUNTRIES OF CFC (E.G. T AND T). OTHER ALTERNATIVES MIGHT BE CFC'S DEPOSITING SOME OF THEIR ASSETS AS A GUARANTY OR MEMBER COUNTRIES COMMITTING THEMSELVES TO PAY IN ADDITIONAL CAPITAL TO CFC, AS NEEDED TO PAY OFF DEBT. SUCH A GUARANTY WOULD ALLOW FOR A MORE FLEXIBLE AID ATTITUDE TOWARD, INTER ALIA (1) THE DME RATIO ULTIMATELY PROPOSED, (2) THE COUNTRIES SELECTED BY CATCO FOR EMPHASIS UNDER THE PROJECT, AND (3) CAT O'S DIVIDEND POLICY. WITHOUT AN ADEQUATE GUARANTY, AID BY NECESSITY WOULD HAVE TO TAKE A MORE CONSERVATIVE STANCE RELATED TO THESE AREAS.

5. ORGANIZATIONAL ARRANGEMENTS: THE ORGANIZATION OF CATCO PRESENTED IN THE PID RAISED A NUMBER OF QUESTIONS. DURING INTENSIVE REVIEW, THE RDO/C SHOULD CAREFULLY ANALYZE ALL THE LEGAL ASPECTS AND IMPLICATIONS OF HOW CATCO IS TO BE ORGANIZED. THE CAPITALIZATION OF CATCO AND THE MECHANICS OF THE PLANNED DIVESTITURE SHOULD BE DISCUSSED IN DETAIL. THE RDO/C SHOULD ALSO ANALYSE, INTER ALIA, (A) THE IMPLICATIONS OF CONTROLLING
BT
#2952

ANNEX B
Exhibit 2

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9095/2

ITEREST IN CATCO RESIDING WITH CFC (E.G. EFFECTS ON
.TCO'S EASE OF ACCESS TO INDIVIDUAL COUNTRIES, ON
RMINATION OF MANAGEMENT AGREEMENT WITH GRACE KENNEDY,
I MANAGEMENT AND POLICY DECISIONS, AND ON THE COMPANY'S
ILITY TO OPERATE IN A COMMERCIAL FASHION), (B) THE
NSEQUENCES OF THE CHANGING OWNERSHIP PATTERN OUTLINED
. PID AS PROJECT IS IMPLEMENTED, (C) THE
PROPRIATENESS OF REQUIRING DIVESTITURE AND HOW THE
OCESS WOULD WORK, AND (D) THE DESIRABILITY OF NOT ONLY
ACE KENNEDY BUT ALSO CFC DIVESTING ITSELF OF OWNERSHIP
ER TIME.

ENVIRONMENTAL ASPECTS: AID/W INVESTIGATING THE
PLICATIONS FOR PROJECT DEVELOPMENT OF AID PROVIDING
NANCING TO CATCO WHICH WOULD USE FUNDS TO -PROCURE
STICIDES FOR SUPPLIERS FOR-SALE TO LOCAL FARMERS.
IDANCE ON THIS ISSUE WILL BE PROVIDED SOONEST BY SEPTEL.

. IN VIEW OF THE NOVEL FEATURES ASSOCIATED WITH THE
OPOSED PROJECT, THE PP SHOULD BE SUBMITTED TO BUREAU
R REVIEW AND AUTHORIZATION.

. FYI: ALL LAC MISSION PID APPROVALS ARE NOW SUBJECT TO
REAU REVALIDATION IF THE POST-PID PROJECT DEVELOPMENT
OCESS EXTENDS BEYOND ONE YEAR. HAIG

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Annex B

Exhibit 3

CERTIFICATION PURSUANT TO SECTION 611 (e) OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, William B. Wheeler, as Director of the Agency for International Development Regional Development Office/Caribbean having taken into account among other things, the maintenance and utilization of projects in the Caribbean region previously financed or assisted by the United States, do hereby certify that in my judgement The Caribbean Agricultural Trading Company (CATCO) has both the financial capacity and the human resources capability to effectively utilize and maintain goods and services procured under the proposed Caribbean Agricultural Trading Company Loan and Grant Project.

(Signed) William B. Wheeler

William B. Wheeler
Director

(Date) 28 July 1982

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ANNEX C

PROJECT SUPPORT STUDIES

BULK ANNEXES IN LAC/DR & RDO/C FILES

<u>Exhibits</u>

1. CATCO Market Assessment
2. A Review of Existing Transportation Options For CATCO

ANNEX D

A Summary of Market Potential for CATCO in Selected Markets and for Selected Fresh Produce Commodities as Projected CATCO Sales Volume in Year 1 (1982/83) to Year 6 (1988/89)

The Banana Market in Trinidad

In the late 1960's, banana marketings in Trinidad were over 9 million lbs. (4,000 tonnes+) per annum - banana production is now estimated to be only a little over 1 million lbs. (500 tonnes) per annum. The C.M.A., until the early 1970's, used to room-ripen bananas through their facilities at Chaguaramas. Weekly volumes reached 120,000 lbs. per week (54 tonnes) during peak periods. The C.M.A. used to operate a seven-day ripening cycle - ripen for six and distribute on the seventh. Produce was sold to vendors and then to consumers via the major public markets. However, the ripened banana business expired when (a) banana supplies declined sharply and (b) Mr. Thomas, the C.M.A. Manager in charge of banana ripening, shifted his managerial position within the organization (Thomas was the only C.M.A. employee with ripening room experience). The C.M.A. ripening rooms still exist and they are conveniently placed adjacent to a docking point at Chaguaramas, but the rooms are in a very bad state of disrepair, the dock is, currently, used exclusively by the lumber trade and, also, is in a very bad state.

In 1982, the size of the banana market is small, around 600 tonnes, or 1 lb. produce per capita. The major use of bananas is as a vegetable, cooked green, although naturally ripened (or 'naturally' forced ripened) bananas are sold by all participants in the fresh produce marketing system, albeit in very small quantities (likely, the street vendor trade and hucksters at public markets account for the lion's share of total market volume). Small quantities of green bananas are imported from Grenada.

The major varieties of bananas merchandised in Trinidad are of the Cavendish type. The Lacatan variety predominates, although the Gros Michel has preferred eating characteristics. The latter is not readily available because of disease problems prevalent throughout the region. The Sucrier and Silk varieties of bananas are available in very small quantities.

There is a large differential between the average prices paid for ripe vis-à-vis unripe bananas. Ripe bananas have a retail price ranging from $1.00/lb. for short 'figs' up to $1.50/lb. for well ripened lacatans. The latter wholesale for around $1.10/lb. but produce movement is small. Green bananas which are locally produced sell for around $.35/lb. and wholesale for $0.40 - 0.45/lb.

Market potential for room-ripened bananas looks very encouraging. Supermarkets contacted expressed strong interest in merchandising room-ripened bananas. The School Nutrition Company (S.N.C.) perceived that from October 1982, around 15 tonnes would be required per week to feed each child in the school in the school meals program, one banana per week. Street vendors in Port-of-Spain sell imported fruits (such as apples, pears) at around $1.00 - $1.50 per piece. Quality supermarkets' price ripened bananas of indifferent quality at over $2/lb. A quality, golden yellow, room-ripened banana retailing at less than $0.50 a piece or, say, $1.20 per lb. would seem attractively priced in relation to other fruit competitors.

It is reasonable to assume that the room-ripened banana could achieve a similar market size that the ripened and unripened banana market attained in the late 1960's, i.e. over 4,000 tonnes per year. The market would likely build to this same level over a 3 - 4 year period. Assuming that banana ripening facilities are in place by late 1982 (say, December), then CATCO can reasonably expect to build up to a weekly throughput of 50 tonnes (a volume figure attained by C.M.A. in the very early 1970's) by the end of Year 0. The total expected volume of bananas transported and ripened in Year 0 (1982/83) is estimated to be 750 tonnes i.e. shipping 25 tonnes per week or less in the first four months of 1983 and building up to 50 tonnes per week in May and June 1983. In Year 1, CATCO should average shipments of 50 tonnes per week and, at this stage, very likely will be the sole supplier of room-ripened bananas to the Trinidad market. From Year 2 through to Year 5, CATCO weekly volume will grow relatively slowly and market share may slip from 100 percent down to around 70 percent.

To return to the 50 tonne per week shipment volume, 25 percent of this would be sold to one buyer, i.e. the S.N.C. and 75% to other trade participants. The ripening room owner (CATCO or other private sector)would, very likely, undertake a wholesale function selling to other wholesalers and/or hucksters and retailers. A volume of fifty tonnes of bananas per week is equivalent to one out of every four Trinidadians consuming one room-ripened banana per week.

Supplies of bananas are available from the Windward Islands market requirements. Supplementary supplies may also be drawn from the domestic banana producing sector.

The Plantain Market in Trinidad

Domestic production of plantains was estimated to be around 3,500 tonnes in 1980/81. Vincentian export statistics for 1979/80 show a flow of about 600 tonnes into Trinidad from St. Vincent, ergo, the Trinidad market size is about 4,000 tonnes. However, domestic production may be overestimated by as much as one-quarter, thus, a more realistic market size is about 3,200 tonnes, (i.e. 5 - 6 lbs. per caipta).

