

PD-ABF-489

ISN 81395

UNCLASSIFIED

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

RDO/C

PROJECT PAPER

ECONOMIC SUPPORT FUND (ESF)
(PAAD)
AMENDMENT #1

AID/LAC/P-764
CR - 696

PROJECT NUMBER: 538-0176
GRANT NUMBER : 538-K-605A

UNCLASSIFIED

CLASSIFICATION:

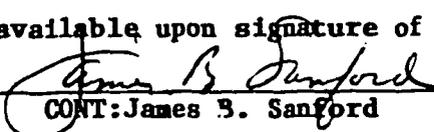
AGENCY FOR INTERNATIONAL DEVELOPMENT PROGRAM ASSISTANCE APPROVAL DOCUMENT (PAAD)		1. PAAD Number 538-K-605A	
		2. Country Dominica	
		3. Category Cash Transfer	
		4. Date August 1992	
5. To Mosina H. Jordan, Director		6. OYB Change Number	
7. From Robert J. Wilson		8. OYB Increase To be taken from: Economic Support Funds	
9. Approval Requested for Commitment of \$ 1,000,000.00		10. Appropriation Budget Plan Code LES192-35538-KG31/72-111/21037	
11. Type Funding <input type="checkbox"/> Loan <input checked="" type="checkbox"/> Grant	12. Local Currency Arrangement <input type="checkbox"/> Informal <input checked="" type="checkbox"/> Formal <input type="checkbox"/> None	13. Estimated Delivery Period 12/92	14. Transaction Eligibility Date Date of Agreement
15. Commodities Financed			

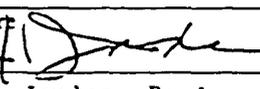
16. Permitted Source <input type="checkbox"/> U.S. only <input type="checkbox"/> Limited F.W. <input type="checkbox"/> Free World <input checked="" type="checkbox"/> Cash \$1,000,000.00	17. Estimated Source <input checked="" type="checkbox"/> U.S. \$1,000,000.00 <input type="checkbox"/> Industrialized Countries <input type="checkbox"/> Local <input type="checkbox"/> Other
--	---

18. Summary Description

The grant will be used to support the Government of the Commonwealth of Dominica (GOCD) in the diversification of its agricultural sector. In the long run, the diversification is intended to reduce Dominica's dependency on banana exports for foreign exchange and promote the expansion of other agricultural exports. While the first phase of the program focused on the development and approval of a strategy, this second phase will focus on implementation of the strategy. Conditionality of this grant includes measures to: a) increase the private sector's involvement in the management of the agricultural diversification program; b) broaden the access to services for producers and market agents of non-traditional crops; c) identify constraints to investment in the general economy; and d) evaluate the effectiveness of local currency projects funded under the program. U.S. dollars will be used to finance imports from the U.S.

Per STATE 235525, dated 7/23/92, funds are available upon signature of AA/LAC or designee for total amount not to exceed US\$1,000,000.00.


 CONT: James B. Sanford 9/14/92
Date

19. Clearances	Date	20. Action
REG/DP PDO:RPosner <i>W.P.</i>	<i>Aug 19, 1992</i>	<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED Authorized Signature:  Date: 09/23/92 Title: Mosina H. Jordan, Regional Director
REG/GC C/ANR: DSmith <i>J.S.D.</i>	<i>8/17/92</i>	
AA/PPC C/PRM: ECON: EMcPhie <i>EMcPhie</i>	<i>8/11/92</i>	
M/FM CONT: JBSanford <i>JBS</i>	<i>8/11/92</i>	
SER/COM RLA: DWLuten <i>DWL</i>	<i>9/9/92</i>	
AA/PRE A/DD: BBurnett <i>BB</i>	<i>7/15/92</i>	

**PROGRAM ASSISTANCE APPROVAL DOCUMENT
DOMINICA AGRICULTURAL SECTOR SUPPORT
538-K-605
AMENDMENT A**

**THE REGIONAL DEVELOPMENT OFFICE FOR THE CARIBBEAN
AUGUST 1992**

**PROGRAM ASSISTANCE APPROVAL DOCUMENT
DOMINICA AGRICULTURAL SECTOR SUPPORT
AMENDMENT A**

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY AND RECOMMENDATION	1
II.	BACKGROUND	
	A. Updated Macro Economic Conditions	2
	B. Bananas and Changes in the Policies of the EC	3
	C. Agricultural Sector Framework	4
III.	PROGRAM DESCRIPTION	
	A. Current Agricultural Diversification Efforts	7
	B. Problems to be Addressed by Program	8
	C. Program Rational	9
	D. Relationship to the FY 1991 Agricultural Sector Program and Earlier AID ESF Assistance	9
	E. Program Support for Implementation of Agricultural Diversification	10
	F. Conditions Precedent Governing Disbursement	11
	G. Standard Conditions and Covenants	12
<hr/>		
IV.	PROGRAM ELEMENTS	
	A. Use of U.S. Dollar Resources	12
	B. Importation of U.S. Commodities	13
	C. Use of Local Currency	13
	D. Capability of Host Country Implementing Agency	13
	E. Reports	14
	F. Monitoring and Evaluation Arrangements	14
V.	ANNEXES	
	A. Program Assistance Approval Document of Initial PAAD 538-K-605	
	B. Country Checklist	

PROGRAM ASSISTANCE APPROVAL DOCUMENT
DOMINICA AGRICULTURAL SECTOR SUPPORT
AMENDMENT A

I. EXECUTIVE SUMMARY AND RECOMMENDATION

As anticipated under the first phase of this program, this amendment provides a second cash transfer to the Government of the Commonwealth of Dominica of \$1.0 million of Fiscal Year 1992 Economic Support Funds (ESF) to support the implementation of an agricultural diversification strategy. By this and previous program approvals, the total level of cash transfer assistance for the program is \$2.0 million. An additional amount of \$600,000 in projectized ESF assistance is being provided to the Government of the Commonwealth of Dominica under the West Indies Tropical Produce Support Project (TROPRO).

The original purpose of the grant remains: to assist the country of Dominica increase its capacity to broaden the economic and export base of the economy through a private sector-led program of expanded and diversified agricultural production. This expansion and diversification is intended to reduce the foreign exchange dependency on bananas, the overwhelmingly predominant cash crop and export. The program will contribute toward reducing the potentially destabilizing effects of banana price, foreign exchange earning and overall income declines facing Dominica as a result of the Single European Market in 1993.

The Grantee will be the Government of the Commonwealth of Dominica, acting through the Ministry of Agriculture.

Conditions Precedent to Disbursement of the first phase of the program were intended to promote the development and official approval of an Agricultural Diversification Strategy (ADS) for Dominica. Having satisfied these conditions, the second phase conditions involve actions to promote the effective implementation of the strategy. An additional U.S. \$1.0 million of ESF grant funds will be disbursed in two tranches of U.S. \$500,000.

Like the original program, this amendment has been designed with the support of and in collaboration with the Ministry of Agriculture, Trade, and Finance of the GOCD. Private sector institutions also contributed to its content. It reflects perspectives on diversification efforts that have been jointly developed between the RDO/C and its Dominican counterparts.

Recommendation: The Program Design Committee of the Regional Development Office for the Caribbean recommends that the Mission Director approve the Program Assistance Authorization Document for the amendment of the Dominica Agricultural Sector Support Program, and the authorization of US \$1.0 million of FY 1992 ESF in support of the program.

II. Background

A. Updated Macro Economic Conditions

Dominica has a land area of 750 square kilometers of which 213 square kilometers is considered arable. The population in 1991 is estimated at 71,800. Nominal GDP at factor cost for 1991 is estimated at EC\$412.4 million. Inflation (as measured by consumer prices) has been low, but has increased in the last few years: 3.7% in 1985, 2.6% in 1986, 4.8% in 1987, 2.2% in 1988, 6.3% in 1989, 1.3% in 1990, and an estimated 5.9% in 1991.

Dominica's major industry has been agriculture, with banana production and exportation to the United Kingdom being the leading part of that sector. The World Bank estimates that the subsidy component of the banana arrangement with the United Kingdom is equal to 10% of GDP. Banana production suffered from hurricane Hugo in 1989 and has not yet recovered. A second major agricultural export is coconuts in the form of soap, exported mainly to Trinidad and Jamaica.

The importance of agriculture is illustrated in the GDP distribution figures for 1990. Agriculture accounts for 28.5%, manufacturing for 6.5%, construction for 6.2%, transport and communications for 16%, hotels and restaurants for only 1.6%, trade for 12%, government services for 17.1% (down from 21.5% in 1986), and other services for 13.2%.

Exports are dominated by bananas. Exports of bananas were valued at US\$13.3 million in 1985 (46.8% of total merchandise exports), rising to a high of US\$38.4 million in 1988 (69.2%), declining to US\$25.1 million in 1989 (55.6%), and recovering to US\$30.8 million in 1990 (56.0%). Coconut oil soap products accounted for US\$7.1 million in 1985 (25% of total merchandise exports) and US\$11.8 million in 1990 (21.4%). The country exports a number of other products, mainly fruits and vegetables or processed agricultural products.

Dominica's merchandise imports have grown from US\$57.2 million in 1985 to an estimated \$117.8 million in 1990. The merchandise and non-factor service deficit was estimated at \$46.9 million in 1990. The overall balance of payments in that year, including transfers and capital flows is estimated at \$4.0 million. Gross reserves of the country were estimated at \$17.0 million in 1990, the equivalent of 1.4 months of imports.

The deficit in the fiscal budget has been increasing since fiscal year 1987/88. The government ran a surplus of EC\$2.2 million on the overall balance for that year. Deficits increased each year since then and a deficit of EC\$51.5 million was reached for 1990/91. A considerable portion of these deficits have been financed by borrowing from commercial banks: EC\$20.3 million in 1989/90 and EC\$23.9 million in 1990/91.

Changes in the tax structure caused a reduction in revenues for 1990/91, even with increased enforcement of the income tax. Over the last six years, taxes on corporate income increased while personal income tax collections have declined. The majority of tax revenues still come

from taxes on international transactions, with a consumption tax on imports and import duties generating the largest amount of revenues. The main reason that expenditures increased in 1990/91 was the conclusion of wage agreements with the public sector unions. This resulted in substantial and retroactive wage increases that caused the government's wage bill to jump from EC\$60.2 million in 1989/90 to EC\$77.0 million in 1990/91.

The government's external debt increased from US\$47.7 million in 1985 to US\$86.8 million for 1991. One major change has been the proportion of that debt that has been given on a concessional basis. The portion of concessional debt increased from 73.3% in 1985 to 98.3% in 1991. Over this period, average interest rates declined from 4.1% to 2.5%.

B. Bananas and changes in the policies of the EC

Current information suggests that the EC will institute a uniform quota/tariff regime on banana imports beginning on or about January 1993. As currently envisioned, this regime will continue imports from the ACP banana producers and will allow imports of between 1.4 million MT (the 1986-88 average imports) and 2 million MT (the 1990 import level) of bananas from dollar banana producers. It is likely that the dollar bananas will also face a tariff of an undetermined percentage. An import regime of this sort requires a waiver under the GATT rules and it is likely that an agreement will be worked out among the EC countries, the ACP banana producers, and the dollar banana producers before it is brought to GATT.

There is likely to be substantial disagreement inside the EC as to the efficacy of this proposed import regime. Germany, which currently purchases bananas from the dollar banana market and retails them at prices significantly lower than Windward Island bananas sold in the U.K., will probably be the principal opponent of the proposed regime, since the change will entail substantial increases in the price of bananas delivered to German consumers. Given the price differences between Germany and the rest of the EC, it is not surprising that Germans are the largest, per capita, consumers of bananas in the EC.

If the 1990 level of imports of 2 million MT is agreed upon for the dollar banana quota, there likely will be a decline in the price received by Dominica for its banana exports. Since there are substantial country specific differences in the current EC importing rules and differences in the retail price of bananas, the unification of the market will result in a single import policy and movement toward a price level that is somewhere between the two main markets: Great Britain (at US\$1.08 a lb.) and Germany (at about US\$.50 a lb.). One estimate from Great Britain is that the price of bananas in that country may fall as much as 30%. A corresponding decrease in foreign exchange earnings from banana exports would be in the area of \$9.0 to \$10.0 million in 1993.

The 30% price decline will be shared by Geest (the shipping company), the DBMC, and the producers. The effect of such a price reduction on producers will be to force some farmers who are currently in banana production to shift to other crops. The DBMC plans to modify

the level of services it is providing to smaller farmers and to target "core" producers of 10 tons or more of bananas a year. A price reduction coupled with reduced access to DBMC services will have serious effects on small marginal farmers.

C. Agricultural Sector Framework

1. Dominican Farmers

There are an estimated 10,000 farmers in Dominica working 40,000 acres. Some 7,900 of these farmers are working plots of 5 acres or less (with an average of 1.8 acres). About 2000 farmers have plots between 5 and 20 acres and only 100 farmers have plots greater than 20 acres. The large number of small holdings and the steep terrain in Dominica reduce the usefulness of mechanization and increase the labor requirements. Smaller plots are consistent with high labor content farming.

The DBMC is contributing to the diversification of the small farmers by redirecting its services away from marginal producers. From the perspective of the DBMC, this is rational behavior, since the administration, collection, and transportation costs associated with these very small farmers are quite high. In addition, the farming practices of the smaller farmers compare badly with the larger producers and the result is poorer quality fruit. Given their levels of production, it is not economically feasible for the smaller farmers themselves to invest in roads, sheds, or other capital equipment that are required to get high quality fruit to market.

Substantial intercropping occurs on the smaller farms. Currently, on larger farms there is substantial intercropping of other tree crops with bananas to take advantage of the high banana price. The result of the relatively high banana price has been to reduce the attention given to other crops in an intercropped system. In addition, there has been substantial cutting of tree crops (cocoa, for example) for conversion to banana production. Any restoration of these tree crops will require access to improved plant material, extension advice, and an extended investment period.

Small farmers already produce a diversified set of crops. This is a necessity since there is no other way for them to insure against disease, other natural disasters, or price fluctuations. In addition, intercropping on small farms may reduce the costs of pest control relative to intensive production of one or two crops. These benefits are gained at a substantial cost. It is more expensive to harvest, collect, and market crops from small diversified farms than from larger specialized ones. In addition, it is more difficult in terms of management and more expensive to give each type of crop the required care for optimal fruit quality when substantial intercropping occurs.

2. Marketing arrangements

The DBMC is the only comprehensive input, financing, collection, and marketing organization in the country, and it deals only with banana production. As mentioned above, the DBMC is planning to reduce its efforts towards the smaller farmers and concentrating its efforts on larger, core producers. DEXIA is involved with smaller, trial shipments of goods for export. TROPRO/CATCO is working on trial shipments and establishing marketing arrangements that are intended to parallel those of the DBMC. Currently, the CATCO program for packaging and shipping fruit to Great Britain is being hampered by the company's inability to gain access to packaging facilities in Roseau. The government hopes to make facilities available to CATCO and other private marketing companies when it recovers its packing house assets from a defunct grapefruit marketing corporation, which currently is in bankruptcy and liquidation proceedings. In addition to the above, several agroprocessor/export companies exist (hot peppers, coffee, cacao, passion fruit) which serve as the market outlets for producers, and onward processing and marketing.