Ministry of Agriculture officials believe that plantain production has been, and still is, declining in Trinidad, even although this is not reflected in the production estimates. With rising real incomes, consumer demand for plantains has remained strong in recent years - plantains are a more frequent dietary item in Trinidad than in, say Barbados. The major center for plantain wholesale sales is the Central Wholesale Market in Port-of-Spain. Most produce, both domestic and imported, is sold on the stem. Spoilage can be very high (40% or more). Major wholesalers are reluctant to handle plantains because of the poor quality of produce, fresh produce managers from the supermarket sector exhibit similar reluctance. Both sets of market participants expressed enthusiasm about the importation of regular supplies of quality packed in suitable containers (cardboard boxes as per bananas).

Wholesale prices for plantains in the Trinidad market range from $0.75 - $1.50 per lb. reflecting both variations in product quality and seasonal price patterns - plantain prices are seasonally high in the latter half of the year. Trade members perceive that a room-ripened plantain would command a premium, but a relatively small one, over the 'regular' plantain - consumers value the characteristic golden color of the full-ripe unblemished produce but to a lesser extent than for bananas as there is a ready appreciation that the plantain skin is thicker and, therefore, provides better protection than does the skin of the banana to the fruit itself.

It is estimated that CATCO could quickly capture 10% of the market for plantains by focusing on the top quality segment, that is, currently, not being satisfied. As domestic production continues to decline, the market potential for CATCO produce will expand; and, more importantly, the consistent availability of quality plantains at competitive prices will foster an expansion of the present level of demand. In Year 1 (1983/84) total market volume will grow to around 4,000 tonnes of which CATCO should capture 25%, i.e. 1,000 tonnes. Purchasing plantains in, say, St. Vincent at $0.40 EC boxed and with the anticipated low levels of spoilage, CATCO can compete directly and effectively with the huckster trade.

In Year 2 through Year 5 (1984/85 to 1988/89), CATCO will at least maintain and, likely, slightly increase its market share in a growing market.

The Citrus Market in Trinidad

Citrus production has declined sharply in Trinidad in recent years: in 1974, 12,000 tonnes of oranges and 19,400 tonnes of grapefruit were produced. Production is certainly less than half and, probably, one-third of this level now. From being a substantial net exporter of fresh citrus, Trinidad consistently shorts own market. In 1982, the processed citrus juice production sector relies entirely on Belizean juice. Extra-regional imports are precluded from entry and, currently, the citrus growers cooperative organization is successfully lobbying against intra-regional imports of citrus produce. The size of the orange and grapefruit markets are estimated to be 4,000 and 5,000 tonnes respectively. With a reduction or removal of entry barriers to the market and available and reliable sources of supply, estimates of mature market size are 8,000* tonnes for oranges and 7,000 for grapefruit for the fresh market.

Orange and grapefruit prices exhibit a seasonal pattern of movement: at relatively low levels when local produce is in full supply (November - May) and escalating sharply (and understandably) in the off-season (June - September). Throughout the year, Trinidadian citrus prices are high by regional (and, indeed, world) standards. In December/January, oranges may wholesale at $0.35 each and this can and does rise to $0.80 each by June. In this latter month, oranges were being sold on the streets of Port-of-Spain at $2.00 each. The price picture for grapefruit is very similar - $0.40 up to $0.85 each.

Of the two citrus products, oranges are the preferred fruit and, likely, are closer substitutes for the high priced extra-regional imported fruit items. Given market access, CATCO could capture 10% of the orange market and, say, 6% of the grapefruit market in Year 0. This is equivalent to a total importation figure for Year 0 of 400 tonnes of oranges (8 tonnes/week) and 300 tonnes of grapefruit (6 tonnes/week).

There is unsatisfied demand for citrus in Trinidad, in particular, for oranges. CATCO's market share could reach 15% or better in Year 1 for both oranges and grapefruit and be maintained at this percentage level in a growing market, i.e. CATCO import tonnage is projected to be 750 tonnes each for oranges and grapefruit in 1983/84. This market share will be maintained through to 1988/89, when CATCO's volume of shipments will be over 1,000 tonnes for each of the major citrus products.

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* This market size would give a per capita consumption of about 14 lbs., compared with 18 lbs. in, e.g., Jamaica.

Dominica will be a major source of supply for grapefruit and, as the Tree Crop Program comes into place, an important supplier of oranges. The other Windward Islands will be residual suppliers of citrus. Sources of supply in Belize and, perhaps, Guyana, are being investigated. The former may be an important source in the formative years of building trade volume. Some Jamaican oranges and ortaniques may be accessible to satisfy Year 0), 1 and 2 requirements.

THE MARKET FOR SELECTED VEGETABLES IN TRINIDAD

In 1980, Trinidad and Tobago imported the following volumes of selected fresh and dried produce:

	Tonnes
Dried Pulses (peas, beans etc.)	13,590
Onions	6,430
Carrots	3,665
Peanuts	2,622
Tomatoes	496
Cabbage	452

Initial estimates for every one of these commodities is that imports increased in 1981. From the list, peanuts, red kidney beans (a pulse), onions and carrots are not produced in Trinidad, thus, the import volumes are equivalent to the Trinidadian market size estimates. With the exception of very minor quantities of peanuts and carrots imported from St. Vincent and onions imported from Antigua (and, historically, Barbados) all imports emanate from extra-regional sources.

The tomato market size is estimated to be close to 5,000 tonnes in 1982, with domestic supplies accounting for 80 per cent of this volume. Tomato wholesale prices are highly seasonal, ranging from $1.00 per lb. for local produce in the first quarter of the year, up to $4.00 per lb. for produce imported from the U.S.A. in the last quarter. The extra-regional produce can be displaced if tomatoes of equivalent quality can be merchandised from within the region. When the banana ripening rooms are in place, or using specifically-built tomato ripening rooms, facilities will exist to ripen intra-regional or local tomatoes (picked green) using ethylene gas, that can compete with the imported produce. Small-scale field trials, using the Barbados pilot project ripening room, have proved very successful.
It is estimated that CATCO can supply 200 tonnes of room-ripened tomatoes to the Trinidad market in Year 2 (1983/84), using both local and imported intra-regional produce. This would represent a 4 per cent total market share, or a 40 per cent share of the imported tomato market. In Year 3 (1984/85) CATCO sales volume will increase to 400 tonnes - an overall market share of about 8 per cent and around 60 per cent of the anticipated expanded imported tomato market. By Year 6 (1988/89), expected CATCO trading volume in room-ripened tomatoes will have reached 485 tonnes.

Carrots, imported largely from the U.S.A. and Canada predominate on the Trinidad market; the produce is uniform in shape (8" long with a diameter of around 1½"), washed, and bagged. The Vincention produce which is, currently, imported under A.M.P. arrangements, is small, variable in size and has a wholesale price that is close to half that of the extra-regional product ($0.65 vis-à-vis $1.10 per lb.). Uniform carrots that are suitable for the Trinidad market can be produced in the region - particularly, in Barbados and Antigua. St. Vincent has a serious nematode problem in the carrot crop. The major constraints to servicing this market from the region are agronomic, but the constraints can be removed with suitable extension support and with the availability of suitable carrot seed. In Year 1 (1983/84), CATCO can contract for the production of 100 tonnes of carrots and to supply the Trinidad market. This would represent a miniscule proportion of total market supply. Having established with the trade that regional carrots can meet the quality standard set by extra-regional imports, CATCO trade in Year 3 (1984/85) will expand rapidly to reach 600 tonnes for the year (12 tonnes per week) and capture around 15 per cent of the total market. By Year 6 (1988/89) CATCO trading volume in carrots will have reached 800 tonnes (15 tonnes per week) and will represent a share of about 17 per cent of the total market.

The market for fresh pigeon peas in Trinidad is estimated to be about 2,000 tonnes. Very small quantities are imported from intra-regional sources, the vast majority being locally produced. This market is quite distinct from the dried pigeon pea market (the latter being the exclusive territory of U.S.A. product) and exhibits distinct seasonal patterns; demand is at its strongest during holiday and festive periods. This labour intensive crop is, currently, in short supply. When CATCO has gained experience in merchandising highly perishable produce (as are fresh pigeon peas), then the company can take advantage of this growing market opportunity. In Year 2, it is estimated that CATCO will supply the Trinidad market with 60 tonnes of fresh pigeon peas from Windward Islands and the annual CATCO market volume will increase to reach 30 tonnes by Year 6 (1988/89).

Small volumes of dried peanuts are exported from St. Vincent to the Trinidad market. Organised farmer groups have been contracted who are enthusiastic to undertake contractural production of peanuts to meet Trinidad specifications. New hybrid peanut varieties which have been tested in the Eastern Caribbean show substantial yield increases over previous seed stock. In Year 2, CATCO will contract for the production of 100 tonnes of peanuts for sale in Trinidad (and 50 tonnes for sale in Barbados). The contractural volume is expected to double in Year 3 (200 tonnes to Trinidad and 100 tonnes to Barbados) and reach around 300 tonnes in Year 6 (120 tonnes for Barbados).

The total market size for cabbage is around 5,500 tonnes per annum, of which 70 per cent is supplied by local farmers. Imported produce enters the Trinidad market in the low season for local supplies, that is, the last six months of each year. Within the region, in particular in St. Vincent, St. Lucia and Barbados, cabbage can be grown of equivalent quality to the imported product. Further, growers have expressed a strong interest in producing cabbage for export to Trinidad at or around the farm price level that CATCO has identified as being 'Trinidad market competitive' (a farm price of around $0.66 B'dos.). In Year 2 (1983/84), CATCO will contract for the production of 100 tonnes of cabbage for the Trinidad market. In Year 3, this volume will increase to 150 tonnes and a small market will be established for contract produced cabbage in other states in the region (50 tonnes). By Year 6, CATCO will supply around 240 tonnes to the Trinidad market, representing less than a 5 per cent share of the total market size, but a 40 per cent share of the imported cabbage volume. Extra-regional exports to other markets within the region will be around 70 tonnes in Year 6, and will be made up of relatively small shipments to the Leeward Islands to sup lement requirements in the off-season.

Trinidad is a major importer of onions. During the 1970's, Barbados exported 500 tonnes and more to this market. Disease problems and poor marketing scheduling destroyed this trade. In 1982, under the guidance of B.M.C., onion production was successfully resurrected in Barbados. A small export surplus is planned for 1983. In year 3 (1984/85), CATCO will contract with producers for 500 tonnes of onions for sale to Trinidad. This trade will grow to reach about 720 tonnes by Year 6 (1988/89). This will represent a 10 per cent market share for CATCO intra-regional produced onions.

THE MANGO MARKET IN TRINIDAD AND BARBADOS

In 1980, Trinidad was a small net exporter of mangoes (about 60 tonnes of imports, largely from Grenada and, to a lesser extent, St. Vincent, are recorded in the official statistics; and 108 tonnes were exported to Canada and the U.K.). Regional produce is,often poor quality and badly packaged. Spoilage is high (40% or more). A ready market exists for quality, well-packaged mangoes, particularly when local produce is not in season (the mango season is from May-July).

During the mango season, wholesale prices for Greyhams or Julies range between $0.30 and $0.50, rising to $0.80 each in the off-season. Common (ungrafted) mangoes range in wholesale price between $0.12 and $0.20 each.

The size of the mango market in Trinidad is difficult, if not impossible, to discern. Domestic production is unknown but, certainly, a 100 tonne CATCO import volume would represent a <u>very</u> small proportion of total supply. Local supplies of quality, packaged mangoes are <u>not</u> available. The production and marketing system for local mangoes is, at best, rudimentary.

CATCO produce would be directed towards the supermarket and hotel/restaurant sectors of the market. Supplies of suitable mangoes are available now in sufficient quantities to meet the anticipated CATCO 1984/85 (Year 2) requirements. Year 2 has been scheduled for first shipments because the very perishable 'soft' nature of mangoes requires a high degree of fresh produce marketing expertise - this will be acquired by the CATCO team by Year 2.

The market picture for packaged, quality mangoes in Barbados is very similar to that in Trinidad. Once again, domestic production of the product is not documented and estimates have wide variation. In 1981, close to 200 tonnes were imported from St. Vincent and St. Lucia by the huckster trade the produce is ill-packaged and, generally, of poor quality. Supermarkets and the huckster trade are the major merchandizers of mangoes in Barbados. The former are constrained in the volume of produce they sell by the poor quality of domestic and imported mangoes. Similarly, the hotel and restaurant trade are reluctant users of mangoes because of quality problems with the product.

In Year 3, CATCO will build a market volume for boxed mangoes of 100 tonnes, destined largely for the hotel, restaurant and supermarket trade. This will increase sharply to 300 tonnes in Year 4 (1985/86) and, by Year 6, will be around 350 tonnes, or 7 tonnes per week. The increasing annual volume of CATCO mango sales will reflect strong penetration into the 'quality' fresh produce sector and an expanding overall market as increasing marketing efficiency lowers unit prices and expands the demand for the product.

It is expected that CATCO will also penetrate the 'other regional' mango market over this same time period (i.e. selling to the Leeward Islands, French and Dutch West Indies). By Year 6, sales to this composite market will be around 350 tonnes.

THE MARKET FOR BANANAS IN BARBADOS

The present market for bananas in Barbados is about 650 tonnes per year, of which over 80 per cent are produced domestically. Approximately 25 per cent of market volume is merchandised by hawkers/street vendors, 30 per cent is consumed in the hotels and restaurant sector, 27 per cent by supermarkets, and institutions take 18 per cent of total supplies. The approximate buying price for bananas from growers is 25-30 cents per pound, and the buying-in price for supermarkets and hotels, for example, is 30-35 cents per pound.

King Agro Foods in association with CATCO, has been testing the market for room ripened bananas. A five tonne capacity room has been in operation for some months. Weekly shipments have been ripened and merchandised via the retail trade, the hotel and restaurant sector, the cruise liner market and the school meals programme. Consumer acceptability has been very strong and weekly market size estimates for year 1, at a wholesale price of around 60-65 cents per pound, are projected to be:

	Tonnes/Week
School meals programme	5
Cruise liner trade	3
Retail (supermarkets etc.)	6
Hotels and restaurants	6
	20

This entire market can be captured by CATCO in years 0 and 1. In the formative year (1982/83) of market penetration, it is expected that CATCO, in association with the ripening room owner, will merchandise 300 tonnes. The planned 20 tonne throughput will not be attained until present ripening room capacity is doubled. In 1983/84, the annual volume merchandised during the year will be 1,000 tonnes.

It is anticipated that the room-ripened banana market will grow very quickly, once consumers are exposed to the product on a continuous basis. From year 2 through to year 5, market size will at least double from the projected level of 1,000 tonnes in year 1 (1983/84) to reach 2,000 tonnes per year (17 pounds per capita) in 1988/89. A conservative estimate is that CATCO can hold 60 per cent of this market, that is, 1,200 tonnes throughput per year.

THE MARKET FOR CITRUS IN BARBADOS

The size of the orange market in Barbados in 1981 was around 1,000 tonnes - a small proportion was supplied from domestically grown produce (say 15%), over half the import volume came from intra-regional sources (Jamaica, some from Trinidad, and relatively small quantities from the Windward Islands), and about one-quarter from outside the region (exclusively, the U.S.A.). About 10% of the orange market is, strictly speaking, accounted for not by oranges but by ortaniques - this produce is imported by Almack Trading Company under an exclusive shipping arrangement with the Jamaican Citrus Growers Association.

The two major market participant groups for oranges are the hawkers/street vendors and the supermarkets. These account for a good three-quarters of total market volume in Barbados. Hotels/restaurants and the institutions share the remaining one-quarter of the market.

It is expected that in Year 0 (1983/84) CATCO will have an annual trading volume in oranges of 200 tonnes (4 tonnes per week),comprising about 20% of total market share. The major factor constraining growth in CATCO orange volume will be the absence of secure supplies of produce. In the first year or two, it is anticipated that there will be a scramble for supplies - relatively small quantities coming from the Windward Islands, sporadic shipments from Jamaica when Jamaican supplies exceed the very bouyant demand for oranges in that state, and the two supply sources where potential has not been assessed in-depth, Guyana and Belize. As a result of the uncertainty surrounding source of supplies, Year 1 CATCO sales volume is expected to remain at 200 tonnes, increasing sharply to 330 tonnes in Year 2 (1984/85) as the CATCO staff gain experience in assessing scarce supplies and, thence, climbing relatively slowly to reach close to 400 tonnes in 1988/89 (Year 5) and maintaining a market share of around 25% in that year (i.e. Year 5 total market volume will be around 1600 tonnes).

The grapefruit market in Barbados was around 300 tonnes in 1981 - substantially smaller than the market volume prevailing in the late 1970's when it was a similar size to the orange market, that is, 1,000 tonnes. In recent years, there has been a consistent shortage of grapefruit on the market reflecting, in part, the sharp curtailment in supplies of produce from Dominica after Hurricane David and Allan. In 1981, St. Lucia was the largest exporter of grapefruit onto the Barbados market, followed by St. Vincent and Trinidad. There have been no significant extra-regional imports of grapefruit in recent years.

Grapefruit are an item that are not generally merchandised via the hawker/street vendor trade - supermarkets and hotels/restaurants are the major market outlets, although hospitals account for around 10% of market volume as fresh fruit is a consistent input in hospital meals.

In Year 0 (1982/83), it is estimated that CATCO can capture about one-third share of the grapefruit market (120 tonnes - 1982/83 total market volume will be around 360 tonnes). Shipments of around 6 tonnes per week in late 1982/early 1983 from Dominica will make up the bulk of CATCO sales volume. In 1983/84 (Year 1), CATCO should make significant inroads into the grapefruit market - satisfying demand that, currently, is latent through gaining access to grapefruit from the Dominica Citrus Growers' Association as output levels approach pre-hurricane days. The likely market volume attained by CATCO will be 300 tonnes (or 6 tonnes per week) which will represent a market share of around 66%*. The CATCO market volume should reach 400 tonnes (8 tonnes per week) by 1988/89 (Year 5) out of a total market volume of around 1,000 tonnes, giving a 40% market share.

* Assuming a 1983/84 total market volume of 450 tonnes.