The private sector mainly exports to the regional market through hucksters. Some 80% of regional exports are handled by hucksters. Each huckster works with a small network of farmers, shippers, and purchasers. There is a very extensive, informal credit system used by the hucksters. While this credit system has not been carefully documented, it appears that hucksters get credit from the farmer (in the form of goods), from the boat owners (for shipping), and give credit to hotels, retailers, and supermarkets to whom they sell their produce.

There are only a few private exporters to the extra-regional market. These are mainly family arrangements with one member of the family living in the country being exported to and receiving the shipment. Little in the way of formal, private export business occurs in agricultural products (excepting bananas). Agro-processors are shipping to the regional market (coconut based soaps, processed cacao and coffee, hot sauce, fruit concentrates, bay oil, and canned products) and are beginning to extend their shipments to extra regional markets.

There seems to be concern in Dominica whether there will be markets for its extra-regional exports, especially of more traditional regional produce such as ground provisions, breadfruit, or passionfruit. Those who are exporting these products do so aiming for the members of the West Indian ethnic community who have migrated to the United States or the United Kingdom. There has been some discussion of the need for substantial marketing studies before expansion of exports of any particular crop is feasible. These studies are to determine the peak price period and the possibilities of promotion of the product to the non-ethnic community. Doing such marketing studies at this time seems to woefully misplace priorities.

Dominica is so small that whatever it gets to the major markets will have little influence on the price. Essentially anything that Dominica can ship and that meets quality standards can

be sold in these markets. There are a number of large produce wholesalers in every major city who should be willing to accept and market shipments. While there would be gains to a CARICOM based tropical produce advertising program, the main problem with "marketing" on behalf of Dominica is that fresh produce is just not getting to the international market.

3. Collection and Transportation Infrastructure

What is lacking in Dominica is a collection, packing, and shipping infrastructure that will regularly take whatever high quality produce the farmer has, ship it to the world market, and make payments to the farmer on a timely basis. The DBMC has this kind of infrastructure for bananas, but is hesitant to extend their program to include other produce. It is not necessary that the agency that provides the input services also collect, pack, and ship the produce. Even if the DBMC was unwilling to be involved in the marketing of non-banana produce, it has the infrastructure for distributing inputs. It could do so and be reimbursed by the marketing agents for the other produce.

CATCO has begun trial shipments of produce to the United Kingdom using Geest as the shipper. Attempts are being made to make these shipments regular (weekly) and to determine a way of making similar shipments to the United States. However, CATCO does not yet have the appropriate packing and collection facilities for allowing this process to continue on a regular basis. There has been discussion of building a number of regional packing plants to which produce could be brought for boxing and putting on pallets to be brought to the port. While this seems to be a reasonable long run goal, the initial steps would be to have packing facilities at the port and to be able to pack whatever produce comes to port and is of appropriate quality. Eventually, packing and grading should take place near or on the farm, except for that produce that needs additional treatment (washing) which would be handled at a central packing plant.

A major constraint to both regional and extra-regional trade in produce is the irregular and expensive transportation system. Except for the weekly Geest boat, sea transport service to major international markets is not well organized. The three companies that do ship out of the region do not compete with one another in terms of price. Dock facilities are not well developed. There is only room for one boat at Roseau and none at Portsmouth. While extensive port facilities are probably not economical both Roseau and Portsmouth should have basic roll-on facilities. This could substantially reduce the costs of sea transport.

Dominica does not have an international airport for the handling the larger aircraft capable of transporting larger volumes of produce. There is an air cargo service that comes into the island (Amerijet). Produce that requires air shipment to international markets must first be shipped to St. Lucia, Antigua, or one of the French islands, stored there, and then shipped onward. The additional shipping and handling costs are not the only problem with this process. The additional storage and handling substantially increases the risk of damage or of delay which could make the produce unfit for the market.

III. Program Description

A. Current Agricultural Diversification Efforts

As conditioned under the first phase of the USAID Agricultural Sector Support Program, the Government of the Commonwealth of Dominica, through its formal Cabinet, has approved both an agricultural diversification policy and strategy in the meeting of Saturday, 4th January 1992: Cabinet Paper No: 282/91 and supplement. Although there are some points that still need to be developed and clarified, the policy underlying the strategy is one that is supportive of the diversification of the economy into non-banana activities.

The policy and strategy view the role of the government as a facilitator of the private sector, and responsible for creating a growth oriented environment. Consultation between the public and private sector is to be encouraged. Emphasis is placed on the search for alternative strategies for the banana sector. It is supportive of the idea of the need to identify and create a marketing process for non-traditional crops similar to that which exists for bananas. It commits the government to support agroprocessing initiatives. It recognizes the problem of shortages of agricultural labor, and suggests labor pools, training and mechanization as possible responses. It recognizes the rational use of land as critical to the diversification effort. It supports moves toward the reduction of the food import bill through the expansion of small livestock, and the development of the fisheries and aquaculture sectors. It speaks to government institutional efficiencies that can be gained by reorganization and strategic management.

Projects aimed at increasing agricultural diversification are currently under way or in the planning stage with the EC countries (under Lome IV), the Canadian Development Agency (CIDA), the Republic of China, and USAID (TROPRO). The goal of these programs is to begin the transition to crops other than bananas before the change in the EC banana import regime occurs (or as quickly after as possible). These programs have taken two approaches: technical assistance aimed at improving the quality and quantity of output, and marketing assistance aimed at improving the movement of goods to the international markets. The majority of the assistance has been technical, with the TROPRO project primarily concentrating on marketing.

Specifically, the Ministry of Agriculture's projects in the area of diversification include: improved non-traditional plant propagation and distribution (cacao, coffee, mangoes, passion fruit, avocados, hot peppers, anthuriums, among others); the refurbishing of packing and collection centers in Roseau and Portsmouth for use by the private sector; the demonstration of appropriate labor-saving farm machinery; small livestock and fisheries extension.

The agricultural diversification strategy acknowledges the need for private sector development as the basis for growth in agriculture. There are still legal barriers to the development of private sector commercial enterprises. For example, there are still price controls on a number of meat products. While these price controls are mandated for sales of

these meat products at any level of production, the transactions only catch the attention of the authorities when the production moves from informal to the formal markets. This means that the legal system is currently restricting development of the private sector in commercial livestock raising. A careful assessment of the legal constraints to private sector development might indicate additional ways the government can facilitate the commercial development of the private sector and diversification of the agricultural base.

While continued efforts on the technical side of agricultural production are necessary, additional work is required on the marketing side. Clearly, Dominica could benefit from improved market infrastructure (roads, ports, airports, packing/collection centers). There also is the important work of developing the frequency and quality of shipments, market contacts, outlets, buyer familiarity, and confidence, such as that work being done under the TROPRO project. Getting the information to producers on quality standards and market requirements is another necessary effort. Such work should include the education/training of extension officers in marketing concerns, quality requirements, etc., since they are one of the main ways of educating the farmer population. One obviously efficient training exercise would be to bring private sector exporters (CATCO, the small agroprocessors, and hucksters) directly together with the extension staff or farmers to disseminate information on produce quality requirements.

B. Problems to be addressed by program

The proposed changes in EC policies towards bananas from Dominica (and the other Windward Island producers) will negatively impact on the price of bananas, the incomes of banana farmers, and the export earnings of the country. Without appropriate advanced planning on the part of producers and an early shift to other crops, the transition period from a high to a lower banana price will be disruptive and difficult.

The diversification to other export and import substitute crops at a volume sufficient to compensate for the loss of banana revenues involves several problems. First, at the production level, there is a need for training and demonstration programs to allow farmers to use their marginal banana lands to produce exportable alternatives. Second, there is a need for the development of a collection and marketing system for these alternative crops in order to reduce farm to market costs. Third, there is need for improved transport facilities (both air and sea), again to reduce the costs of getting these crops to external markets. These difficulties occur with both fresh and processed produce.

Small economies such as that of Dominica can be faced with a particular double bind. If there are not adequate marketing and transport systems for particular crops in place, then farmers will not be willing to grow those crops. If farmers are not growing the crops, no one will be willing to invest in the marketing and transport systems for them.

C. Program Rationale

A decline in the near future of the price that Dominica receives for bananas, its principal export and the crop which over 10,000 Dominican farmers are producing, is anticipated. The consequences of the price decline will be felt both at the farm and national level. Lower income levels will reduce the country's ability to import, sustain ongoing programs and investments, meet its growing debt obligations, and attract new investment. Clearly, other sources of export earnings that efficiently utilize the country's natural resources and skills of its rural based population need to be developed. The program is intended to encourage, promote, and implement diversification from bananas to other crops that are competitive and potentially strong income earners in the regional and world markets. The program also will contribute to Dominica's balance of payments in 1993, the year in which the initial effects of the European Single Market are expected to be felt.

D. Relationship to the FY 1991 Agricultural Sector Program and Earlier AID ESF Assistance

As envisioned in the first phase of the USAID/GOCD Agricultural Sector Support Program, the development of a diversification policy and strategy would lead to a subsequent key step in the diversification process - the implementation of the strategy. FY92 program funds will be targeted to support implementation. Support of activities such as non-traditional crop extension and training, small farm mechanization, demonstration projects, test marketing, and development of storage and transport infrastructure will contribute to this important phase.

The program has a relationship and logical consistency with earlier AID ESF assistance to Dominica. Earlier programs that provided balance of payments assistance for objectives in the area of fiscal stability met with a good measure of success. Dominica recognizes the importance of balancing current revenues and expenditures and maintaining downward pressure on the growth of wages and salaries as a percent of GOCD revenues and GDP.

This program will assist adjustments in Dominica's productive sectors in light of the threats to its traditional export base. Cash transfer balance of payments assistance will help cushion the anticipated shortfalls in export earnings. While the level of the shortfall in earnings is difficult to predict, a 30 percent decline in the price of bananas, with constant levels of marketed production, will result in a \$9.0 to \$10.0 million decline in the value of exports. Overall balance of payments, all other things equal, will decline to deficit levels and reduce the country's reserves. The \$1.0 million in ESF assistance provided under this program amendment in 1993-94 will help to bolster the country's balance of payments situation, albeit not sufficiently to make up for the anticipated shortfall nor prevent the fall into a balance of payments deficit. The local currency generations will support activities to broaden and diversify the non-traditional export base.

E. Program Support for Implementation of Agricultural Diversification

A.I.D. assistance will directly support the implementation of the Agricultural Diversification Strategy as approved by the Cabinet in the meeting of Saturday, 4th January 1992: Cabinet Paper No: 282/91 and supplement. In particular, A.I.D. assistance will support:

- the implementation of macroeconomic, agricultural, and other sectorial policies which influence agricultural expansion and diversification consistent with the Agricultural Diversification Policy and Strategy approved by the Cabinet; and
- the implementation of specific projects in non-traditional production, processing, marketing, and exporting.

The change in European policy towards Windward Island bananas may result in a reduction in the price received by Dominica for its banana exports and a resultant shift in production. In response to the price decline and without massive governmental subsidies, the DBMC will need to shift its resources away from the small, marginal, high cost of production, high cost of transport, low quality of output producers towards the 20% of the current producers who generate 80% of current output. While the remaining 80% of the producers will be able to continue banana production, the resources of DBMC will no longer be available to them at current levels. Shifting production into other crops is seen as the most likely response for these small farmers. Facilitating this shift is the intent of this project.

The main gain from diversification per se at both the national and the individual farm level is a form of insurance protection from commodity price shocks or natural shocks (storms, plant disease, etc.). This insurance is purchased at a cost, since any level of diversification requires not specializing in the single product that is currently most profitable.

Diversification of agricultural production in response to the predicted price decline will automatically occur at the national level because of the variations in land types and because marginal banana land will be shifted over to other crops. Crop diversification at the individual farm level, where the farms are small and reasonably contiguous, is nationally inefficient and occurs because there are no alternative forms of crop insurance or methods of sharing price risks (such as crop futures markets).

A.I.D. assistance is intended to be used to implement policies aimed at reducing the costs and risks of non-traditional crop production and marketing, and encouraging rational diversification for those smaller farmers that shift out of banana production. Rational diversification implies that there be coordination between the producers and marketers, especially with crops intended for export.

In addition, it is intended that A.I.D. assistance be used to implement policies to improve or reduce the costs of private sector investment, marketing and export of crops other than

bananas. While expansion of fisheries is not strictly agricultural diversification as discussed above, implementation of strategies aimed at this expansion would be an appropriate use of funds since these expanded fisheries might employ some of those who decided to quit commercial farming.

A.I.D. will obligate US\$1.0 million as a grant and thereafter disburse the funds to the GOCD within eighteen months. Disbursements will be made in two separate tranches of US\$500,000, governed by the satisfaction of the conditions which A.I.D. will ask the GOCD to meet.

F. Conditions Precedent Governing Disbursement

The conditionality for the second phase of the program is designed to bring about "significant" progress in implementing the diversification policy and strategy approved by the Cabinet. Two sets of conditions shall be met in satisfactory form prior to disbursement of two tranches of \$500,000, coming one year and eighteen months respectively following the signature of an agreement. All disbursement, financial tracking and reporting procedures remain the same as those of the initial phase of the program.

1. Conditions Precedent to Disbursement of the First Tranche.

a. Evidence that the GOCD/Ministry of Agriculture has set up joint public and private sector steering committees for diversification projects supported by the program, and documentation to the effect that the joint steering committees have met regularly to review the implementation and progress of diversification project activities. Specifically, the MOA will incorporate a representative of the private marketing company, CATCO/CFDC or another, a representative of the Hucksters Association, and representatives of the cacao, passion fruit, coffee, hot pepper processing industries into steering/implementation committees of diversification projects.

b. Evidence, in the form of official correspondence, that the GOCD has promoted a strategy decision on the part of the Dominica Banana Marketing Corporation to sell inputs, make space available in packing and storage facilities, and otherwise make its infrastructure available on a cost recovery basis to producers and market agents of non-traditional crops.

c. Evidence, in the form of an official policy pronouncement, that CATCO and other private sector organizations have been given access by the Dominica Export and Import Agency (DEXIA) to its packing house facilities.

d. Evidence that the GOCD has distributed copies to private and public sector bodies of a diagnosis of the environment effecting private sector investment in the agricultural and other sectors of the economy of Dominica. This can be satisfied by completing and distributing copies of the IDB/CDB-sponsored "Investment Sector Diagnosis" to public and private sector bodies in the country.

2. Conditions Precedent to Second Tranche Disbursement

a. Evidence, in the form of a copy of the official minutes of a Cabinet meeting, of Cabinet-level review of the recommendations of the investment sector inventory/diagnosis completed as a condition of the first tranche disbursement.

b. Evidence, in the form of a final evaluation document, of the completion of an interim evaluation of the implementation of the Agricultural Sector Support Program; an implementation plan for considering and addressing acceptable recommendations from the evaluation; and a financial audit of the use of Program funds. The terms of reference for the evaluation and audit will be developed between USAID and the GOCD and jointly agreed upon by way of a countersigned implementation letter issued under this program.