THE MARKET FOR PLANTAINS IN BARBADOS

The current size of the market for plantains in Barbados is around 730 tonnes, the bulk of which are imported from St. Vincent. The hawker/street vendor trade merchandises around 60 per cent of this annual figure, the supermarket sector 34 per cent, hotels and restaurants only 5 per cent, and a very small quantity goes through the institutional trade.

The plantain trade is characterised by a high degree of product spoilage and, generally, low quality fruit.

In year 0, CATCO can capture 20 per cent of the market for plantains - the focus will be on the provision of reliable supplies of boxed quality produce largely to the supermarket trade (around 3 tonnes per week). Satisfying this segment of the market will stimulate growth in the size of the overall market for plantains. In year 1, market size will grow to around 900 tonnes, of which CATCO can expect to capture one-third, again through servicing the quality end of the market. In year 3 through 5, the market is expected to grow relatively slowly, but CATCO will maintain market share.

THE MARKET FOR TOMATOES IN BARBADOS

Imports of tomatoes from extra-regional sources (largely the U.S.A.) account for about 2 percent of the total volume of imported fresh and processed fruits and vegetables into Barbados. Annual tomato imports in 1981 were about 340 tonnes, representing 26 percent of the total market volume of around 1,400 tonnes. The two major outlets for tomatoes are supermarkets and the huckster/street vendor trade, accounting for close to 80 percent of total supply, followed by hotels/restaurants - 15 percent of market volume, and the residual quantity being merchandized via the institutional trade.

As per Trinidadian tomato imports, the produce imported into Barbados is high quality vis-à-vis the local product. It is estimated that CATCO will merchandize 50 tonnes of room-ripened tomatoes in Year 2 (1983/84) - utilizing the room ripening facilities which will be put in place to service the room-ripened banana market. In Year 3, the volume will increase to 75 tonnes, representing a CATCO market share of around 5 percent (or 20 percent market share for imported produce), and by Year 6 (1988/89) the annual CATCO market volume will reach close to 90 tonnes. Very likely, the green tomatoes processed through the ripening room will be produced in Barbados itself.

Antigua, St. Kitts and the French and Dutch West Indies are significant importers of tomatoes from extra-regional sources. It is projected that, by Year 3, CATCO will penetrate these regional markets with room-ripened tomatoes, once experience has been gained in the Trinidad and Barbados markets. Expected CATCO market volumes of room-ripened tomatoes delivered to regional markets identified above are: Year 3 - 200 tonnes; Year 4 - 400 tonnes; Year 6 - 484 tonnes.

THE EXTRA-REGIONAL MARKET FOR CATCO PRODUCE

A substantial market exists outside the Caribbean region for produce that can be grown in the CATCO supply area, not least in Europe and North America. However, competition in these markets is stiff and quality requirements are very high. In the first 2 years of trading, it is not planned that CATCO will attempt to penetrate extra-regional markets, but by Year 3 (1985/86), sufficient expertise in merchandizing perishable produce and satisfying demand for high quality produce will have been attained.

The major vegetable item identified for extra-regional trade is sweet peppers - destined for European markets in their "off-season" (November - March). A Dutch importer has already expressed firm interest in undertaking field and shipping trials - once the production and marketing feasibility has been attested (and initial indications are very encouraging), then the expected requirement from this one company is estimated to be 320 tonnes. Year 3 has been conservatively selected as the first full year of shipment; the projected CATCO volume for this year is 500 tonnes, increasing to around 700 tonnes by Year 6 (1988/89).

Mangoes are an item that already are exported from the region, from St. Lucia, St. Vincent and Dominica to European markets. However, the export trade is disorganized and sporadic. It is projected that CATCO will export 100 tonnes of mangoes, largely from St. Lucia and St. Vincent, to Europe in Year 3 (1984/85). This annual volume will increase sharply in Year 4 and attain a level close to 400 tonnes in Year 6 (1988/89). The current size of the market for mangoes in Europe is 7,700 tonnes, projections for the end of the decade indicate that this will increase to 10,000 tonnes. The anticipated CATCO shipment of 400 tonnes in Year 6 will represent about 4 percent market share in the European region.

A range of exotic produce is exported from the Eastern Caribbean to extra-regional markets; again, the trade is disorganized and sporadic and includes such items as breadfruit, hot peppers, yams, tannias, eddoes, sweet potatoes, passion fruit, etc. Using sweet peppers and mangoes to form a nucleus for an extra-regional marketing thruft, CATCO will 'add-on' other exotic produce to the tune of 500 tonnes in Year 3. It is anticipated that this volume will double by Year 6, to reach around 1,000 tonnes, or 20 tonnes per week.

CATCO OUTPUT RELATED COSTS, MARGINS AND SALES PRICES BY PRODUCT (B'DOS $/LB)

COST CATEGORY	BANANAS	PLANTAINS	ORANGES	GRAPEFRUIT	PEANUTS	CABBAGE	PIG.PEAS	CARROTS	ONIONS	TOMATOES	MANGOES
Product costs	10¢	20	35	35	1.54	66	66	44	39	1.09	31
Packaging Materials/Grading	10¢	10	10	10	3	4	4	6	6	10	30
Handling etc.	2¢	2	2	2	6	4	5	4	3	10	2
Freight/Ins./ Tr.	14¢	10	14	14	5	10	8	10	8	16	12
Shrinkage	4¢	5	4	4	9	4	5	4	3	11	5
CATCO Margin for Cost & Profit	4¢	5	6	6	26	12	12	12	11	39	20
PRICE TO WHOLESALE DISTRIBUTOR	44¢	52¢	71¢	71¢	2.03	1.00	1.00	80¢	70¢	1.95	1.00

ANNEX D
EXHIBIT 2

CATCO FARM INPUT RELATED COSTS, MARGINS AND SALES

BY COUNTRY OF SALES, IN YEAR 1 OF THE PROJECT

(BDS$)

COUNTRY OF SALES	FERTILIZER			SEEDS			CHEMICALS			MISCELLANEOUS			TOTAL		
	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	SALES
ST. LUCIA				28,756	4,313	24,437				57,500	8,625	48,875	86,250	12,938	73,312
ST. VINCENT				28,750	4,313	24,437				57,500	8,625	48,875	86,250	12,938	73,312
ST. KITTS	414,000	12,420	401,580	17,250	2,588	14,662	57,500	5,750	51,750	28,750	4,315	24,435	517,500	25,073	542,573
MONTSERRAT				6,900	1,035	5,865	69,000	6,900	62,100				75,900	7,935	67,965
DOMINICA				9,200	1,380	7,820	34,500	3,450	31,050	11,500	1,725	9,775	55,200	6,555	48,645
ANTIGUA	115,000	3,450	111,550	69,000	10,350	58,650	57,500	5,750	51,750				241,500	19,550	221,950
BARBADOS	1035,000	31,050	1003,950	69,000	10,350	58,650	115,000	11,500	103,500				1219,000	52,900	1166,100
TRINIDAD				115,000	17,250	97,750	230,000	23,000	207,000				345,000	40,250	304,750
TOTAL	1564,000	46,920	1517,080	343,850	51,580	292,270	563,500	56,350	507,150	155,250	23,290	131,960	2626,600	178,140	2448,460

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ANNEX D
EXHIBIT 3

TABLE

CATCO FARM INPUT RELATED COSTS, MARGINS AND SALES
SALES BY COUNTRY OF SALES, IN YEAR I OF THE PROJECT

	FERTILIZER			SEEDS			CHEMICALS			MISCELLANEOUS			TOTAL		
COUNTRY OF SALES	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	COSTS	SALES	CATCO MARGIN	SALES
ST. LUCIA				28,756	4,313	24,437				57,500	8,625	48,875	86,250	12,938	73,312
ST. VINCENT				28,750	4,313	24,437				57,500	8,625	48,875	86,250	12,938	73,312
ST. KITTS	414,000	12,420	401,580	17,250	2,588	14,662	57,500	5,750	51,750	28,750	4,315	24,435	517,500	25,073	542,573
MONTSERRAT				6,900	1,035	5,865	69,000	6,900	62,100				75,900	7,935	67,965
DOMINICA				9,200	1,380	7,820	34,500	3,450	31,050	11,500	1,725	9,775	55,200	6,555	48,645
ANTIGUA	115,000	3,450	111,550	69,000	10,350	58,650	57,500	5,750	51,750				241,500	19,550	221,950
BARBADOS	1035,000	31,050	1003,950	69,000	10,350	58,650	115,000	11,500	103,500				1219,000	52,900	1166,100
TRINIDAD				115,000	17,250	97,750	230,000	23,000	207,000				345,000	40,250	304,750
TOTAL	1564,000	46,920	1517,080	343,850	51,580	292,270	563,500	56,350	507,150	155,250	23,290	131,960	2626,600	178,140	2448,460

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Annex D
Exhibit 3
p. 2

Management Agreement

THIS MANAGEMENT AGREEMENT is made as of this 12th day of December, 1981 BETWEEN CARIBBEAN AGRICULTURAL TRADING COMPANY LIMITED a company incorporated and registered under the Laws of Barbados Cap. 308 and having its registered office situate at Beckwith House, Hincks and Prince Alfred Streets, in the City of Bridgetown and Island of Barbados (hereinafter called "the Company") of the ONE PART AND GRACE, KENNEDY & COMPANY LIMITED a company registered and incorporated under the Companies Act of Jamaica and having its registered office at No. 64 Harbour Street, Kingston, Jamaica (hereinafter called "GKCO") of the OTHER PART

WHEREAS CARIBBEAN FOOD CORPORATION (CFC) and GKCO have caused the Company to be incorporated in Barbados to conduct business operations in the Caricom Region; and CFC and GKCO are at present the only Shareholders of the Company.