G. Standard Conditions and Covenants

As included in previous agreements between the GOCD and A.I.D., this proposed assistance program contains a standard set of other conditions and covenants mandated by U.S. legislation or otherwise by A.I.D. requirements. These include, for example, requirements for specimen signatures of designated officials, the opinion of counsel, the separate dollar account, the uses of the U.S. dollars, the separate local currency account and use of the EC dollars, program recordkeeping, and procedures for accounting and reporting. Due to the fact that this program is an amendment, all of these standard conditions and covenants already are met.

IV. PROGRAM ELEMENTS

A. Use of U.S. Dollar Resources

Depending on the existing foreign exchange regime in a recipient country, AID/W guidance (State 325792, 10/20/87) on programming of U.S. dollar resources offers three choices in descending order of preference: imports from the U.S., auction of foreign exchange, and debt service payments. The Mission decided on the first of these for the initial program assistance agreement, and it is proposed to maintain this programming mode.

The U.S. dollars will be deposited in a separate interest bearing account at a U.S. commercial bank that is normally a correspondent bank of a commercial bank in Dominica in the name of the National Commercial Bank (NCB) of Dominica. This will be an account opened for the purposes of the initial program grant and is to be used exclusively for disbursements under this proposed grant amendment. Conditionality under the Grant Agreement will specify that no other funds may be deposited in the account. The funds will be used, over the ensuing eighteen-month period, to cover payments for Dominican importation of eligible merchandise from the U.S.

The GOCD will instruct the NCB to draw down the separate account for payments for U.S.

exports to Dominica, unless the specific transaction in question involves Dominican imports of goods for which the use of separate account funds are ineligible. The GOCD will need to be mindful of the necessity of liquidating funds in the account within one year of their deposit. Any accrued interest in the account shall be used in the same manner as the principal.

B. Importation of U.S. Commodities

It is expected that Dominica will be able to import commodities from the United States in value at least equal to that of the Grant. Dominica's imports from the U.S. were approximately US \$33.3 million in 1989 and US \$25.6 million for the first ten months in 1990. The record shows Dominica having imported US \$3.7 million in eligible goods for that period. This overall import record suggests that Dominica will have no problems purchasing the value of at least US \$1 million in eligible U.S. imports in FY 93 and FY 94.

C. Use of Local Currency

AID/W supplemental guidance (State 204855 6/21/91) offers two principal types of local currency programs which can be funded from the separate account. These programs are: A) Budget Support which includes general budget support, general sector support and specific sector support, and B) Extra-budgetary Activities which includes projects or activities outside the host country's budget. RDO/C has selected the specific sector budget support option, given the specific program emphasis on agricultural diversification in the agricultural sector. Per the guidance, this approach is effective for joint programming with the host government which focuses public sector expenditure on priority categories of uses.

A condition met by the government under the first program was the creation of a sub-sectoral item in the Ministry of Agriculture's budget identified as "Agricultural Diversification Support". The government will deposit an amount of Eastern Caribbean dollars equivalent to the grant disbursement into a separate interest bearing government account at the National Commercial Bank of Dominica (NCB). The funds in this account will not be commingled with funds from any other source and will be transferred to the Ministry of Agriculture to be expended only for the purposes approved under the grant agreement. AID will not assume any role or responsibility for approving disbursements from the separate local currency account, and any accrued interest thereon will be used in the same manner as the principal.

D. Capability of Host Country Implementing Agency

In order to program local currency for specific sector support, AID must have a relatively high level of confidence in the reporting and control mechanisms of the financial and budgeting systems of the government agency responsible for the management of the separate accounts. Under this grant, the Ministry of Finance, which has previously managed similar separate accounts, will be responsible for the management of the separate local currency account. Prior experience with the Ministry of Finance has given us reasonable assurance

that this agency has adequate financial management systems in place to properly account for the local currency. Previous capability assessments also support the conclusion that the Government of the Commonwealth of Dominica's financial management systems are up to the standard required by AID.

In addition, the Ministry of Agriculture successfully implemented the AID-funded Hurricane Hugo Rehabilitation Project in 1989/90. A capability assessment of this ministry by an independent accounting firm determined that adequate financial systems and internal controls were in place to offer reasonable assurance that allocated funds would be used for intended purposes. RDO/C accepts this prior favorable experience with the Ministry of Agriculture as evidence of sufficient financial management capability.

E. Reports

The Government of the Commonwealth of Dominica will be required in the Grant Agreement to present reports to A.I.D. to enable A.I.D. to conclude that the U.S. dollar and local currency resources have been expended in accordance with the program.

In the case of the U.S. dollar resources, the National Commercial Bank of Dominica will be required to present, on a quarterly basis, to A.I.D., through the Ministry of Finance:

- o the disbursement orders it has communicated to its U.S. correspondent bank to release funds from the special dollar account; and
- o copies of the statements of the latter account, verifying that the funds have been appropriately released.

In the case of local currency, the GOCD will be required to demonstrate that funds have been allocated to the Ministry of Agriculture for activities that promote agricultural diversification.

Reporting will occur quarterly, beginning ninety days after disbursement of the U.S. dollar resources, until funds in the separate local currency account have been liquidated.

F. Monitoring and Evaluation Arrangements

A.I.D. will monitor the implementation of the program through regularly submitted reports and frequent visits to GOCD implementing agencies. Per the terms of the original agreement, the GOCD has agreed to meet at regular intervals with A.I.D. in order to consult concerning the effectiveness of the activities undertaken through the Agreement.

By entering into this second phase agreement, the Grantee understands that a second tranche disbursement is dependent on the condition of the completion of a program evaluation and

financial audit. The terms of reference of both the evaluation and audit will be detailed in a separate program implementation letter.

CLASSIFICATION:

AGENCY FOR INTERNATIONAL DEVELOPMENT PROGRAM ASSISTANCE APPROVAL DOCUMENT (PAAD)		1. PAAD Number 538-K-605	
		2. Country DOMINICA	
		3. Category CASH TRANSFER	
		4. Date August 1991	
3. To Mosina H. Jordan, Director		6. OYB Change Number	
7. From Henson Carter, PRM/ECON		8. OYB Increase To be taken from: Economic Support Funds	
9. Approval Requested for Commitment of \$ 1,000,000		10. Appropriation Budget Plan Code 72-111/21037 LES1-91-35538-KG31	
11. Type Funding <input type="checkbox"/> Loan <input checked="" type="checkbox"/> Grant	12. Local Currency Arrangement <input type="checkbox"/> Informal <input checked="" type="checkbox"/> Formal <input type="checkbox"/> None	13. Estimated Delivery Period 8/91 to 8/93	14. Transaction Eligibility Date Date of Agreement
15. Commodities Financed			
16. Permitted Source U.S. only Limited F.W. Free World Cash \$1,000,000		17. Estimated Source U.S. \$1,000,000 Industrialized Countries Local Other	
18. Summary Description			

The grant will be used to support the Government of the Commonwealth of Dominica (GOCD) in the diversification of the agricultural sector. In the long run the diversification is intended to reduce Dominica's dependency on banana exports for foreign exchange and promote the expansion of other agricultural exports. Conditionality in this grant includes the development, review and approval of an agricultural diversification strategy, and an action program to implement the strategy. Under this program, ESF dollars will be used to finance imports from the United States, while local currency will be provided as budget support to the GOCD's agricultural diversification program.

Per STATE 265984 dated 08/13/91, funds are available upon signature of AA/LAC or his designee for total amount not to exceed US\$1,000,000. *James B. Sanford* Dated 8/12/91
James B. Sanford, CONT

19. Clearances C/PRM/ECON: P Lerner <i>P Lerner</i>		Date 8/12/91	20. Action <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED	
C/PDO: J Wooten (Draft)			Authorized Signature <i>Mosina H. Jordan</i>	
C/ANR: R Stryker (Draft)			Date 8/12/91	
RLA: D Luten <i>D Luten</i>		8/12/91	Title Mosina H. Jordan, Director	
CONT: J Sanford <i>J Sanford</i>		8/12/91		
D/DIR: L Armstrong <i>L Armstrong</i>		8/12/91		

AID 1120-1 (5-82)

CLASSIFICATION:

PROGRAM ASSISTANCE APPROVAL DOCUMENT

DOMINICA AGRICULTURAL SECTOR SUPPORT

THE REGIONAL DEVELOPMENT OFFICE FOR THE CARIBBEAN

AUGUST 9, 1991

**PROGRAM ASSISTANCE APPROVAL DOCUMENT
DOMINICA AGRICULTURAL SECTOR SUPPORT**

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY AND RECOMMENDATION	
II. BACKGROUND	3
A. Macroeconomic Framework	3
B. Agriculture Sectoral Framework	7
III. PROGRAM DESCRIPTION	9
A. Rationale and Priority Problem to be Addressed	9
B. Relationship to Previous ESF Program in Dominica	9
C. Purpose and Structure of Program	10
D. Conditionality and Covenants Governing Disbursement	12
E. Pending Availability of FY 92 Funds	14
F. Standard Conditions and Covenants	14
IV. PROGRAM ELEMENTS	14
A. Use of U.S. Dollar Resources	14
B. Use of Local Currency	15
C. Cash Transfer versus Commodity Import Program (CIP)	16
D. Grant versus Loan Funding of the Program	16
E. Reports	17
F. Importation of U.S. Commodities	17
ANNEXES	
A. Request for Assistance from Government of Dominica	
B. Initial Environmental Examination Determination	
C. Environmental Threshold Decision	
D. Statutory Check List	
E. Points to Consider for Agricultural Diversification Strategy	
F. Agricultural Sector Assessment	

PROGRAM ASSISTANCE APPROVAL DOCUMENT
DOMINICA AGRICULTURAL SECTOR SUPPORT

I. EXECUTIVE SUMMARY AND RECOMMENDATION

The program provides US \$1.0 million of Economic Support Funds (ESF) as a cash transfer to the Government of the Commonwealth of Dominica (GOCD) from U.S. Fiscal Year 1991 funding and, pending availability, the same amount in Fiscal Year 1992.

The purpose of the grant is to assist the country of Dominica increase its capacity to broaden the economic and export base of the economy through a private sector-led program of expanded and diversified agricultural production. This expansion and diversification is intended to reduce the foreign exchange dependency on bananas, the overwhelmingly predominant cash crop and export, stimulated by the United Kingdom (UK) guaranteed market at heavily subsidized prices. It is also intended to increase total exports, reduce foreign exchange requirements for imported foodstuffs and enhance food security. In the event that the UK banana subsidy is substantially reduced or eliminated with the planned 1992 unification of the European market, this program contributes towards reducing potentially destabilizing effects on the Dominican economy and reducing potential hardship that large segments of the population could face as a result of sharp income declines.

The Grantee will be the Government of the Commonwealth of Dominica, acting through the Ministry of Finance and the Ministry of Agriculture.

Conditions Precedent to Disbursement are intended to promote the development and official approval of an Agricultural Diversification Strategy (ADS) for Dominica. US \$ 1.0 million of the grant will be disbursed in two tranches of US\$ 500,000 against specific conditions which, when satisfied, will provide evidence of the GOCD's progress towards developing and approving the strategy in collaboration with the private sector. To help the government elaborate the strategy and thereby satisfy Conditions Precedent, technical assistance will be made available to Dominica through the West Indies Tropical Produce Support Project (TROPRO), to which US \$300,000 will be added this Fiscal Year.

The Agricultural Diversification Strategy is expected to include several essential elements: 1) the identification and tuning of macroeconomic, agricultural, and other sectoral policies which influence agricultural expansion and diversification; 2) a vertically integrated market ordering system; 3) budgetary resources to support diversification; 4) an Action Program to implement the strategy; and 5) identification of environmental factors that will affect diversification.

Through regular correspondence and dialogue, AID and GOCD will exchange information and views concerning the development of an ADS. The government will be able to call upon technical expertise to help identify various options in the process of elaborating the strategy. It is also expected that the GOCD will have substantive interaction and dialogue with the private sector and design the ADS collaboratively with the private sector. This collaboration will help insure that the resulting strategy supports or creates an environment in which the private sector is able to perform as effectively and efficiently as possible in the agricultural expansion and diversification process. An annex is provided that presents some of the key talking and correspondence points for an ongoing dialogue.

Disbursements for each of the first two tranches of US\$ 500,000 will be made when the conditions for each tranche are met. The design of this program and its conditions takes into account the uncertain nature of FY 92 financing, which, if available, is intended to support implementation of the diversification strategy. The program also includes covenants which encourage GOCD to continue progress towards restraining the public sector wage bill and increasing the current account surplus, which will support private sector-led diversification and provide continuity with previous structural adjustment programs supported by the U.S.

This program has been designed with the support of, and in collaboration with the Ministry of Agriculture and Ministry of Finance of the GOCD. It reflects jointly developed perspectives on an effective and efficient process which will assist Dominica move towards expanding and diversifying its economic and export base, specifically in agricultural production.

Recommendation:

The Program Design Committee of the Regional Development Office for the Caribbean recommends that the Acting Mission Director approve the Program Assistance Authorization Document for the Dominica Agricultural Sector Support, the authorization of US \$1.0 million in FY 1991 Economic Support Funds via this PAAD, and, subject to their availability, the same amount in FY 92 to support the program of agricultural diversification for the Government of the Commonwealth of Dominica.

II. BACKGROUND

A. Macroeconomic Framework

The economy of Dominica is a small open one, primarily based on agriculture and agro-processing. The average per capita GDP of the country's approximately 85,000 people is about US\$ 1,900. Since the mid-1980s, except for the effects of Hurricane Hugo in 1989, national economic indicators reflect a strong economy that shows resilience, buoyancy, and discipline in the management of macro-economic variables.

The growth of real GDP is estimated at 7% in 1990. Unemployment has declined from 20% to 10% since the mid-1980s. Public sector savings are 5-8% annually. Debt service is less than 5% of exports. The public sector has made substantial investment in infrastructure, as much as 20% of GDP in 1990. The inflation rate is moderate at 3% for the same year. The exchange rate is stable and the balance of payments demonstrates acceptable performance. This relative national economic stability is vulnerable because of the narrow export base. Bananas, which receive a highly subsidized price from the United Kingdom, account for about 70% of total exports, nearly 28% of GDP and nearly 46% of employment. The planned 1992 unification of the European market and tariff structure presents an added dimension of vulnerability.

Real GDP increased at an average annual rate of 7% in 1986-1988, stimulated by the increased production of bananas and the spillover effects on other sectors. GDP declined by 1% in 1989 because of damage to the output capability of the agricultural sector caused by Hurricane Hugo. Agriculture recovered quickly and growth of GDP is estimated at 7% in 1990.

Private sector wages increased on average by 6% a year in 1987-90, and in late 1989 the minimum wage was increased by 50%. The relatively strong growth in the economy since the mid-1980s led to a reduction in the unemployment rate from 20% at the beginning of 1990 to less than 10% recently. Labor shortages are now reported in some sectors. These labor shortages have put upward pressure on public sector wages, contributing to a high public sector wage bill.

The rate of increase of consumer prices rose from about 3% a year in 1986-88 to nearly 6% in 1989. A major contributing factor was the increase in the price of foodstuffs because of the disruption caused by the hurricane and the continued shift from production of diverse foodstuffs to bananas. In the first ten months of 1990 the increase in prices slowed to less than 3% a year and some food prices declined as production recovered.

Public finances strengthened in the second half of the 1980s with the current account surplus of the consolidated public sector increasing from the equivalent of 2% of GDP in 1984/85 to an annual average of more than 7% in 1986-89. This improvement resulted from buoyant economic activity, restraints on current expenditure, the expansion of coverage by the Social Security Scheme, and the substantial surpluses of the Dominica Banana Marketing

Corporation (DBMC), the largest public sector enterprise, during 1986-88. Improved public savings and available external assistance permitted the public sector to reduce sharply its indebtedness to domestic banks in the late 1980s.

Hurricane Hugo wrought declines in economic activity. Public sector savings declined from nearly 8% of GDP in 1988-89 to 5% in 1989-90. Capital expenditures also increased and the overall balance moved from a surplus of more than 2% of GDP in 1988-89 to a deficit equivalent to 9% of GDP in 1989-90. This led the public sector to borrow the equivalent of 4% of GDP from the domestic banking system in 1989-90 after several years of net repayment.

Private sector deposits with commercial banks more than doubled between 1985 and mid-1990. In the first two years of this period, bank lending declined as the public sector reduced its net indebtedness and banks acquired external assets. Since 1988, however, bank lending increased sharply, reflecting initially an increase of loans to the private sector for residential housing and the resumption of borrowing by the public sector. To satisfy the demand for credit in 1989 and 1990, the commercial banks reduced their accumulated net balances abroad. Interest rates are market determined, except that savings deposits require a minimum rate.

The deficit in the current account of the balance of payments rose from about 4% of GDP a year in 1986-87 to nearly 20% of GDP a year in 1988-89. This reflected a rise in imports of both consumer and capital goods in line with the growth of personal income and of public investment, and a fall in exports due to the hurricane. The external current account deficit is estimated to have declined to 16% of GDP in 1990 as banana export volume recovered, prices increased in the U.K. market, and the growth of consumer goods imports slowed.

External debt has risen from US \$48 million in 1985 to US \$73 million in 1990. However in relation to GDP, the debt declined from about 48% to 44% during the same period. The share of concessional borrowing during this period increased from about 73% in 1985 to 97% in 1990, which served to reduce the annual debt service from 8% of exports of goods, nonfactor services, and net private transfers to less than 5%.

The exchange rate of Dominica's currency, the Eastern Caribbean dollar, has been pegged to the U.S. dollar at the rate of E.C. dollars 2.70 per U.S. dollar since July, 1976. In real effective terms there was a depreciation of about 24% from early 1985 through mid-1988. From mid-1988 to mid-1990, the exchange rate for the E.C. dollar for Dominica has shown no trend in real effective terms.

Economic Prospects

The annual growth of real GDP is projected to be in the range of 5-6% a year in 1991-93. However, this is based on the assumption that the preferential access to the U.K. market for banana exports will not be altered significantly by the unified European market planned for 1992, and that new domestic and foreign investment will encourage a resumption of growth in manufacturing and stimulate construction and tourism activities.

The uncertainty and time frame posed in these assumptions promotes agricultural diversification as an important policy area. The diversification of the agricultural production base has been hampered by the relative profitability of bananas which has diverted land, capital and labor away from other crops and resulted in the expansion of banana cultivation to less productive areas. This has contributed to soil erosion on sloping land and, because of lower yields from marginal land, has raised unit costs of many common agricultural operations.

Some manufacturers are experiencing difficulties due to the rising cost of labor, the less developed transport system compared to neighboring states, and the loss of some markets. GOCD authorities expect that some of these problems will be addressed through investment in new production techniques, increased emphasis on labor training to raise productivity, and the adoption of CARICOM's Common External Tariff (CET) which should strengthen the position of Dominica's exporters within the region. Moreover, investment in hydroelectricity, water delivery, and communications, some of which is ongoing and some of which is planned, will expand the infrastructure base. Finally, the growth of tourism, including a potentially significant component of vacation and retirement community housing, is expected to further enhance annual GDP.

Major proposals of the central government budget for 1990-91 included reinstating the export tax on bananas, increasing various post and travel allowances, raising the ceiling on government employment by 2%, and increasing wages by 3% retroactive to the beginning of the previous fiscal year. Subsequent modifications included changing the structure on some duties, netting a revenue increase of 0.5% of GDP on an annual basis.

In December 1990, after strong opposition from the civil service union to the wage increases provided for in the original budget, the Central Government revised the planned increases to 7% in 1990-91 and 7.5% in the previous year and awarded an additional 0.5% to the 5% increase of 1988-89.

Notwithstanding measures which increased revenues by 1.5% of GDP in 1990-91, Government revenues are projected to decline to 27% of GDP this year, from 28% in the previous year. Contributing factors are a fall in income tax receipts and the projected slower growth of imports. With current expenditures estimated to increase from 24% of GDP to 25% in the present fiscal year, the current account surplus is expected to decline to 2% of GDP in 1990/91 from 4% in the previous year.

The decline in central government saving in 1990-91 is expected to be offset in part by a strengthening of the financial position of non-financial public enterprises. The Water Authority increased water rates by 50% and the Dominica Banana Marketing Corporation's finances have strengthened with the recovery of banana production.

The overall deficit is expected to remain about 9% of GDP. For the second consecutive year, the deficit is likely to exceed the availability of concessional external financing and thus to require domestic financing equivalent to 4% of GDP. It is projected that this 1990-91 deficit of 9% of GDP can be reduced to less than 1% of GDP a year in 1991-92 and 1992-93, assuming no new discretionary revenue measures are implemented, that wage and salary expenditure increase no more than 6% which would be below the expected growth of nominal GDP of 9-10% a year, and that capital expenditure would decline from about 18% of GDP in 1990-91 to an average of 12% in the following two years. Taking account of existing commitments of external concessionary assistance, a deficit of this size would enable the public sector to reduce its outstanding domestic indebtedness.

Economic projections referenced in this section on Dominica's economy are based on the GOCD, the IMF and the World Bank assumptions for the medium term:

- o the export price for bananas will remain at its average 1990 level while annual export volumes will increase at lower rates than in the recent past as marginal producers withdraw from production;
- o export volumes of other agricultural and of manufactured commodities will increase as some banana farmers switch to other products;
- o imports will increase more slowly than in the past because of the decline of public investment;
- o earnings from tourism will increase as more facilities are developed;
- o inflows of official grants and loans will be based on existing commitments and debt servicing will take place according to scheduled maturities;
- o inflows of private remittances will increase at a slower pace given the return of Dominican expatriates from the U.K. and North America to Dominica for retirement;
- o inflows of direct private investment would increase considerably with expected hotel and vacation home construction and new manufacturing;
- o commercial banks will undertake external investment as the public sector ends domestic bank borrowing.

On these assumptions, the external current account deficit would fall to about 11% of GDP by 1993, from 16% in 1990. The ratio of external public debt to GDP is projected to decline from 43% in 1990 to 37% in 1993 and debt service as a proportion of exports of goods and nonfactor services and private transfers is estimated to decline from 5% to about 4% a year over the same period.

B. Agriculture Sectoral Framework

A full Agricultural Sector Assessment is provided as ANNEX F of this PAAD.

Agriculture in Dominica is the largest contributor to GDP (30%), provides nearly one half of employment, and earns 75% of the foreign exchange. The ten thousand, mostly small farmers cultivate about 25,000 acres of land.

A wide variety of tropical crops are produced both for domestic consumption and export. For the past decade, export bananas have been the overwhelmingly predominant cash crop, stimulated by the United Kingdom (UK) guaranteed market at heavily subsidized prices. Significant agriculture-based export products also include coconut oil, grapefruit concentrate, root crops, and bay oil. Less significant agricultural exports include other citrus, exotic fruits, cocoa, coffee, spices, flowers and ornamentals, aloe vera gel, and vegetables.

The wet tropical climate and steep topography, combined with the relative scarcity of labor on small undercapitalized farms, present special problems for improving production efficiency and market competitiveness.

Bananas, Dominica's principle export product, account for approximately 93% of the value of agricultural production and approximately 70% of total exports. Without the subsidy embodied in the U.K. preferential treatment of Dominican bananas, it has been estimated that banana prices could fall by as much as 50%. This denotes the size of the distortion as well as the size of the adjustment problem the country could shortly face. The presence of the banana subsidy for the past several years, has led farmers to shift scarce factors of production (land, labor and capital) away from other production options to bananas. This has created a cycle of reduced supply of other products, loss of diversified product markets, and low capacity utilization by processors of non-banana products. This in turn further exacerbates excessive dependence on bananas for foreign exchange and farmer incomes.

Analysis indicates that costs of production are high and quality constraints exist that will prevent bananas from competing successfully in world markets if preferential access to the U.K. market is lost. The sectoral program described in this PAAD will encourage and assist adjustment away from production of this subsidized commodity into other products that are competitive and potentially strong income earners in the regional and world markets.

Two thirds of internal foodstuffs consumption is from imports, especially meats. The subsidized foreign exchange return on banana production made this the financially superior and apparent mode of meeting local food requirements and demand. However, foreign exchange earnings will likely fall when the banana subsidy disappears. High dependence on imported foodstuffs renders the availability of basic food required by the population vulnerable to balance of payments problems that the diminished or eliminated subsidy on bananas could

severely test. Unless comparative advantage shifts exports to other products that bring in equivalent levels of foreign exchange earnings, it is in Dominica's interest to produce economically viable food products that reduce the food import bill, respond to local demand, and efficiently employ Dominica's agricultural production potential. In short, the policy thrust toward agricultural diversification can address both the issue of excessive dependence on banana exports to a subsidized market and the associated need and ability to reduce the food import bill.

The comparative advantage for bananas exists not only because of the U.K. guaranteed placement and the subsidized price, but also because the marketing system in Dominica is arranged for priority support of banana production. The banana market is vertically integrated from the farmgate to the shipping dock, thereby virtually eliminating all marketing risks for the banana farmer. A number of production services are provided to banana farmers such as input supply, technical assistance, and aerial spraying, which reduces a number of production risks. Disaster insurance covers rehabilitation and replacement costs for windstorm damage to bananas, thereby alleviating important climatic risks.

In contrast, farmers who grow diversified crops other than bananas are faced with insecure market access, unstable prices, a fractionated and unreliable market, the absence of built-in production services, and the absence of disaster insurance. In other words, farmers growing diversified crops must directly assume many more of the production costs from farmgate to dock than does the banana farmer, and must assume the entire burden of the associated risks. Farmers heavily discount potential returns when faced with high risks. Thus, comparative risk conditions induce farmers to produce bananas rather than diversified export and other crops that could reduce the food import bill, even though net returns from bananas may be significantly lower.

In summary, the two critical obstacles to achieving future competitiveness for Dominican agriculture are:

- 1) subsidy-engendered distortions of relative prices between bananas and other export crops, and
- 2) deficiencies in the diversified export, processing and marketing sub-systems for fresh and processed produce.

26

III. PROGRAM DESCRIPTION

A. Rationale and Priority Problem to be Addressed

The proposed assistance program is designed to help resolve the following priority problem:

The national economy and its agricultural sector are excessively dependent on subsidized banana exports to the United Kingdom market.

The planned unification of the European market and of its external tariff policies in 1992, may reduce or eliminate this preferential access. If not adequately prepared, the Dominican economy could face destabilizing effects, and large segments of the population could face considerable hardship triggered by significant decreases in income.

Agricultural diversification, for which Dominica possesses considerable natural resource capability and production potential, could make significant contributions toward addressing these issues. Agricultural diversification could also serve to decrease the high food import bill that future non-subsidized exports would strain to support.

Market disincentives, price distortions, and lack of attention to domestic agricultural policy have inhibited movement toward diversification during the last decade. However, changing international market conditions and accompanying uncertainty make a strong case for Dominica to identify, adopt, and implement policies and action programs that will broaden and diversify its export base. The proposed cash transfer assistance is structured to encourage and support the development of such policies and programs, and to ease adjustment away from subsidized banana production into diversified products that are competitive and strong income earners in regional and world markets.

The Dominica Agriculture Sector Assessment seen at ANNEX F provides an in-depth picture of the sector and the priority problem areas to be addressed.

B. Relationship to the Previous ESF Program in Dominica

The ongoing ESF program in Dominica commenced in 1987 as part of the Tight Consultative Group Economic (TCG) Program in conjunction with the IMF and the World Bank. The medium term objective of the TCG program was to increase the rate of economic growth with a view to reducing unemployment and improving living standards, while strengthening the country's fiscal and balance of payments positions. The program developed incentives to stimulate private sector investment in order to promote growth of output and employment. The program also aimed to strengthen public finances by establishing public sector savings targets. The GOCD projects that it will not meet the fiscal targets established through the A.I.D. ESF Program for the 1990-1991 fiscal year, to which it committed itself one year ago. This specific fiscal issue carries over from the current ESF Program which ends June 30, 1991 and has implications for Dominica's agricultural sector performance and diversification.

21

Dominica successfully met all targets for the first three tranches of the ongoing program. However, a combination of unexpected events prevented the GOCD from meeting targets for the last tranche. These targets were:

- o restraining growth in the central government civil service wage and salary payments so that they do not exceed 49% of current revenue and 54% of current expenditure; and
- o achieving a central government current account surplus equal to at least 7% of current revenue.

Based on actual data for the first nine months of the 1990/1991 fiscal year and trend data from previous years, the GOCD projects that government civil service wage and salary payments will equal 57.1% of current revenue and 59.1% of current expenditure, and that the current account surplus will equal 3.2% of current revenue.

In spite of falling short on meeting the targets for the fourth tranche of the existing ESF program, the GOCD has provided information that demonstrates strong effort and responsible progress toward meeting them, and that identifies conditions in the country's economic, political, and legislative environment which defend the revenue and expenditure patterns for the fiscal year. The GOCD has also outlined actions directed toward insuring full target achievement during the next fiscal year. RDO/C supports continued progress in this direction and sees it as an important foundation for sustained success of the agricultural diversification program.

In general, the performance of the agricultural sector influences and is influenced by Dominica's pattern of national revenue accumulation and expenditure. Income derived from agricultural production contributes to the economy's tax base and a portion of the country's revenue is invested in or allocated to the agricultural sector. Non-priority fiscal expenditures siphon scarce resources away from priorities such as agricultural diversification. Specifically, public wage restraint combined with productivity gains would help Dominica maintain competitiveness and promote the expansion of non-traditional export activities. In this sense, the GOCD should further direct public sector involvement to areas that stimulate private sector activity outside the banana industry.

The program includes covenants that encourage the GOCD to continue to make best effort progress toward restraining growth in central government civil service wage and salary payments, and to increase the central government current account surplus.