AND WHEREAS the Company and GKCO have agreed that GKCO shall manage the business operations of the Company for an initial three year period, subject to policy directions by the Board of Directors of the Company.

NOW THEREFORE IT IS AGREED as follows:

ARTICLE I

DEFINITIONS

1.01 The following terms shall have the following meanings when used in this agreement unless the context shall otherwise require;

"Company" means Caribbean Agricultural Trading Company Limited.

"Board of Directors" means the Board of Directors of the Company.

"Business Operations" has the meaning set forth in the Memorandum of Association of the Company as of the date of this agreement as the same may from time to time be supplemented or amended.

"Manager" means Grace Kennedy & Company Limited.

"Caricom Region" means the states from time to time comprising the membership of the Caribbean Common Market established by the annex to the Treaty establishing the Caribbean Community done at Chaguaramas on the 4th July, 1973.

ARTICLE II

APPOINTMENT AS MANAGER

2.01 Subject to the provisions of this Agreement the Company hereby appoints GKCO to be the Manager of the Company and GKCO accepts such appointment. It is expressly agreed by and between the parties that in carrying out its obligations under this Agreement GKCO shall in all things act in good faith in the best interest of the Company and in accordance with such policy directions as it may from time to time receive from the Board of Directors of the Company.

ARTICLE III

TERM

3.01 Subject to the provisions of section 3.02 the term of this Agreement shall commence on the 1st day of October, 1981 and continue for a period of three years, unless sooner terminated by the Company or GKCO by the giving to the other party of not less than six months notice in writing.

3.02 After the three year period referred to in section 3.01, GKCO if so requested by the Board of Directors of the Company, shall continue to act as Manager under the terms and conditions of this agreement for such period of time as may be agreed.

ARTICLE IV

PURPOSE, POWERS AND DUTIES

4.01 (a) Subject to direction by the Board of Directors the Manager shall manage the business operations of the Company.

(b) The Manager shall at all times adhere to any budgets and act in accordance with any operation plan approved from time to time by the Board.

4.02 Subject as aforesaid and to the provisions of section 4.03 the Manager shall have all powers necessary, appropriate and incidental to the efficient and economic conduct of the business operations in the ordinary course of the Company's business in accordance with this agreement including but without limitation:

(a) employing and dismissing employees of the Company on such terms and conditions as may be deemed appropriate; retaining advisors, consultants and other personnel to assist the Company in carrying out its obligations; establishing labour policy and handling all facets of labour relations; and generally performing all functions relating to the provision of labour and personnel for the Company;

(b) maintaining, protecting and preserving all company property, including but not limited to real property, personal property, facilities, fixtures, equipment trade secrets and other confidential information;

(c) planning, organising and contracting for the design, construction, improvement or rehabilitation of any facilities reasonably necessary to the efficient and economic operation of the Company's business;

(d) purchasing, leasing or otherwise acquiring real property, personal property, facilities, fixtures, equipment, supplies, services, or other materials required for the efficient operation and management of the Company, and leasing any type of property specified in this sub-section;

(e) selling, conveying, leasing, assigning, transferring, condemning, abandoning, destroying or otherwise disposing of, in the ordinary course of business, real property, personal property, facilities, fixtures, equipment, supplies or other materials which are worn out, obsolete or no longer useful;

(f) defending and prosecuting law suits; settling and compromising claims, entering into, modifying, releasing, terminating or ratifying contracts and agreements; securing insurance for the Company, adjusting losses and claims pertaining to such insurance;

(g) opening, maintaining and drawing on bank accounts in the name of the Company; signing, accepting, endorsing and receipting notes, drafts, cheques and bills of exchange; making disbursements from the Company's funds in the name of and for the account of the Company for costs and expenses incurred by the Company; and generally performing all financial, banking and disbursing functions incident to the operations of the Company;

(h) keeping full, accurate and up to date books of account and financial and operating records that adequately describe the activities and business of the Company; preparing the annual budgets of the Company for approval by the Board of Directors; preparing operation reports for the Board of Directors; and generally performing all filing, reporting, accounting and secretarial services incident to the operations of the Company;

(i) doing all acts and conducting all operations necessary to implement any expansion of operations should the Company determine to expand operations;

(j) doing all acts and performing all operations as may be necessary or incidental to the performance of any contractual obligation undertaken by the Company; and

(k) doing all acts and conducting all operations as may be necessary, appropriate or incidental to the efficient and economical conduct of the business operations of the Company and to the conduct of the day to day activities of the Company.

4.03 The Manager shall not perform the following acts or exercise the following powers (even if expressly or impliedly included within the powers set forth in section 4.02) on behalf of the Company unless specifically authorised by the Board of Directors:

(a) selling, conveying, assigning, transferring, exchanging, condemning, abandoning or otherwise disposing of any assets or property of the Company with a net book value in excess of $10,000.00 for each transaction;

(b) committing for capital expenditure to any one project, item, operation or activity an aggregate amount in excess of $50,000.00, or materially exceeding a previously approved annual capital budget;

(c) entering into any lease or real property or facilities for a term in excess of one year or for an annual rent in excess of $24,000.00 for any single transaction;

(d) entering into any agreements or commitments not covered by any other sub-section if this section 4.03 in the name of, for the account of or on behalf of the Company if the term is in excess of one year or if the total amount of consideration is in excess of $100,000.00;

(e) prosecuting, defending or settling law suits or claims to which the Company is a party; and

(f) entering into any contract, arrangement or understanding with either CFC or an affiliate of CFC or GKCO or an affiliate of GKCO other than pursuant to this agreement.

4.04 Subject to the provisions of Article 9 the Manager shall use its best efforts, skill, care and judgment in the performance of its duties under this agreement.

4.05 Except as the Board of Directors may otherwise determine the Manager:

(a) not less often than once in each calendar year shall prepare and submit to the Board of Directors for its consideration a budget (Annual Budget) setting forth the estimated receipts and expenditures (capital, operating and other) of the Company for a period of not less than twelve months coinciding with the financial year of the Company. When approved by the Board of Directors the Manager shall implement the Annual Budget and shall be authorised, subject to the provisions of Section 4.03, without the need for the further approval of the Board of Directors, to make the expenditures and incur the obligations provided for in the Annual Budget. The Board of Directors may review and approve the adjustments and amendments to the Annual Budget during the period covered by the Annual Budget.

(b) within thirty (30) days after the end of each calendar month shall prepare and deliver to the members of the Board of Directors of the Company and to the

Board of Directors of GKCO a financial and operating report that adequately describes the activities and business of the Company during such month; and

(c) within sixty (60) days after the end of each calendar year, shall prepare and deliver to the members of the Board of Directors of the Company and to the Board of Directors of GKCO an annual operating report that adequately describes the activities and business of the Company during each calendar year.

Each such report shall specifically include a statement as to the expenditure on the acquisition or replacement of or addition to equipment or facilities of any kind, the contributions to the capital of the Company, all loans and advances made to the Company and all loans and advances and other payments repaid or made by the Company during the period covered by such reports.

4.06 The Manager shall also prepare and deliver to the Company such operating and financial and other plans, budgets and reports as the Board of Directors may request from time to time.

ARTICLE V

EMPLOYMENT

5.01 Personnel required to assist in the performance of the Manager's duties under this agreement shall be employed by the Manager as employees of the Company and the Manager shall ensure that it is so stated in any agreement or contract of employment of such personnel. The Manager shall determine the authority, compensation and duties of and may discharge, suspend or dismiss any such employees of the Company. The Manager shall assign on a full time or part time basis such personnel of GKCO as may be required to assist in the performance of the Manager's duties under this agreement. All such employees shall be considered employees of GKCO.

5.02 GKCO employees, while at offices or facilities of the Company shall at all times be subject to the same rules and regulations as established by the Company for its own employees.

ARTICLE VI

TRADEMARKS

6.01 Nothing contained in this agreement shall give the Company the right to use any trade mark or trade name belonging to GKCO or to any of its affiliates.

ARTICLE VII

COMPENSATION

7.01 Except with respect to reimbursement of costs referred to below the Manager shall not be entitled to any remuneration for any services provided to the Company during the term of this agreement including any continuation or extension under section 3.02 unless otherwise expressly agreed in writing by the Company. It shall however be reimbursed for all costs charges and expenses reasonably incurred or expended in the rendering of services as Manager, including those described in section 7.05 (hereinafter called "reimbursable costs").

7.02 GKCO shall submit to the Company monthly invoices describing in reasonable detail all reimbursable costs incurred, including summaries of types of services rendered.

7.03 Payment for each invoice shall be made in Barbados dollars within thirty (30) days of receipt of such invoice by the Company. GKCO shall not seek or secure any local borrowing in respect of any expenditure incurred hereunder.