C. Purpose and Structure of the Program

The purpose of the program is to provide support to the Government of the Commonwealth of Dominica (GOCD) to diversify Dominica's agricultural sector. Diversification is intended to reduce the nation's foreign exchange dependency on banana exports for foreign exchange, promote the expansion of other agricultural exports, reduce foreign exchange requirements for imported foodstuffs, and enhance food security.

The program is structured to obligate US \$1.0 million in U.S. Economic Support Funds (ESF) in U.S. Fiscal Year 1991 and thereafter disburse the funds within twelve months via the cash transfer mode. A second US \$1.0 million will be obligated for the program in FY 92, depending on the availability of funds. Disbursements will be made in separate tranches of US\$ 500,000, governed by the satisfaction of Conditions Precedent.

Conditions set by A.I.D. are intended to help the GOCD to achieve the purpose of the program through the development, review, approval, and implementation of an Agricultural Diversification Strategy (ADS). Evidence indicating satisfaction of conditions precedent to disbursement will demonstrate GOCD commitment and progress towards achieving diversification in the agricultural sector.

The program also proposes to aid the GOCD with the elaboration of the Agricultural Diversification Strategy by making assistance available through the O.E.C.S.-managed West Indies Tropical Produce Support Project (TROPRO). Of the US \$1.3 million in FY 1991 Economic Support Funds, US \$300,000 will be added by A.I.D. to the TROPRO Project to finance any studies or analyses or with the elaboration of the strategy. A second US \$300,000 may be added to TROPRO in FY 92, depending on funding availability.

The ADS is expected to include, among others, several important features:

1. Government policy should be tuned to support diversification. Complementarity between macroeconomic, agricultural, and other sectoral policies that influence agriculture will be necessary. Thus, an important objective of the Agricultural Diversification Strategy will be the identification of policies that need development, refinement, or abolishment.
2. An Action Program for implementing the ADS will likewise constitute an important element. It will need a timetable with discernible benchmarks against which implementation progress can be measured. Special legislation may also be identified as an important component of the Action Program.
3. A more efficient marketing system is required to expand production and processing, improve marketing efficiencies, enhance market competitiveness, and increase market penetration for various products. Thus, a key feature of the diversification strategy is likely to be a vertically integrated market ordering system (VIMOS), governed by market forces and managed by the private sector. The creation and operation of a VIMOS is seen as essential to help Dominica make the transition from an economy predominantly reliant on subsidized banana exports to an economy supported by diversified production in a competitive international market environment. The market ordering system will also play a significant role in implementing other aspects of the strategy

4. In the elaboration of a policy agenda and an Action Program for implementation of the strategy, a budget which reflects the costs of diversification--both in the public and private sectors--should be drawn up. The government will have to consider an increase in national budget allocations to the Ministry of Agriculture, as well as revised allocations within the Ministry and for targeted private sector assistance, to promote diversification. The Ministry of Agriculture will need a line item in the budget for Diversification Support that can fund private or public sector efforts. The line item can be funded by the Eastern Caribbean Dollar equivalent of the U.S. dollar disbursements.
5. Finally, the Agricultural Diversification Strategy and Action Program will need to address the environmental factors associated with agricultural diversification.

D. Conditionality and Covenants Governing Disbursement

This section sets forth the conditions which A.I.D. will ask the government to satisfy before disbursement of the U.S. dollars. Evidence which A.I.D. will consider as satisfaction of the conditions is described.

1. First Tranche Conditionality: The first tranche disbursement of US\$ 500,000 will be conditioned on evidence of a commitment by the government to develop an Agricultural Diversification Strategy.

Evidence: To satisfy the condition governing disbursement of the first tranche of US\$ 500,000, the Prime Minister of the GOCD will furnish to A.I.D. an official letter that states the commitment of the government to develop and implement an Agricultural Diversification Strategy that will address the following significant elements:

- a) A policy agenda that outlines the scope of specific macroeconomic and sectoral policy issues which affect agricultural diversification, and for which policy development or refinement is required;
- b) A more efficient marketing system, such as a vertically integrated market ordering system governed by market forces and managed by the private sector;
- c) An action program to implement the diversification strategy;
- d) A sub-sectoral item in the Ministry of Agriculture budget to promote diversification identified as "Agricultural Diversification Support".

2. Second Tranche Conditionality: The second tranche disbursement of US\$ 500,000 will be conditioned on evidence of GOCD development, review, and approval of the Agricultural Diversification Strategy and Action Program to implement the strategy.

Evidence: The government will furnish to A.I.D.

- (a) a copy of the section of the official minutes of the Cabinet meeting, or other official document, pertinent to and reflecting the decision taken by the Cabinet to approve the agricultural diversification strategy;
 - (b) documentation indicating that a sub-sectoral item for "Agricultural Diversification Support" has been created in the 1991-92 Ministry of Agriculture supplemental budget and constitutes an element of the diversification strategy;
 - (c) documentation indicating that the EC dollar equivalent of US \$500,000 has been allocated to the "Agricultural Diversification Support" sub-sectoral item in the 1991-92 supplemental budget, that the Ministry of Agriculture has authority to draw down the budget, and that the funds will remain available in the separate account until disbursed to the Ministry of Agriculture to fund such supplemental budget item.
3. Special Covenants which the GOCD will be asked to honor are also listed below. The covenants are intended to indicate A.I.D.'s continued interest in and support for the government's prudent fiscal management, without which the Agricultural Diversification Strategy cannot be successfully implemented. The covenants are:

- (a) The GOCD will seek to achieve a 1991 current account surplus of at least seven percent;
- (b) The GOCD will seek to restrain growth in central government civil service wage and salary payments so that they do not exceed forty-nine percent of current revenue and fifty-four percent of current expenditure;
- (c) The GOCD will continue to implement the cost containment measures based on the findings and recommendations of the Organization, Methods and Manpower technical assistance team and keep A.I.D informed of implementation progress.
- (d) The GOCD will not employ funds provided by A.I.D. under this assistance program, or the E.C. dollars deposited into separate local currency account, for the procurement or use of pesticides.

E. Pending Availability of FY 92 Funds

A.I.D. expects to be able to provide funds in U.S. Fiscal Year 1992, subject to their availability, to assist the government with the subsequent key step in the diversification process--the implementation of the strategy. The sum of US \$1.3 million will be targeted for implementation support. Of this sum, US \$300,000 will be added to the TROPRO project to finance additional survey research, further policy analysis, training, or other activity deemed necessary to enhance the success of the diversification program.

If the funds are not available, the formal U.S. contribution for the program would terminate after disbursement of the second tranche.

F. Standard Conditions and Covenants

As included in previous agreements between the GOCD and A.I.D., this proposed assistance program will contain a standard set of other conditions and covenants mandated by U.S. legislation or otherwise by A.I.D. requirements. These include, for example, requirements for specimen signatures of designated officials, the opinion of counsel, the separate dollar account, the uses of the U.S. dollars, the separate local currency account and use of the EC dollars, program recordkeeping, and procedures for accounting and reporting. These standard conditions and covenants will be detailed in the agreement and are aspects of A.I.D. requirements with which the GOCD is familiar.

IV. PROGRAM ELEMENTS

A. Use of U.S. Dollar Resources

Depending on the existing foreign exchange regime in a recipient country, AID/W guidance (State 325792, 10/20/87) on programming of U.S. dollar resources offers three choices in descending order of preference: imports from the U.S., auction of foreign exchange, and debt service payments. The Mission recommends the first of these for the proposed program assistance, imports from the U.S.

The U.S. dollars will be deposited in a separate interest bearing account at a U.S. commercial bank that is normally a correspondent bank of a commercial bank in Dominica in the name of the National Commercial Bank (NCB) of Dominica. This will be a new account to be used exclusively for disbursements under the proposed grant. Conditionality under the Grant Agreement will specify that no other funds may be deposited in the account. The funds will be used, over the ensuing twelve-month period, to cover payments for Dominican importation of eligible merchandise from the U.S.

36

The GOCD will instruct the NCB to draw down the separate account for payments for U.S. exports to Dominica, unless the specific transaction in question involves Dominican imports of goods for which the use of separate account funds are ineligible. The GOCD will need to be mindful of the necessity of liquidating funds in the account within one year of their deposit. Any accrued interest in the account shall be used in the same manner as the principal.

B. Use of Local Currency

AID/W supplemental guidance (State 204855 6/21/91) offers two principal types of local currency programs which can be funded from the separate account. These programs are: A) Budget Support which includes general budget support, general sector support and specific sector support, and B) Extra-budgetary Activities which includes projects or activities outside the host country's budget. RDO/C has selected the specific sector budget support option, given the specific program emphasis on agricultural diversification in the agricultural sector. Per the guidance, this approach is effective for joint programming with the host government which focuses public sector expenditure on priority categories of uses.

A condition to be met by the government is the creation of a sub-sectoral item in the Ministry of Agriculture's budget identified as "Agricultural Diversification Support". The government will deposit an amount of Eastern Caribbean dollars equivalent to the grant disbursement into a separate interest bearing government account at the National Commercial Bank of Dominica (NCB). The funds in this account will not be commingled with funds from any other source and will be transferred to the Ministry of Agriculture to be expended only for the purposes approved under the grant agreement. AID will not assume any role or responsibility for approving disbursements from the separate local currency account, and any accrued interest thereon will be used in the same manner as the principal.

Capability of Host Country Implementing Agency

In order to program local currency for specific sector support, AID must have a relatively high level of confidence in the reporting and control mechanisms of the financial and budgeting systems of the government agency responsible for the management of the separate accounts. Under this grant, the Ministry of Finance, which has previously managed similar separate accounts, will be responsible for the management of the separate local currency account. Prior experience with the Ministry of Finance has given us reasonable assurance that this agency has adequate financial management systems in place to properly account for the local currency. Previous capability assessments also support the conclusion that the Government of the Commonwealth of Dominica's financial management systems are up to the standard required by AID.

In addition, the Ministry of Agriculture successfully implemented the AID-funded Hurricane Hugo Rehabilitation Project in 1989/90. A capability assessment of this ministry by an independent accounting firm determined that adequate financial systems and internal controls were in place to offer reasonable assurance that allocated funds would be used for intended purposes. RDO/C accepts this prior favorable experience with the Ministry of Agriculture as evidence of sufficient financial management capability.

C. Cash Transfer versus Commodity Import Program (CIP)

In designing the sector assistance program, the Mission weighed the merits of a cash transfer program against a CIP, and reviewed the experience in other countries of the Caribbean and elsewhere. The Mission has concluded that the cash transfer mechanism is the best means to achieve the objectives of the diversification program.

The procedures and controls required to implement a CIP would impose a degree of public sector intervention and control over the allocation and use of foreign exchange which would be contrary to both Dominica's and USG's policy of relying on the market mechanism. The cash transfer approach will also require less staff time to administer, both on the part of Dominica and the Mission. Under the terms of the agreement, the U.S. dollar proceeds of the proposed disbursement will be programmed for Dominica's purchase of eligible merchandise from the U.S.

D. Grant versus Loan Funding of the Program

The Mission has determined that grant rather than loan funding is the appropriate form of program support. While the ratio of loans to GDP is declining, it is still relatively high in Dominica. The same can be said for the debt service ratio. External debt has risen from US \$48 million in 1985 to US \$73 million in 1990. This translates to a reduction from 48% of GDP in 1985-86 to 44% of GDP in 1989-90. During the same period, the share of concessional borrowing has increased from about 73% in 1985 to about 97% in 1989-90, and this has served to reduce the annual debt service from 8% of exports of goods, nonfactor services, and net private transfers to less than 5%. The denominators of these two ratios are subject to sharp changes, one of them possibly being the reduction or elimination of the United Kingdom subsidy on bananas. Moreover, a hurricane could reduce the GDP by 25 or 30%, driving the debt/GDP ratio to intolerable levels overnight.

In support of Dominica's current trend of reducing these debt ratios, and in recognition of the vulnerability of the denominators, the Mission has determined grant funding is most appropriate for Dominica at this time.

E. Reports

The Government of the Commonwealth of Dominica will be required in the Grant Agreement to present reports to A.I.D. to enable A.I.D. to conclude that the U.S. dollar and local currency resources have been expended in accordance with the program.

In the case of the U.S. dollar resources, the National Commercial Bank of Dominica will be required to present, on a quarterly basis, to A.I.D., through the Ministry of Finance:

- o the disbursement orders it has communicated to its U.S. correspondent bank to release funds from the special dollar account; and
- o copies of the statements of the latter account, verifying that the funds have been appropriately released.

In the case of local currency, the GOCD will be required to demonstrate that funds have been allocated to the Ministry of Agriculture for activities that promote agricultural diversification.

Reporting will occur quarterly, beginning ninety days after disbursement of the U.S. dollar resources, until funds in the separate local currency account have been liquidated.

F. Importation of U.S. Commodities

It is expected that Dominica will be able to import commodities from the United States in value at least equal to that of the Grant. Dominica's imports from the U.S. were approximately US \$33.3 million in 1989, US \$28.1 million for the first ten months in 1989, and US \$25.6 million for the first ten months in 1990. Under Project 538-0157, funds were disbursed in June, 1986, wherein Dominica reported approximately US \$6 million in imports from the U.S. for the June to December period following disbursement. The record shows Dominica having imported US \$3.7 million in eligible goods for that period. This overall import record suggests that Dominica will have no problems purchasing the value of at least US \$1 million in eligible U.S. imports in FY 91, or in FY 92.



Ref No.

F 140/X05/15

MINISTRY OF FINANCE
GOVERNMENT HEADQUARTERS
KENNEDY AVENUE
ROSEAU.
COMMONWEALTH OF DOMINICA
WEST INDIES.

1st August, 1991

Mr Larry T Armstrong
Acting Director
United States Agency for
International Development
Regional Development Office
P O Box 302
Bridgetown
BARBADOS

DOMINICA AGRICULTURE DIVERSIFICATION PROGRAM

Dear Mr Armstrong

As you are aware, officials of the Dominica Government have met with several members of your staff over recent months to discuss potential U.S. support for our effort to diversify the agricultural sector.

During this period, USAID has furnished the services of Dr Fred Mann and his study of the sector has been reviewed by the Ministry of Agriculture. We have also reviewed the contents of the letter dated 28th June from Dr Stryker which provided an abstract of the proposed U.S. assistance program.

Representatives of the Dominican Government have thoroughly discussed the U.S. assistance proposal with USAID personnel. It is our understanding that USAID proposes to provide US\$1 million to assist with our agricultural diversification activities, with the possibility of a second US\$1 million dependent on the availability of funds.

Handwritten notes and stamps on the right side of the page, including a signature and the date 08/16/91.

61

TO: HONOURABLE CHARLES
PRIME MINISTER AND
MINISTER OF FINANCE

Extended Page 1.
ANNEX A
Page 2 of 3

cc: Permanent Secretary/Ministry of Agriculture
Development Co-ordinator/Economic Development Unit

- 2 -

We understand that disbursement will be made in tranches of \$500,000, subject to the satisfaction by the Government of several conditions, including evidence of:

- (i) a commitment by the Government to diversify the sector;
- (ii) the development, review, and approval of a comprehensive diversification strategy;
- (iii) the creation of a line item for diversification in the Ministry of Agriculture budget; and
- (iv) deposit of the EC Dollar equivalent of the US Dollars in a special account for the budget line item.

It is further understood that USAID can finance technical expertise for studies, analyses, policy review, and strategy formulation through the Organisation of East Caribbean States Agricultural Diversification Unit by adding other funds to the TROPO Project targeted specifically for Dominica.

My Government welcomes the assistance offered, especially as it is consistent with and supportive of our program to diversify the agricultural sector and reduce the vulnerability of our economy.

I should be grateful if the proposal would now be finalised and the draft program agreement submitted for our review at your earliest convenience.

Yours sincerely

(Sgd) M EUGENIA CHARLES

37

DETERMINATION OF CATEGORICAL EXCLUSION
FOR ENVIRONMENTAL EXAMINATION

I. PROGRAM DATA

Program Location:	Commonwealth of Dominica
Program Title and Number:	Dominican Agricultural Sector Program 538-0176
Funding (LOP):	\$2,000,000 ESF Grant
Life of Program:	2 Years
Determination prepared by:	<u>Albert L. Merkel</u> Mission Environmental Officer
Environmental Action:	Categorical Exclusion
Date:	<u>7/2/91</u>
Approved	Disapproved
<u>[Signature]</u> Mission Director	<u>[Signature]</u> Mission Director

Clearances:

Ronald B. Stryker, Chief ANR
Gerald Cashion, PDO
Patricia L. Lerner, Chief PRM/ECON
Larry T. Armstrong, D/DIR

In draft (6/28/91)
In draft (06/28/91)
In draft (06/28/91)
★

II. Purpose and Structure of the Program

The purpose of the ESF Cash Transfer program is to provide support to the GOCD to expand and diversify Dominica's economic and export base, specifically in agricultural production. Such expansion and diversification is intended to reduce foreign exchange dependency on bananas, expand total exports, reduce foreign exchange requirements for imported foodstuffs, and enhance food security.

The program is structured to obligate and disburse US\$1.0 million in ESF cash transfer assistance in FY 91, and depending on availability, in FY 92 as well. The funds will be disbursed against specific commitments by the GOCD, or conditions, to achieve the above stated purpose through developing, officially approving and implementing an Agricultural Diversification Strategy (ADS).

III. Environmental Considerations

This program will provide funding to the GOCD to develop the capability to engage in formulating sound policies and development planning in the Agriculture sector, including attention to the environment. However, AID will not have prior approval of financing or prior approval of implementation of specific activities or knowledge of or control over specific activities that may have an effect on the physical and natural environment for which financing is provided by AID.

IV. Determination Recommended

A categorical exclusion of the requirement to conduct an environmental examination for this program as permitted in 22 CFR Part 216, Para 216.2(c)(1) and Para 216.2(3).

Drafted 6/28/91 ALMerkel:aaw Doc. 2405b

LAC-IEE-91-66

ENVIRONMENTAL THRESHOLD DECISION

Project Location : Commonwealth of Dominica

Project Title : Dominican Agricultural Sector Program (FY 91/92 ESF Cash Transfer Program)

Project Number : 538-0176

Funding : \$2 million (ESF Grant)

Life of Project : 2 Years (FY 91-92)

IEE Prepared by : Albert L. Merkel, Mission Environmental Officer, RDO/C

Recommended Threshold Decision : Categorical Exclusion

Bureau Threshold Decision : Concur with Recommendation

Comments : Pursuant to A.I.D. environmental regulations, an IEE is generally not required when A.I.D. does not have knowledge of or control over specific activities that have an effect on the physical and natural environment for which financing is approved by A.I.D. This exemption does not apply, however, to assistance for the procurement or use of pesticides. Therefore, the FY 91/92 Cash Transfer Program, which is assisting GOCD's efforts to expand and diversify Dominica's economic and export base, specifically in agricultural production, will not provide support for the procurement or use of pesticides. A covenant will be placed in the program agreement between the GOCD and A.I.D. that no pesticides will be procured or used under this program without first conducting an Environmental Assessment and having it approved by the LAC Bureau Environmental Officer.

2

Environmental Threshold
Decision (cont'd)

LAC-IEE-91-66

Copy to : Aaron Williams, Director,
RDO/C

Copy to : Patricia Lerner, FRM/ECON, RDO/C

Copy to : Ronald Stryker, ANR, RDO/C

Copy to : Gene Wilkens, REA/CAR

Copy to : Jim Hradsky, LAC/DR/CAR

Copy to : IEE File

John O. Wilson Date JUL 10 1991

John O. Wilson
Deputy Chief Environmental Officer
Bureau for Latin America
and the Caribbean

12

ANNEX D

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to the eligibility of countries to receive the following categories of assistance: (A) both Development Assistance and Economic Support Funds; (B) Development Assistance funds only; or (C) Economic Support Funds only.

A. COUNTRY ELIGIBILITY CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUND ASSISTANCE

1. Narcotics

a. Negative certification (FY 1991 Appropriations Act Sec. 559(b)): Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? No

b. Positive certification (FAA Sec. 481(h)). (This provision applies to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct N/A

source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government):

(1) does the country have in place a bilateral narcotics agreement with the United States, or a multilateral narcotics agreement?

(2) has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (a) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (b) the vital national interests of the United States require the provision of such assistance?

c. Government Policy (1986 Anti-Drug Abuse Act of 1986 Sec. 2013(b)). (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to Congress

N/A

listing such country as one: (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

2. **Indebtedness to U.S. citizens** (FAA Sec. 620(c): If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity?

No

3. **Seizure of U.S. Property** (FAA Sec. 620(e)(1)): If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No

4. **Communist countries** (FAA Secs. 620(a), 620(f), 620D; FY 1991 Appropriations Act Secs. 512, 545): Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by

No

the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

5. Mob Action (FAA Sec. 620(j)): No
Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property?

6. OPIC Investment Guaranty (FAA Sec. 620(l)): No
Has the country failed to enter into an investment guaranty agreement with OPIC?

7. Seizure of U.S. Fishing Vessels (FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5): No
(a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made?

8. Loan Default (FAA Sec. 620(q); FY 1991 Appropriations Act Sec. 518 (Brooke Amendment)): No
(a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriations Act appropriates funds?

4/6

9. **Military Equipment (FAA Sec. 620(s)):** If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

Yes. See "Taking into Consideration" memo.

10. **Diplomatic Relations with U.S. (FAA Sec. 620(t)):** Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No

11. **U.N. Obligations (FAA Sec. 620(u)):** What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.)

Current, See "Taking into Consideration" memo.

12. **International Terrorism**

a. **Sanctuary and support (FY 1991 Appropriations Act Sec. 556; FAA Sec. 620A):** Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons?

No

47

b. Airport Security (ISDCA of 1985 Sec. 552(b)). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

No

13. Discrimination (FAA Sec. 666(b)): Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No

14. Nuclear Technology (FAA Secs. 669, 670): Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

No

15. Algiers Meeting (ISDCA of 1981, Sec. 720): Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.)

See "Taking into Consideration" memo.

16. **Military Coup (FY 1991 Appropriations Act Sec. 513):** Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?

No

17. **Refugee Cooperation (FY 1991 Appropriations Act Sec. 539):** Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?

Yes, to the extent applicable.

18. **Exploitation of Children (FY 1991 Appropriations Act Sec. 599D, amending FAA Sec. 116):** Does the recipient government fail to take appropriate and adequate measures, within its means, to protect children from exploitation, abuse or forced conscription into military or paramilitary services?

No

B. **COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO DEVELOPMENT ASSISTANCE ("DA")**

N/A. This is an ESF program.

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

2. **Abortions (FY 1991 Appropriations Act Sec. 535):** Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary

sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

C. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO ECONOMIC SUPPORT FUNDS ("ESF")

Human Rights Violations (FAA Sec. 502B): Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

No

5C(2) - ASSISTANCE CHECKLIST

Dominica Agricultural
Sector -- 1991 Program
Grant (538-K-605)

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. Host Country Development Efforts (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to:
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

This program, which is intended to help expand and diversify Dominica's agricultural production and sales, will encourage (a), (b), (d) and (e).

2. U.S. Private Trade and Investment (FAA Sec. 601(b)): Information and conclusions on how assistance 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).

The grant dollars will be used to purchase U.S. commodities. Also, the program may create new opportunities in the agricultural sector.

3. Congressional Notification

a. **General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A):** If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)?

A CN was submitted on June 25, 1991, and cleared without objection on July 10, 1991.

b. **Notice of new account obligation (FY 1991 Appropriations Act Sec. 514):** If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

N/A

c. **Cash transfers and nonproject sector assistance (FY 1991 Appropriations Act Sec. 575(b)(3)):** If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

Yes

4. **Engineering and Financial Plans (FAA Sec. 611(a)):** Prior to an obligation in excess of \$500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

N/A

5. **Legislative Action (FAA Sec. 611(a)(2)):** If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action

N/A

will be completed in time to permit orderly accomplishment of the purpose of the assistance?

6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

N/A

7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

Yes

8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

N/A

9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

See A.i above

527

10. U.S. Private Trade (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).

See A.2 above

11. Local Currencies

a. Recipient Contributions (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

The program is intended to encourage Dominica to use its own resources to take various policy actions. No U.S. owned foreign currencies will be utilized.

b. U.S.-Owned Currency (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?

N/A

c. Separate Account (FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

Yes to (a), (b) & (c)

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

Yes

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

Yes

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

Yes

12. Trade Restrictions

a. Surplus Commodities (FY 1991 Appropriations Act Sec. 521(a)): 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?

No

b. Textiles (Lautenberg Amendment) (FY 1991 Appropriations Act Sec. 521(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of

N/A

55

textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

13. Tropical Forests (FY 1991 Appropriations Act Sec. 533(c)(3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

N/A

14. PVO Assistance

a. Auditing and registration (FY 1991 Appropriations Act Sec. 537): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. Funding sources (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

N/A

15. Project Agreement Documentation (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

These actions will be taken, to the extent applicable

16. Metric System (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

N/A

17. Women in Development (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

N/A

18. Regional and Multilateral Assistance (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

No. This is a direct grant to Dominica for sector reform.

19. Abortions (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

N/A

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

b. Will any funds be used to lobby for abortion?

20. Cooperatives (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

N/A

21. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

N/A

b. Release of currencies (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?

22. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

N/A

b. U.S. procurement (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?

Grant dollars will be used for U.S. procurement.

c. Marine insurance (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

N/A

d. Non-U.S. agricultural procurement (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

N/A

e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

No

f. Cargo preference shipping (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

N/A. This is a non-project cash transfer grant. See FY 1961 Appropriations Act, Sec. 575(b)(2).

g. Technical assistance (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the

N/A

51

facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

h. U.S. air carriers
(International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

N/A

i. Termination for convenience of U.S. Government (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

N/A

j. Consulting services
(FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

N/A

k. Metric conversion
(Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest

N/A

documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

1. Competitive Selection Procedures (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

N/A

23. Construction

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

N/A

b. Construction contract (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

N/A

c. Large projects, Congressional approval (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress?

N/A

24. U.S. Audit Rights (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

N/A

25. Communist Assistance (FAA Sec. 620(h)). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes

26. Narcotics

a. Cash reimbursements (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated?

N/A

b. Assistance to narcotics traffickers (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

N/A

27. Expropriation and Land Reform (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President?

Yes

28. Police and Prisons (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?

Yes

29. CIA Activities (FAA Sec. 662): Will assistance preclude use of financing for CIA activities?

Yes

30. Motor Vehicles (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?

Yes

62

31. **Military Personnel (FY 1991 Appropriations Act Sec. 503):** Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes
32. **Payment of U.N. Assessments (FY 1991 Appropriations Act Sec. 505):** Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes
33. **Multilateral Organization Lending (FY 1991 Appropriations Act Sec. 506):** Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes
34. **Export of Nuclear Resources (FY 1991 Appropriations Act Sec. 510):** Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes
35. **Repression of Population (FY 1991 Appropriations Act Sec. 511):** Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes
36. **Publicity or Propoganda (FY 1991 Appropriations Act Sec. 516):** Will assistance be used for publicity or propoganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propoganda purposes not authorized by Congress? No

37. Marine Insurance (FY 1991 Appropriations Act Sec. 563): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate?

N/A

38. Exchange for Prohibited Act (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

No

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

N/A. This is an ESF program.

(pp. 15-25 of Assistance Checklist is omitted)

1. Agricultural Exports (Bumpers Amendment) (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. Economic and Political Stability (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

Yes

2. Military Purposes (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

No

3. Commodity Grants/Separate Accounts (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? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).)

N/A

4. Generation and Use of Local Currencies (FAA Sec. 531(d)): Will ESP funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).)

N/A, This is an FY 1991 Obligation.

5. Cash Transfer Requirements (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)). If assistance is in the form of a cash transfer:

a. Separate account: Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

Yes. (This is a non-project cash transfer grant).

65

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

Yes

c. U.S. Government use of local currencies: Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

Yes

d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

Yes

POINTS TO CONSIDER FOR AGRICULTURAL DIVERSIFICATION STRATEGY

1. Policy agenda to be addressed, analyzed and acted upon, to cover policies related to:
 - a. Public and private sector roles, in national agricultural production, processing, marketing;
 - b. Domestic and foreign investment;
 - c. Infrastructure development and maintenance;
 - d. Market ordering for agricultural produce supplies destined to fresh export and processed markets;
 - e. Participation of private sector in promoting improved agricultural technology transfer;
 - f. Agricultural credit;
 - g. Provision of production-related on-farm and post-harvest inputs and services and related producer incentives;
 - h. Land use, development, conservation, taxation;
 - i. Land tenure and titling;
 - j. Mechanization and labor-production;
 - k. Livestock breeding stock supply.
 - l. Domestic and international transportation;

The policy agenda should specify required analyses and feasibility studies, a review and approval process, and an implementation schedule required to put selected policy options in place and permit them to achieve the anticipated impact.

2. Framework for Development: A Vertically Integrated Marketing Ordering System addressing the full range of elements comprising the agricultural processing and marketing subsystems from the farm gate to the shipping dock, as well as the vertical integration of harvest, post-harvest, and on-farm services to producers that are amenable to economies of scale efficiencies and timeliness, including possible services such as:

- a. Input supply;
- b. Farm to market transportation;
- c. Farm management;
- d. On-farm harvesting and post-harvest operations such as tree crop and root crop harvesting, coconut husking, wet cocoa bean extraction from pods, heading, etc.;
- e. On-farm cultured practices, such as pest management, pruning, etc.;
- f. Risk assumption, including disaster insurance;

3. Framework for an Agricultural Production Diversification Program, intended to improve productivity (through improved efficiency in factor use) as well as increased output through widespread adoption of improved technology, husbandry, and farm management practices.

The program should cover a full range of elements considered important to production and productivity enhancement, including, but not limited to:

- a. Ministry of Agriculture role in promoting and complementing private sector technology transfer and farm management services;
- b. Sustainable supply of plant propagation materials and livestock breeding stock;
- c. Adoption of appropriate mechanization and labor saving/productivity enhancing technologies/inputs;
- d. Generating and providing economic information about technology and production enterprise options;
- e. Strategies for improving delivery of information about and inputs related to technologies, husbandry and management.