7.04 Within ninety (90) days following the end of each calendar year during the term of this agreement the Manager shall furnish to the Company a report of all reimbursable costs for the calendar year reimbursed by the Company. Upon request of the Company such report shall be certified as correct by the Company's independent Chartered Accountants.

7.05 Reimbursable Costs include without limitation:-

(a) travel and transportation expenses (including loading and unloading, packing and demurrage) to, from and within Barbados and elsewhere; communication expenses; fees and expenses of consultants; insurance expenses; cost expenses and direct damages incurred or sustained by GKCO and not compensated by insurance; supplies, customs, excise, sales, license, permit, import and other taxes, fees or duties but excluding taxes on income; legal fees; accounting and auditing expenses; duplicating, photostating and other costs of preparing and producing material;

(b) costs incurred by GKCO in transferring employees (which included employees of affiliates pursuant to Section 5.01) to, from and within Barbados, including without limitation payments and allowances given employees in connection with such transfers, and moving expenses of employees, their families, and their household goods; losses incurred by GKCO directly related to and in connection with the transfer of any employee.

(c) with respect to employees (which includes employees of Affiliates pursuant to Section 5.01) assigned to work full time in Barbados for the Company for six (6) months or more, all salaries and wages paid by GKCO and the cost of all benefits paid for or to such employees, including without limitation overseas allowances and premiums, home leave and vacation allowances, housing, cost of living and environmental allowances, schooling allowances, payments made to employees on account of differentials between Barbados or any other Caricom country personal income taxes, payroll taxes of every kind related to said salaries and wages including without limitation social security and unemployment taxes, pensions, retirement and other employee benefits, insurance and all other expenses incurred by GKCO in relation to such employees, all in accordance with regular established programmes of GKCO;

(d) with respect to employees (which includes employees of Affiliates pursuant to Section 5.01) othe than those referred to in subsection (c) above, all salaries and wages paid by GKCO to such employees for time actually spent rendering service to the Company hereunder, plus an amount equal to seventy-five percent (75%) of such salaries and wages which shall be deemed without limitation to include the cost of all employee insurance and other benefit programmes, office supplies, periodicals, rent, utilities, and indirect services from all staff departments; and

(e) any and all other costs and expenses of whatever nature and kind reasonably incurred by GKCO in the performance of this agreement.

ARTICLE VIII

RECORDS

8.01 GKCO shall keep reasonably detailed records in accordance with generally accepted accounting principles and practice consistently applied as required for the determination of payments due hereunder. All such books, records and accounts reasonably related thereto will be made available for use by the Accountant in making any certification required under Section 7.04.

ARTICLE IX

LIMITATION OF LIABILITY

9.01 Within the scope of the services provided hereunder GKCO will operate the facilities of the Company as efficiently and economically as possible under all the circumstances. It is understood and agreed however that in the absence of fraud or gross negligence on the part of any officer or employee of GKCO having jurisdiction and responsibility for the general performance of this agreement, GKCO shall not be responsible for, and the Company will save GKCO harm from and against, any and all claims (and the costs and expenses of defending against them), with respect to the operation of the Company.

ARTICLE X

FORCE MAJEURE

10.01 (a) In the event the Company, GKCO or CFC is unable to perform any of its obligations under this agreement by reason of Force Majeure as defined in subsection (c) of this section, such obligations shall be suspended for as long as the event of Force Majeure continues.

(b) A party failing to perform any obligations under this agreement by reason of Force Majeure or reasonably anticipating any such failure shall so notify the other party, describing the circumstances and estimated duration of the Force Majeure event.

(c) Force Majeure means war, revolution, invasion, insurrection, civil disorders, acts of God, compliance with any laws and orders of any Government having jurisdiction or any subdivision thereof, or any other condition or circumstance of a similar character or any other cause beyond the reasonable control of a party or other entity or person.

10.02 No provision of this agreement shall be interpreted as limiting GKCO or its affiliates from either directly or indirectly engaging in any type of activity or enterprise or commercial undertaking either in Jamaica or Barbados or elsewhere. Neither CFC nor GKCO shall be subject to liability, prejudiced in its right to enjoy profits and compensation or required to account to the Company for its participation in any such activities, enterprises or undertaking.

ARTICLE XI

ASSIGNMENT

11.01 The Manager shall not have the right to sell, transfer, assign, mortgage or pledge its interest in this agreement in whole or in part, except by operation of law.

11.02 The Company shall not have the right to sell, transfer, assign, mortgage or pledge its interest in whole or in part in this agreement except by operation of law.

ARTICLE XII

GOVERNING LAW

12.01 This Agreement shall be governed by and construed in accordance with the Laws of Barbados.

ARTICLE XIII

EFFECT OF LAWS AND REGULATIONS

13.01 The performance of the obligations hereunder are subject to existing and future laws and regulations of Barbados and the Caricom territories.

ARTICLE XIV

NOTICE

14.01 All notices, consents or other communications given pursuant to this Management Agreement shall be in writing and shall be personally delivered or mailed, postage prepaid by registered mail or certified mail return receipt requested (air mail to foreign locations) addressed as follows:-

If to the Company	Addressed to the Secretary of the Company at the Registered Office of the Company
If to GKCO	Grace Kennedy & Co. Ltd. No.64 Harbour Street Kingston Jamaica Attention: Managing Director

or to such other address as either party may from time to time notify the other. Any notice, consent or other communication personally delivered shall be deemed to have been effectively given at the time of delivery and any notice, consent or other communication mailed as aforesaid shall be deemed to have been effectively given on the seventh day after the date of posting and if to foreign locations, on the fourteenth day after the date of posting.

ARTICLE XV

MISCELLANEOUS

15.01 This Agreement is for the sole benefit of the Company and GKCO and their successors and none of the provisions of this agreement shall be for the benefit of or be enforceable by any creditor of any party.

15.02 Any amendment, modification or alteration of this Agreement shall be in writing executed by the Company and GKCO.

15.03 The captions contained in this Agreement and the titles of the articles are inserted only as a matter of convenience and in no way define, limit, extend or describe the scope of this Agreement or the intent of any of its provisions.

IN WITNESS WHEREOF this agreement has been executed and delivered
at BRIDGETOWN, BARBADOS
of the day and year first above written.

CARIBBEAN AGRICULTURAL TRADING COMPANY LIMITED

By. *Dennis Noel* ....

GRACE KENNEDY & COMPANY LIMITED

By. *Carlton Alexander* ....

CARIBBEAN AGRICULTURAL TRADING COMPANY LIMITED

AND

GRACE KENNEDY & COMPANY LIMITED

MANAGEMENT AGREEMENT

DUNN, COX & ORRETT
ATTORNEYS-AT-LAW
46 DUKE STREET
KINGSTON

EXHIBIT 1 PROJECTED CATCO OPERATING COSTS FOR TRADING YEARS 1982-1992 * ($1000 BDS)

ITEM	YEARS 1	2	3	4	5	6	7	8	9	10
Personnel	550	815	907	1247	1434	1649	1897	2181	2508	2884
Office Space Rental	23	46	51	56	61	67	74	82	90	99
Computer Rental	30	33	36	40	44	48	53	58	64	47
Phone Copier Rental	20	22	24	27	29	32	35	39	43	47
Veh. Maintenance	30	33	36	40	44	48	53	58	64	71
Stationery, Printing	15	16	16	17	18	19	20	21	22	23
Regional Travel	120	132	145	96	106	116	128	141	155	170
Ex-Regional Travel	20	22	24	16	18	19	21	23	26	28
Market Development	80	88	97	106	117	129	142	156	172	189
General Insurance	15	17	18	20	22	24	27	29	32	35
Vehicle Rental	60	66	73	80	88	97	106	117	129	141
Audit Fees	20	22	24	27	29	32	35	39	43	47
Other G.K. Reimb'les	171	196	226	260	299	344	395	454	523	601
Legal Expenses	20	22	24	27	29	32	35	39	43	47
Electricity,water	28	35	42	42	47	47	51	51	54	54
Director's Meet.	40	44	48	53	59	64	71	78	86	94
Phone Telex, Cngs	75	83	91	60	66	73	80	88	97	106
Amt. Expenses	51	51	52	-	-	-	-	-	-	-
Depreciation	7	7	7	7	7	7	7	7	7	6
Gen. Main. repairs	12	12	13	15	16	18	19	21	23	26
Bad Debts Allow.	20	97	181	267	340	427	492	565	650	748
TA, Training, IDB	434	434	-	-	-	-	-	-	-	-
TA, Training Other	30	80	120	80	140	70	77	85	92	102
	1911	2373	2315	2583	3013	3362	3818	4332	4923	5589
Contingency	57	275	247	317	199	168	191	217	246	279
TOTAL	1968	2648	2562	2900	3212	3530	4009	4549	5169	5868

* For a detailed description of the assupmtions on each line item in this table, see the footnotes on following pages.