COMMONWEALTH OF DOMINICA

AGRICULTURAL SECTOR ASSESSMENT

**DOMINICA MINISTRY OF AGRICULTURE AND USAID/BARBADOS
MAY 28, 1991**

DOMINICA AGRICULTURAL SECTOR ASSESSMENT

TABLE OF CONTENTS

	Page
I EXECUTIVE SUMMARY OF FINDINGS AND CONCLUSIONS	1
A. The National Economy	1
- Findings	2
- Conclusions	3
B. The Agricultural System	2
- Findings	
- Conclusions	
C. Opportunities and Issues	4
II OVERVIEW OF THE NATIONAL ECONOMY	7
A. Size and Location	7
B. Population, Infrastructure and Resources	7
C. Structure and Performance of the Economy	8
D. National Economic Outlook	8
III OVERVIEW OF THE AGRICULTURAL SYSTEM	10
A. Climate and Topography	10
B. Role in the National Economy	10
C. Land Distribution and Use	10
1. Land Distribution	11
2. Cropland Use	11
3. Livestock	13
4. Forestry	13
5. Fishing	14
D. Sources and Destinations of Output	15
1. Crops	15
2. Livestock	16
3. Forestry	16
4. Fisheries	17
E. Processing and Marketing	17
1. Overview	17
2. Fresh and Cottage-processed Marketing Sub-system	17
3. The Banana Industry	18
4. The Processing Sub-system	21

	Page
F. Public Sector Expenditures and Institutions Involved in Agriculture	24
1. Public Sector Expenditures in Agriculture	24
2. Public Sector Institutions Involved in Agriculture	24
a. Ministry of Finance and Development	24
b. Ministry of Agriculture (MOA)	25
c. Other Public Sector Institutions	25
d. Regional and International Institutions	26
G. Producer and Support Organizations	28
H. Input Supply and Factory Markets	29
1. Input Supply	29
2. Factor Markets	30
I. Costs of Production and Comparative Advantage	32
J. Native Populations	37
IV CONSTRAINTS TO AGRICULTURAL SYSTEM GROWTH	38
A. System-wide Constraints	38
B. Production Sub-system Constraints	38
C. Marketing and Processing Sub-systems Constraints	39
V GOVERNMENT - AGRICULTURAL DEVELOPMENT POLICIES AND PROSPECTS FOR GROWTH	41
A. Agricultural Development Policy of the GOCD	41
B. Prospects for Export Growth	43
C. Prospects for Growth in Import Substitution Products	43

	Page
VI POLICY AND PROGRAM ISSUES	44
A. The Banana Industry and Diversification Policy	44
B. Market Ordering	44
C. Labor and Mechanization Policy	46
D. Land Use Policy	47
E. Market Information	47
F. Research and Development	48
VII. PROPOSED VERTICALLY INTEGRATED MARKET ORDERING SYSTEM AND ENTERPRISE (VIMOS AND VIMOE)	
VIII. SUMMARY OF BASIC FUNCTIONS, STRUCTURE AND CHARACTERISTICS OF PROPOSED VIMOS AND VIMOE	
IX. SUGGESTIONS FOR USAID ASSISTANCE	
A. Strategy	
1. Institutional	
2. Functional	
B. Specific Areas Recommended for Assistance	
C. Considerations Related to Sources and Applications of USAID Resources	
<u>APPENDIX A</u>	Statistical Tables
<u>APPENDIX B</u>	Economic Characterization of Present and Proposed Agricultural Produce Market System in Dominica
<u>APPENDIX C</u>	Summary Information about Farmer and Support Organizations
<u>APPENDIX D</u>	Public Sector Institutions for Agriculture, Forestry and Fisheries
D- I	Organization Charts
D- II	Ministry of Agriculture - Summary Description
D-III	Recurrent Public Sector Recurrent and Capital Expenditures in Agriculture
D- IV	Other Public Sector, Regional and International Institutions Serving in Agriculture
DV	USAID and Other Sectoral Projects Assisting Agriculture
<u>APPENDIX E</u>	Bibliography
<u>APPENDIX F</u>	List of Persons Contacted

LIST OF ACRONYMS AND DEFINITIONS

1.	CET	Common External Tariff
2.	AGRICULTURAL "PPMC" SYSTEM	Agricultural "Production, Processing, Marketing and Consumption/Demand" System
3.	GDP	Gross Domestic Product
4.	DBMC	Dominica Banana Marketing Corporation
5.	MOA	Ministry of Agriculture, Forestry and Fisheries
6.	U.K.	United Kingdom
7.	CARICOM	Caribbean Common Market Secretariat
8.	WWII	World War II
9.	EC\$	Eastern Caribbean Dollar (US\$1.00 = EC\$2.70)
10.	EEC	European Economic Community
11.	CIF	Cost Including Freight
12.	DCP	Dominica Coconut Processors, Limited
13.	DAI	Dominica Agro-Industries Limited
14.	CORONA	Corona Development, Limited
15.	BELLO	P.W. Bellot & Company
16.	WINDARD	Windward Processors, Limited
17.	MFD	Ministry of Finance and Development
18.	EDU	Economic Development Unit of MFD
19.	DEXIA	Dominica Export and Import Agency
20.	AIDB	Agricultural Industrial Development Bank
21.	NDC	National Development Corporation
22.	NDFD	National Development Foundation of Dominica
23.	CARDI	Caribbean Agricultural Research and Development Institute
24.	ROC	Republic of China
25.	FTC	French Technical Cooperation Agency
26.	BDD	British Development Division
27.	IICA	Inter- American Institute of Agricultural Cooperation
28.	CARDITS	CARDI Technical Services
29.	FAO	Food and Agriculture Organization
30.	WINBAN	Windward Islands Banana Research Organization
31.	WINCROP	Windward Islands Banana Crop Insurance Organization
32.	CATCO	Caribbean Agricultural Trading Company
33.	OECS/ADCU	Organization of Eastern Caribbean States/ Agricultural Diversification Coordinating Unit
34.	UWI	University of the West Indies
35.	CARDATS	Caribbean Rural Development and Training Services
36.	ECSEDA	Eastern Caribbean States Export Development Agency
37.	CDB	Caribbean Development Bank
38.	EDF	European Development Fund
39.	U.S.	United States of America
40.	IFAD	United States International Fund for Agricultural Development
41.	CESS	"Assessment" or "Check-off" System
42.	AID	Agency for International Development
43.	USAID Barbados	AID - Regional Development Office of the Caribbean (RDO/C) located in Bridgetown, Barbados

- 44. IRR Internal Rate of Return
- 45. PADF Pan American Development Foundation
- 46. GOCD Government of the Commonwealth of Dominica
- 47. VIMOS Vertically Integrated Market Ordering System for Agricultural Diversification
- 48. VIMOE Vertically Integrated Market Ordering Enterprise, the key institution for implementing commercial operations for the VIMOS
- 49. IESC International Executive Service Corps an AID-sponsored mechanism for accessing retired executives of U.S. Companies to provide short-term technical assistance training to developing countries
- 50. PROJECT SUSTAIN An AID-sponsored mechanism for providing technical and managerial personnel from U.S. agro-industry to provide short-term technical assistance and training to companies in developing countries
- 51. APC or PC Agricultural Producers Coalition, producers coalition
- 52. HA Hucksters Association
- 53. AI Agro-forestry
- 54. AVT Agriculture Venture Trust

DOMINICA AGRICULTURAL SECTOR ASSESSMENT * 1/

I. EXECUTIVE SUMMARY OF FINDINGS AND CONCLUSIONS

A. The National Economy

FINDINGS

1. Dominica is insular, small in size, has a small internal market, few natural resources, no white sand beaches, and depends on a very narrow and now uncertain economic and export base in terms of both products and markets.

2. Despite the limitations described above, since the mid-1980's, the economy has been growing at a steady pace except for the effects of Hurricane Hugo in 1989. Performance of macro-economic variables demonstrates sound monetary and fiscal management. The population is mostly literate, much of the road system is good, the mountain landscape and tropical scenery is spectacular, and coral reefs are world-class.

3. Current and planned public and private sector, including foreign, investment is positioning Dominica to be able to exploit its tourism potential. The favorable macro-economic policy environment and democratic traditions are conducive to investment stability. The openness of the economy should encourage continued export growth.

CONCLUSIONS

1. Natural resources and economic opportunities are limited. Economic activities with clear comparative advantage are less than obvious. Thus, public investment options must be carefully prioritized, and private investment incentives prudently targeted.

2. Diversification of the economic and export base is urgent. Achieving diversification will require more than normal good management of macro-economic variables, as well as of public

* In this report, "Agricultural Sector" refers to crops, livestock, forestry and fisheries, unless the context dictates otherwise.

1/ Prepared by Fred L. Mann, University of Missouri College of Agriculture, Office of International Programs. Field work and report preparation took place in Dominica and USAID/Barbados from April 1-28, 1991.

15

and private sector investment policies. Realization of import substitution opportunities also will require careful selection and realistic management of import policies. This is especially important in view of the imminent establishment of a Common External Tariff (CET) by the CARICOM countries.

3. Government and private sector leadership is dynamic and motivated, most essential infrastructure is in place, and production and marketing opportunities exist for some important commodities. Were the government to make appropriate and timely policy decisions that unleash private sector potential, both Dominican and from abroad, expanded long-term national prosperity can be achieved.

B. The Agricultural System

FINDINGS

1. The broad agricultural system includes the production, processing, marketing and consumption/demand sub-systems of the crops, livestock, forestry and fisheries sub-sectors (herein called the "agricultural PPMC system"). It is the most important component of the national economy in terms of contribution to Gross Domestic Product (GDP), provision of employment, supply of foodstuffs consumed internally, and generation of foreign exchange earnings.

2. The climate is wet and tropical, prone to tropical storms and hurricanes. The topography is steeply mountainous, while the volcanic soils are generally deep, permeable and naturally fertile. Approximately two-thirds of the total land area is forested and too steep for agriculture (one-third of this is considered to be suitable for managed production forest). Approximately 20% (40,000 acres) of the total land area is in farms, of which an estimated 15,000 acres are idle, wasteland or woodlands. Another 15,000 acres are intercropped, and some 10,000 acres are in pure crop stands.

3. Most farming, forestry and fishing operations are small individual or family-owned proprietorships. They generally are under-capitalized, with limited technical and managerial knowhow. Productivity of most factors of production (i.e., land, labor and capital) appears to be low.

4. Intercropping is widespread, usually with two or more interspersed crops on the same land area.

5. Bananas currently are the most economically important cash crop, raised by 85% of the farmers, followed by coconuts, grapefruit, root crops (mainly dasheen, tannia and yams), bay, other citrus, and minor amounts of cocoa, exotic fruits, coffee, spices, tubers, cut flowers, ornamentals and vegetables.

6. Livestock populations are low, dispersed and generally of poor genetic quality. They are raised primarily as a "backyard" activity, using crop residues or "cut and carry" forage, for feed. Livestock production currently is of limited economic importance, but is important to domestic consumption. Likewise, neither fishing nor forestry are of great economic importance, but furnish an important part of domestic demand for these products. Combined, these three sub-sectors constitute only 25% of agricultural GDP (4% of total GDP).

7. Most marketing of domestically produced foodstuffs for internal consumption is carried out directly by producers and small itinerant traders (known as hucksters). Most of this marketing takes place at public marketplaces in towns and villages.

8. Inter-island trade of fresh produce, as well as of some semi-processed products and spices, generally is handled by hucksters, while extra-regional export marketing of both fresh and processed products is handled by commercial firms.

9. Dominica enjoys guaranteed access to the U.K. at a premium price for all export grade bananas produced. The government-owned Dominica Banana Marketing Corporation (DBMC) exports nearly all bananas to the U.K. through a single shipper/wholesaler, Geest Industries. In 1988, these exports constituted 92% of agricultural exports (both processed and fresh) and over 70% of total exports. These percentages dropped temporarily in 1989 and 1990, as the result of banana plantation damage from Hurricane Hugo, but full recuperation is expected in 1991.

10. Significant other exports include fresh grapefruit, oranges and limes, root crops, pumpkin, avocado and cut flowers, as well as coconut oil, bayoil, pepper sauce, lime juice, grapefruit juice concentrate and processed fruit and vegetable products.

11. There currently are five agricultural product processing plants and two commercial sawmills in Dominica. Because of operating problems, the largest (government-owned) sawmill has ceased operations. Two processing plants are severely decapitalized (one with majority government ownership) and regularly operate below breakeven capacity.

12. Three-fourths of agricultural output is exported. The remainder satisfies one-third of total domestic foodstuffs consumption.

CONCLUSIONS

1. The long-standing U.K. guaranteed market and preferential prices for Windward Island bananas has induced farmers to shift scarce factors of production (land, labor and capital) from other production options to bananas. The result is a continuous.

cycle of reduced output of other crops, loss of existing and potential diversified product markets, and low capacity utilization by processors of non-banana crops. This, in turn, further exacerbates excessive dependence on bananas for foreign exchange and farm incomes.

2. The agricultural production sub-system is economically inefficient and factor productivity is low. Thus, unit costs of production are high. The inherent difficulties of agricultural and forestry production on steep slopes limits the potential to adopt technologies, such as mechanization, that can achieve economies of scale to increase economic efficiency and factor productivity.

3. The marketing and processing sub-systems (except possibly for DBMC operations) are economically inefficient. Labor and capital productivity is low. The marketing sub-system (except for bananas) is fractionated, disorganized and inadequately links the farm to final markets. Thus, unit transaction costs and farm to market product losses are high. Most processing firms are operating below breakeven capacity; some already are severely decapitalized, and all have high unit operating costs of production.

4. With a few notable exceptions, limited technical and management capabilities are apparent at all levels of the PPMC system. This inhibits the capacity of the system to adopt measures that reduce unit costs, increase operating efficiency and factor productivity, and expand and diversify the product and market base.

5. Considerable potential exists in the agricultural PPMC system to improve agricultural resource productivity and incomes and to increase agriculture's contribution to the national economy. For the farmer to respond, he must have a stable market and responsive prices. The marketing sub-system can provide such conditions if private sector PPMC system actors unite to become vertically integrated, and if government supports this process. Without this step, efforts to improve agricultural production efficiency and increase output are likely to meet with limited success.

C. Opportunities and Issues

1. A number of opportunities exist to improve operating efficiency and to increase factor productivity in production, processing and marketing of both traditional (e.g., bananas, coconut, grapefruit, bay oil) and non-traditional (e.g., cocoa, avocado, ginger and other spices, cut flowers and ornamentals, root crops and vegetables) export crops.

2. A number of opportunities also exist for improved efficiency in production of import substitution/food/security products, especially meats (beef, mutton, pork and chicken) and fish.