Footnotes to Operating Costs Statement

* Office Space Rental assumes 12 offices will be needed in the first year giving rise to an expense of $23,040. This is assumed to double in the second year. 10% increases annually thereafter.
* Computer Rental assumes initial annual rental of $30,000 with 10% increases annually for upgrading/rental fee increases.
* Telephones, Copier Rental assumes initial annual rental of $20,000 with 10% increases annually thereafter. Provision for telex equipment rental is also included here.
* Vehicle Maintenance assumes five vehicles at a unit running cost of $500/month (mostly for petrol) with 10% increase annually.
* Stationery and Printing includes for general office stationery and computer printing paper at an initial $10,000 plus $2,400 each toward postage and subscriptions. 5% increases are assumed annually thereafter.
* Regional Travel includes for travel within the region at an average rate of $200 airfare/trip plus $250 per diem and local travel (each trip assumed to take three days), plus $50 for airport transfers; that is, each trip:

Airfare	$ 200
3 days @ $50 per diem and local travel	750
Airport transfers	50
Total	$1,000

A total of ten trips are assumed to be made on average each month. Say, three trips by the General Manager, three trips by the Trade Manager and four trips among the Assistant Trade Managers and field officers. Thus, a travel expense of $10,000/month or $120,000/year is assumed in the first year's operation with 10% increase in cost for the next two years. The following year, this cost is assumed to fall off to $96,000 per annum as the marketing system should have been fairly well established by then. 10% increases are assumed annually thereafter.

* Extra-regional Travel includes for travel without the region, mostly to North America, at an average rate of $2,000/trip for airfare plus $300 per diem and local travel (each trip assumed to take six days) plus $200 for airport transfers. That is, each trip:

Airfare	$2,000
6 days @ $300 per diem and local travel	1,800
Airport transfers	200
Total	$4,000

A total of five trips are assumed to be made per year. Thus a travel expense of $10,000/year is assumed with 10% increases in cost for the first two years. Then, this cost is assumed to fall off to $16,000/annum with 10% increases annually thereafter.

* Market Development includes for advertising, promotion, publication of the company's prospectus and developmental work with vegetable varieties, pest control programs and beverages to be produced from indigenous fruit and vegetables. 10% increase annually.

* General Insurance includes for general business insurance including insurance on stock in trade. 10% increase annually. First year estimate at $15,000.

* Vehicle Rental assumes five vehicles rented at $1,000 per month on average with 10% increases annually.

* Audit Fees - 10% increases annually on estimate of Year 0's costs of $20,000.

* Other Grace Kennedy Reimbursables includes for the cost of services provided under the Grace Kennedy Management Contract which holds for a three year period after which it may be renewed or say, reformed with another party. The first year's estimate is based on:

20 air trips @ $700	$14,000
10 man-months @ $9,600	96,000
$\frac{(360 \times 10 \text{ days})}{12}$ @ $200 per diem and local travel	60,833
Total	$170,833

15% increases in this expense are assumed annually.

* Legal Expenses are estimated at $20,000 in the first year and includes for retainer fees plus additional charges for specific queries. 10% increases annually.

* Electricity and Water is estimated at an annual cost of $28,000 in the first year with $7,000 increases over the next two years and an approximate 10% increase every two years thereafter.

* Directors' Meetings is estimated at $40,000 in the first year and allows for all costs associated with accommodating the overseas participants for the quarterly Directors' meeting and the monthly Management Committee meetings. 10% increases annually.

* Telephone, Telex Charges are assumed to be relatively high in the first three years, starting at $75,000 in the first year with 10% increases over the next two years. Like travel expenses, these costs are assumed to fall off by the fourth year of operation to $60,000 with 10% increases annually thereafter.

* Amortization represents the amortization of the leasehold improvement costs ($154,000) over a 3 year period.

* General Maintenance and Repairs allows for repairs and maintenance to office equipment et alia and is estimated at $12,000 in the first two years with 10% increases annually thereafter.

* Operational Contingency is estimated at 5% of the total operational expenses and allows for other minor items not otherwise included explicitly in the operational expenses as well as contingencies associated with those items that are explicitly included.

* Bad Debts Allowances is an expense relating to non-collectable accounts and is estimated at 1/2 of 1% of the gross revenue in any given year.

* Personnel: The supporting schedule for personnel is shown in Section III. D. Table 1.

* Depreciation: The rate of depreciation is assumed to be 10% on fixed assets. The historical cost of depreciable assets is $69,000. Thus depreciation figures are as follows in $1,000:

End of Year	Depreciation	Fixed Assets Net
1	7	62
2	7	55
3	7	48
4	7	41
5	7	34
6	7	27
7	7	20
8	7	13
9	7	6
10	6	-

* Amortization: The leasehold improvements of $154,000 are assumed to be amortized over a 3 year period. Thus, these amortization figures are as follows in $1,000:

End of Year	Amortization	Leasehold Improvements Net
1	51	103
2	51	52
3	52	-

EXHIBIT 2 PROJECTED CATCO OPERATIONAL ACCOUNTS PAYABLE STATEMENT ($1000 BDS)

ITEM	1	2	3	4	5	6	7	8	9	10
Salaries	34,398	50,961	60,462	77,939	89,629	103,074	118,535	136,316	156,763	180,277
Vehicle Maintenance	2,500	2,750	3,025	3,328	3,660	4,028	4,430	4,873	5,360	5,895
Vehicle Rent	5,000	5,500	6,050	6,655	7,321	8,053	8,858	9,744	10,718	11,790
Agency Commission	250	750	781	899	1,034	1,064	1,366	1,509	1,808	2,079
Office Rental	960	1,920	2,112	2,323	2,556	2,311	3,092	3,401	3,742	4,116
Computer Rental	1,250	1,375	1,513	1,664	1,830	2,013	2,214	2,436	2,679	2,947
Phone Rental	1,250	1,375	1,513	1,664	1,830	2,013	2,214	2,436	2,679	2,947
Phone charges	9,375	10,313	11,344	12,478	13,726	15,099	16,608	18,269	20,096	22,105
Stationery	1,233	1,295	1,359	1,427	1,499	1,574	1,573	1,651	1,734	1,820
Travel	11,667	12,833	14,117	9,333	10,267	11,293	12,423	13,665	15,031	16,535
Market Development	6,667	7,333	8,067	8,873	9,761	10,737	11,810	12,991	14,291	15,720
Audit Fees	20,000	2,000	2,200	2,420	2,660	2,928	3,222	3,544	3,898	4,288
Legal Expenses	1,667	1,833	2,017	2,218	2,440	2,684	2,953	3,248	3,573	3,930
Warehousing	1,750	1,925	2,118	2,330	2,562	2,819	3,100	3,416	3,753	4,127
GK Staff Cost	14,230	16,372	18,827	21,651	24,899	28,634	32,929	37,868	43,549	50,081
Elec/water	1,167	1,458	1,750	1,750	1,967	1,967	2,115	2,115	2,260	2,260
Directors' meetings	1,667	1,833	2,017	2,218	2,440	2,684	2,953	3,248	3,573	3,930
Maintenance	1,000	1,000	1,100	1,210	1,331	1,464	1,528	1,755	1,782	2,144
TOTAL	116,037	122,826	140,372	160,380	181,412	204,939	231,923	262,485	297,289	336,991
TOTAL IN $1000	116	123	140	160	181	204	232	262	297	337

FOOTNOTES TO OPERATIONAL ACCOUNTS PAYABLE SCHEDULE

The project may owe on average:

- 3 weeks wages/salaries
- 1 month's vehicle maintenance/rental
- 2 weeks' Agency Commission
- 2 weeks' office space rental
- 2 weeks' computer rental
- 3 weeks' telephone copier rental
- 6 weeks' telephone/telex charges
- 1 month's stationery printing
- 1 month's market development
- the year's audit fee
- 1 month's legal expenses
- 1 month's maintenance
- 2 weeks' warehousing rent
- 1 month GK reimbursables
- 2 weeks' electricity, water
- 2 weeks' Directors' meetings

These assumptions are reflected in the Operational Accounts Payable statement over the 10 year period of analysis.

Projected Accounts Payable with Respect to Trading

It is assumed that the project will undertake to pay suppliers of produce on a cash basis so that there will generally be no accounts payable arising as a result of the purchase of produce.

In the case of the purchase of inputs, it is assumed that in the first year of operation the project will need to pay on sight draft. However, from the second year of operation onwards when the volume of inputs to be ordered have increased, the project will negotiate a 60 day credit on these purchases.

Orders are assummed to be for a 4 months' supply of inputs in each case. Thus, in the first year of operation, the project will need to have cash funds available to purchase a 4 months' supply. This is reflected in the bracketed figure for inputs in the first year.

The figures for accounts payable (which represents working capital financing for the project) are therefore as follows in $1,000 (BDS).

End of Year	Operational	Inputs	Total	Change
1	116	(160)	(44)	(44)
2	123	1,632	1,755	1,799
3	140	2,065	2,205	450
4	160	2,065	2,775	568
5	181	3,154	3,335	562
6	205	3,742	3,947	612
7	232	4,380	4,612	665
8	262	5,037	5,299	687
9	297	5,792	6,089	790
10	337	6,662	6,999	910
L10	-	-	-	(6,089)

L10 = Assumptions made to liquidate the business for IRR calculations.

Projected Accounts Receivable

The project will also experience laps between the sale of goods and the actual receipt of funds arising from those sales. In the case of outputs, this period is assumed to be 30 days, and for inputs 90 days.

Thus, accounts receivable will appear as follows in $1000 (BDS).

End of Year	Inputs	Outputs	Total	Change
1	171	274	445	445
2	657	1,403	2,060	1,615
3	831	2,742	3,573	1,513
4	1,051	4,107	5,158	1,585
5	1,269	5,253	6,522	1,364
6	1,532	6,613	8,145	1,623
7	1,762	7,605	9,367	1,222
8	2,026	8,746	10,772	1,405
9	2,330	10,058	12,388	1,616
10	2,680	11,567	14,247	1,859
L10	-	-	-	(12,388)

L10 = Assumptions made to liquidate the business for IRR calculations.

Projected CATCO Inventory

The major parts of inventory at any point in time is assumed to be:

Outputs : 2 weeks supply

Inputs : 4 month supply

Office Supplies : negligible

Inventory imposes an additional cash outflow on the project. The value of inventory at lower of cost or market value would therefore be as follows in $1000 (BDS)

End of Year	Outputs	Inputs	Total	Change
Start of Year 1	127	213	340	340
1	653	816	1,469	1,129
2	1,244	1,033	2,277	808
3	1,779	1,306	3,085	808
4	2,275	1,577	3,852	767
5	2,863	1,871	4,734	882
6	3,292	2,190	5,482	748
7	3,786	2,518	6,304	822
8	4,354	2,896	7,250	946
9	5,007	3,331	8,338	1,088
10	5,758	3,830	9,588	1,250
L10	-	-	-	(8,338)

L10 = Assumptions made to liquidate the business for IRR calculations.

EXHIBIT 6: SCHEDULE OF REPAYMENT OF LONG-TERM DEBT [1/]

(In $1000 BDS)

YEAR	INTEREST	PRINCIPAL	DEBT SERVICE	BALANCE DUE
1	120	-	120	3,000
2	240	-	240	6,000
3	320	-	320	8,000
4	320	-	320	8,000
5	320	-	320	8,000
6	560	800	1,360	7,200
7	504	800	1,304	6,400
8	448	800	1,248	5,600
9	392	800	1,192	4,800
10	336	800	1,136	4,000
L10	336	800	5,136	-

[1/] Assumes - draw downs of $3,000 Year 1

$3,000 Year 2

$2,000 Year 3

- 5 year monitorium on principal @ 4% interest.
- 10 year pay back period @ 7% on the outstanding balance.

L10 = Assumptions made to liquidate the business for IRR calculations.

7

PROJECTED TAXES PAYABLE (in $1,000 BDS)

Taxes are paid quarterly in arrears. These figures are therefore as follows $1,000 (BDS).

End of Year	Taxes	Taxes Paybale	Change
5	1,368	342	342
6	2,690	673	331
7	3,125	781	108
8	3,683	921	140
9	4,323	1,081	160
10	5,060	1,265	184
L10	5,060	-	(1,081)

L10 = Assumptions made to liquidate the business for IRR calculations.

ANNEX G

CATCO:

ECONOMIC COST BENEFIT

INPUT AND OUTPUT

MARKETING PROGRAMS

TABLE 1

CATCO: ECONOMIC COST-BENEFIT ANALYSIS

(BDS $000)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7-20
A. INPUT MARKETING PROGRAM								
I. BENEFITS								
1. Reduced Cost of Inputs/a		13	40	41	42	42	43	43
2. Increased Production		54	354	576	845	1,110	1,146	1,146
3. Foreign Exchange Benefits/b		3	17	26	36	46	47	47
TOTAL BENEFITS		70	411	643	923	1,198	1,236	1,236
II. COSTS								
1. Cost of Inputs/c		34	221	360	528	694	716	716
2. Increased Costs of Production/d		11	71	115	169	222	229	229
TOTAL COSTS		45	292	475	697	916	945	945
SUB-TOTAL - INPUTS		25	119	168	226	282	291	291
B. OUTPUTS MARKETING PROGRAM								
I. BENEFITS								
1. Increased in Value of Outputs Marketed/e		1,315	7,023	11,818	18,119	24,266	29,787	32,967
2. Decrease in Market Costs/f		38	152	261	286	235	193	130
3. Foreign Exchange Benefits/g		68	351	591	906	1,213	1,489	1,648
TOTAL BENEFITS		1,457	7,526	12,670	19,311	25,714	31,469	34,745
II. COSTS								
1. Cost of Sales of Increase in Output Marketed/h		1,104	5,718	7,485	14,808	20,102	24,807	27,593
TOTAL COSTS		1,104	5,718	7,485	14,808	20,102	24,807	27,593
SUB-TOTAL - OUTPUTS		353	1,808	5,185	4,503	5,612	6,662	7,152
C. OTHER CATCO COSTS								
1. Capital Costs	687	0	0	0	0	0	0	0
2. Operating Costs		1,504	1,742	1,776	1,811	1,794	1, 787	1, 766
3. Research and Development Costs/i		75	75	75	75	75	75	75
SUB-TOTAL OTHER	(687)	(1,579)	(1,817)	(1,851)	(1,886)	(1,869)	(1,862)	(1,841)
D. TOTAL NET BENEFIT (COST)	(687)	(1,201)	110	3,502	2,843	4,025	5,091	5,602

E. Internal Rate of Return =83.89

F. Net Present Value =92,111

NOTES:

a. CATCO's input marketing program will reduce input costs as well as spur additional output production. The reduction in input costs arises from economies of scale--bulk purchasing--and is projected at two percent of current costs.

b. Exchange rates are assumed to be overvalued. Hence, foreign exchange is valued at 110 percent of domestic prices. (See Table A for details of the impact of foreign exchange).

c. Those additional input purchases under the CATCO input program mandated by the increased economic activity induced by CATCO.

d. Increased costs of inputs other than those covered under the CATCO input program.

e. See Table B.

f. CATCO through improved marketing efficiency will reduce costs by two percent.

g. See note b above.

h. See Table C.

i. Assume $75,000 per year would be required for research and development in the region for CATCO to meet its projected trading goals.

TABLE A

CATCO: FOREIGN EXCHANGE BENEFITS OF INPUT PROGRAM

(BDS $000's)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7-20
1. Reduced Cost of Inputs	1	4	4	4	4	4	4
2. Increased Output Production	5	35	58	85	111	115	115
3. Cost of Inputs*	(3)	(22)	(36)	(53)	(69)	(72)	(72)
TOTAL FOREIGN EXCHANGE BENEFIT	3	17	26	36	46	47	47

*See Note c.

TABLE B

CATCO: OUTPUT INCREASES

(BDS $000's)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7-20
A. BANANAS*							
Increase in Value of Output Marketed*	1,014	5,699	6,271	6,523	6,783	7,524	7,524
1. Increase in Value of Output Marketed Provided from Decreased Spoilage	621	3,489	3,839	3,994	4,153	4,607	4,607
2. Increase in Value of Output Marketed Provided from Increased Production	0	0	0	0	0	0	0
3. Increase in Value of Output Marketed Provided from Change in End Use of Commodity**	393	2,210	2,432	2,529	2,630	2,917	2,917
B. OUTPUT OTHER THAN BANANAS							
Increase in Value of Output Marketed	337	1,324	5,547	11,596	17,483	22,263	25,443
1. Increase in Value of Output Marketed Provided from Decreased Spoilage	337	1,324	2,773	3,866	4,370	4,771	4,771
2. Increase in Value of Output Marketed Provided from Increased Production	0	0	2,774	7,730	13,113	17,492	20,672
3. Increase in Value of Output Marketed Provided from Change in End Use of Commodity	0	0	0	0	0	0	0
C. TOTAL OUTPUT							
Increase in Value of Output Marketed	1,351	7,023	11,818	18,119	24,266	29,787	32,967
1. Increase in Value of Output Marketed Provided from Decreased Spoilage	958	4,813	6,612	7,660	8,523	9,378	9,378
2. Increase in Value of Output Marketed Provided from Increased Production	0	0	2,774	7,730	13,113	17,492	20,672
3. Increase in Value of Putput Marketed Provided from Change in End Use of Commodity	393	2,210	2,432	2.529	2,630	2,917	2,917

*Assume 60% of the bananas which would be sold by CATCO would otherwise spoil in the field or at the dock. The remaining 40% would have an alternate use as livestock feed but would be valued at only 5% of the value of the same bananas used for human consumption.

** e.g. Selling bananas on the market instead of using them for livestock feed.

TABLE C

CATCO: COST OF SALES OF INCREASE IN VALUE OF OUTPUT MARKETED

(BDS $000'S)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7-20
A. BANANAS							
Total Cost of Sales of Increase in Value of Output Marketed	948	5,365	5,839	6,079	6,315	7,002	7,002
1. Direct Cost of Sales of Increase in Value of Output Marketed	922	5,180	5,701	5,930	6,166	6,840	6,840
2. Share of Common Costs*	26	185	138	149	149	162	162
B. OUTPUT OTHER THAN BANANAS							
Total Cost of Sales of Increase in Value of Output Marketed	338	1,295	2,880	10,160	15,328	19,502	22,288
1. Direct Cost of Sales of Increase in Value of Output Marketed	317	1,251	2,760	9,917	14,963	19,040	21,760
2. Share of Common Costs	21	44	120	243	365	462	528
C. TOTAL COST OF SALES	1,286	6,660	8,719	16,239	21,643	26,504	29,290

* "Common costs" are those costs incurred by both CATCO's input and output marketing programs.