3. Several important policy and program issues should be placed on the agenda for timely debate and resolution if Dominica is to effectively respond to agricultural diversification opportunities. Urgent attention should be given to selection of policy instruments and adoption of action programs designed to:

a. Neutralize the subsidy-induced comparative advantage of the banana industry relative to promising diversification alternatives, in order to shift labor and capital resources and grower attention from bananas to rehabilitation and exploitation of substantial acreages of long-life tree crops already established, and to promising non-traditionals that, with appropriate technology and market structuring, can be expanded profitably.

b. Convert the internal marketing structure for diversified crops entering processing and fresh export channels to one of supply managed market ordering, through incentives and assistance to stimulate private sector vertical integration of marketing activities from the farm gate to the processor or shipping dock.

c. Increase emphasis on efficiency objectives in the provision of banana marketing and production support services to potentially more efficient banana farmers, in lieu of the current policy of emphasis on servicing all banana farmers independently of their potential to achieve improved productivity. Less productive banana farmers should be assisted to diversify into other crops.

d. Increase public and private sector investment in more aggressive testing and demonstration of the economic benefits to be realized from adoption of appropriate small producer mechanization and from use of improved breeding stock. Increase public and private sector investment in specialized training for specialists in the production and marketing of prioritized diversified crops.

e. Increase public and private sector investment in management training and management support for producers, processors and marketing firms. Seek policies to more adequately reward and retain managers. Re-examine public and private sector retirement policies, especially as they apply to specialized technical and managerial personnel.

f. Complete data and maps, and develop knowhow required 1) to apply land use policies at the individual property level, and 2) to assure future conservation and use of land and other resources in a manner consistent with multiple objectives.

h. Strengthen access to, and timely dissemination of, a wider range of production and market technology information; also, increase private sector initiatives in promoting technology transfer.

II. OVERVIEW OF THE NATIONAL ECONOMY

A. Size and Location

Dominica is a small island nation, 790Km² (195,000 acres) in size, located in the island chain of the Eastern Caribbean known as the Windward Islands.

B. Population, Infrastructure and Resources

1. Current population is estimated at 85,000, about half of which is classified as urban, with a labor force of approximately 40,000. Ninety five percent of the population is literate. Most homes are served by both piped water and electricity, while most towns and villages have telephone service.

2. Main highways and about one-half of the feeder roads (over 600 miles) are paved. Towns and villages are located primarily on the coast. Most have all-weather feeder road access.

3. Roseau, the capital (area population of 15,000), and Portsmouth, on the northwest coast (area-population of 5,000), are the principal population centers. A deepwater harbour at Roseau can berth two large vessels simultaneously. It has over 5,000 M² of roofed storage space, plus a container yard. At Portsmouth, a jetty accommodates smaller vessels that serve the regional market. A new cruise ship facility near Portsmouth is scheduled to open in September.

Dominica has no international airport. A small regional airport serves Roseau and a somewhat larger one (with DC-9 capacity) is located at Melville Hall on the Northeast coast. The latter has 460 M³ of dry and cold storage. Extra-regional passengers and air freight must make connections via other islands.

4. The natural resource base is limited. Dominica is of recent volcanic origin, has no known minerals, nor does it have white sand beaches as do many of the Caribbean islands. Although there are extensive tropical forests, the steeply mountainous topography, with elevation changes from sea level to over 3,000 feet in a distance of less than 5 miles, limits commercial use. Likewise, agricultural options are limited. Nevertheless, Dominica does have abundant fresh water and hydraulic energy sources, extensive marine fisheries resources, impressive coral reefs, and spectacular mountainous topography covered with tropical vegetation in natural surroundings.

C. Structure and Performance of the Economy

1. Dominica has an open economy. Its small internal market makes it highly dependent on exports for economic growth. With no mineral resources and little conventional beach tourism, Dominica's economic growth has relied primarily on its educated and healthy labor force (through enclave industries), and on its agricultural production capacity.

2. Recent infrastructure development will assist in exploiting specialized tourism potential directed toward nature-lovers and divers. However, considerable private sector investment still is needed in hotel space and other tourist accommodations. Although there are good prospects for attracting large investors for this purpose, in the meantime, growth of the economy, foreign exchange earnings and domestic consumption must depend primarily on additional enclave industry development, on increased agricultural output for fresh and processed export, and on agricultural production that substitutes for imports.

3. Since the mid-1980's, the economy has been growing steadily, except for a temporary setback in 1989 caused by Hurricane Hugo. The positive performance of macro-economic variables demonstrates sound monetary and fiscal management.

Table 1 in Appendix A provides data on the performance of selected macro-economic indicators from 1985 to 1990. During this period, except for 1989, average annual GDP increases have been around 7%, unemployment declined from 20% to 10%, and public sector savings averaged 5-8% annually. Additionally, the inflation rate has been moderate, the exchange rate has been stable and public sector investment in infrastructure has been substantial (20% of GDP in 1990).

Agriculture, government services and wholesale/retail trade are the three most important sub-sectors of the economy, contributing 30%, 19% and 13% of GDP, respectively.

4. Since agriculture generates 30% of GDP, provides nearly one-half of employment, supplies one-third of internal foodstuffs consumed, and earns 75% of foreign exchange, its continuing strength and growth is essential to the health of the economy.

D. National Economic Outlook

1. Future economic stability is vulnerable because of the narrow export base. In 1988 (used instead of 1989 or 1990 because of the abnormal effects of Hurricane Hugo), bananas and plantain accounted for 70% of total exports, while oil based soaps accounted for another 17%. Both of these exports face an uncertain future in existing export markets at present costs of production.

Banana exports are especially vulnerable since they depend almost entirely on a privileged and subsidized market in the U.K. This market may change when the EEC common market tariff regime is fully implemented in 1992.

Balance of payments also increasingly depends on net private transfers (from 6.6% in 1985 to 13.3% in 1990).

2. Realization of opportunities for diversification of exports will require prudent management of the banana industry (discussed later). Likewise, realization of import substitution opportunities will require careful management of import duties on inputs and on competing imports.

3. The Dominica macro-economic policy environment is favorable for growth and development within the agricultural sector. However, in view of the primary importance of agriculture in terms of GDP, foreign exchange and employment, as well as the heavy dependence on a single crop and the vulnerability of existing markets for both of the principal foreign exchange earners (bananas and soaps), high priority should be accorded to seeking ways to direct private sector attention and investment toward diversified agricultural production, processing and marketing. This requires urgent attention to a number of policy and program issues discussed later in this report.

III. OVERVIEW OF THE AGRICULTURAL SYSTEM

The agricultural PPMC system in any country comprises complex economic, technological and social interactions of sub-systems. Inadequate institutional structures and weak management of these complex interactions often become critical constraints to realization of the development potential of the system. The agricultural PPMC system in Dominica is especially complex, and its development is made even more difficult because of topographical constraints.

A. Climate and Topography

The climate is appropriate for tropical agriculture, with very high rainfall in most areas (100-200 inches annually) and rather distinct wet and dry seasons. Topography is steeply mountainous with 90% of agriculture being practised on slopes of 15-45 degrees.

Soils are of recent volcanic origin, deep, naturally fertile and highly permeable, thus permitting rapid infiltration and percolation of rainfall. This somewhat ameliorates problems of sheet and gully erosion from surface runoff.

B. Role in the National Economy

For many years, the agricultural PPMC system has been the principal contributor to the economy both in terms of exports and contribution to GDP (See Tables 7 and 8 in Appendix A). It also employs approximately half the labor force and produces one-third of the foodstuffs consumed internally.

In 1988, fresh and processed agricultural products contributed nearly 77% of total export earnings. This dropped to 66% in 1989 due to damage to banana and other tree crops caused by Hurricane Hugo. Agricultural export earnings are overwhelmingly dependent on banana exports. Over 90% of agricultural exports are bananas, destined to the U.K. This is more than 70% of total exports.

C. Land Distribution and Use

Although a number of estimates exist concerning land distribution and use, they are incomplete and often inconsistent, both internally and with each other. A census planned for 1992 will provide new information. In the meantime, estimates of land distribution and use have been made considering various sources of data and the opinions of a number of knowledgeable persons in Dominica. The magnitudes of error that may exist in these estimates do not invalidate this assessment nor the conclusions drawn.

1. Land Distribution

Tables 5 and 6 in Appendix A provide rough estimates of land in farms, number of farmers, tenure and size distribution (footnotes explain how they were made). Based on these estimates, 10,000 farmers hold 40,000 acres of land in farms, of which 25,000 acres (62.5%) is cropped, and 15,000 acres is not farmed, (i.e., it is in forest vegetation, is idle or is wasteland).

Thirty-four percent of the farmers own their own land, 31% farm family-owned land, 24% rent their land and 11% are squatters or hold possession under some other type of arrangement. Seventy-nine percent of all farmers are estimated to be family-sized or subsistence farmers, each with less than 5 acres of land (constituting 35% of total land in farms) with an average farm size of 1.8 acres. Twenty-four percent have medium sized farms of 5-20 acres (constituting 40% of total land) with an average farm size of 8 acres. Only about 100 farmers (1.0%) have farms larger than 20 acres. Ninety percent of these farms are 20 to 100 acres in size (with 12% of total land) with an average size of 53 acres, while only 10 farms (called estates) are between 100 and 1,000 acres in size (with 13% of total land) with an average size of 520 acres.

In conclusion, most farmers in Dominica have very small farms. As many as half the farmers probably have 2 acre or less in crops. Thus, the small farmer must efficiently produce high-value labor intensive crops in order to productively utilize his available family labor and provide himself and his family with sufficient income and non-income benefits to compete with off-farm alternatives.

2. Cropland Use

Table 2, Appendix A, provides estimates of crop acreages from two sources, one for 1988 and another for 1990. The 1990 data show that coconuts are the largest crop with 19,000 to 20,000 acres, followed by bananas with 13,000 acres, dasheen with 3,134 acres, grapefruit with 2,875 acres and bay with 2,000 acres. Five other crops have estimated acreages of 500 to 1,150 acres, and eight others are produced on acreages of 100 to 500 acres.

Most sources estimate agricultural land and land in farms at approximately 40,000 acres. These sources also indicate that land in crops also is 40,000 acres. However, a review of available information strongly suggests that in light of widespread intercropping and the presence of considerable unfarmed areas in farms (idle, woodlands or wastelands), the total land surface in crops likely is considerably less than 40,000 acres.

95

Based on the data from Table 2 in Appendix A, the estimates of total gross acreage in all crops ranges from a low of about 42,000 to a high of 53,000 acres. Using a median of 48,000 gross acres in crops, and considering expert opinions concerning intensity of intercropping by area and number of crops in a given intercropped space, it is estimated that the distribution of land in farms, by type of cropping, is as follows (See Table 3, Appendix A for greater detail):

<u>Type of Cropping</u>	<u>Acres</u>
- Intercropped	14,250
- Pure stands (not multicropped)	10,400
- Pure stands multicropped (i.e., same land cropped two or more times in same year)	<u>350</u>
- Total net acreage farmed	25,000
- Land in farms but not farmed (i.e., woodland, idle or wasteland)	<u>15,000</u>
- Total land in farms	40,000

Based on opinions of knowledgeable persons, and on personal observation, the intensity of intercropping shown above and in Table 3 may be underestimated. Few tree crops are pure stands. Most are intercropped in two or more tree species. In addition, significant areas planted to tree crops also are underplanted to a root crop (generally dasheen or tannia). Thus, at the very least, if estimates for land in farms (40,000 acres) and median gross area of land in crops (48,000 acres) are reasonably accurate, the total net cropped area probably is closer to 25,000 acres than to 40,000 acres.

Given the frequency of intercropping, the reported low yields for many crops may be more apparent than real. For example, if a satisfactory yield for pure stand bananas under good husbandry practises is 14 tons per acre, for pure stand grapefruit, 12 tons per acre, and for pure stand dasheen, 10 tons per acre, an equivalent intercropped yield of 7 tons for bananas, 6 tons for grapefruit and 5 tons for dasheen is equally productive. Furthermore, intercropping permits the small farmer to diversify his production and market risks, and perhaps allows him to better distribute family labor use throughout the year.

When one adds to the intercropping scenario described above, border and hedgerow or windbreak plantings of several other crops such as exotic fruits, avocado, coffee, cinnamon, etc., combined with some penned or staked livestock fed on crop residues (and perhaps some pure stand crops, as well), it becomes apparent that the Dominican small farmer is in fact running a complex, diversified and fairly intensive farming operation. His operation undoubtedly is quite rational within the context of his climatic and marketing risk structure, his lack of capital and his lack of business management and technological skills.

Because of steep topography, there currently is little mechanization of agriculture. Most work is carried out using the hands, a hoe and/or a machete for land preparation, planting, fertilizer application, weeding and harvesting. Inputs are hand-carried (or head-carried) from the road-side to the field, and harvest is hand-carried from the field to the roadside. Many farms still are located up to one-half mile off-road. A few miles of access roads would greatly increase the productivity of these farms.

There do exist possibilities for introducing relatively low-cost appropriate mechanization technology for some farming activities. Appropriate mechanization can greatly increase labor productivity and reduce job tedium. To illustrate, the backpack sprayer was introduced to Dominican farmers a few years ago for chemical control of insects and weeds. Most farms now use one. This simple piece of equipment has increased labor productivity in chemical pest control activities by a factor of ten.

The Ministry of Agriculture (MOA) rents a few mechanical tillers. However, they are old and poorly adapted to the steep slope conditions of most areas. A few larger estates have purchased better adapted tillers. Portable weed/brush cutters, hand-held harvesters and pruners also may have application.

3. Livestock

Livestock is primarily "backyard" production for family and village consumption. Total livestock populations are small. They include cattle (3,000), sheep (6,000) goats (9,500), pigs (6,000), chickens for eggs and rabbits. There are a few commercial-sized producers of pigs and eggs. Little pasture grazing is done, with most ruminant feeds coming from crop residues and border grazing.

Except for laying hens and some pigs, genetic quality is low. Balanced feeding rations are not used. The lack of domestically produced grains complicates nutritionally balanced feeding. Some progress has been made in using locally available coconut meal for up to 80% of feed supplement requirements for pigs. Also, there is some experience in making silage from processed citrus and other fruit skins and pulp. However, in the absence of further testing of these feeding options, farmer adoption is slow. A feed mill on St. Vincent provides most balanced feeds for layers and more intensive pig production.

4. Forestry

Forestry resources are mainly rain forest in steep mountainous areas, and some windbreak and border plantings in agricultural areas. Some 130,000 acres (approximately 2/3 of the total land surface) is covered with forest vegetation. An estimated 65-75% of this should be maintained as protection/nature forest, half of which currently is in national parks, reserves and water.

87

catchments. Another 40,000 acres is amenable to managed timber production, but harvesting is high cost and difficult because of topography.

Timber harvesting is characterized by several dozen small-scale "alaskan" and "chainsaw" mills. There are two commercial saw mills (one of which is now closed). Access roads for logging are difficult to build and maintain. Managed harvesting is difficult to control since small operators seek out only premium trees, leaving behind lower grade species.

Current production of lumber is low, estimated at less than one million board feet annually. This is less than 10% of the estimated annual sustainable yield of exploitable forest resources. It appears that less than 1% of households rely on fuelwood or charcoal for domestic purposes. Thus, this is not likely to pose a threat to forests, except in isolated cases.

Currently, Dominica imports over EC\$6.0 million annually of lumber. Because of lack of local lumber, a modern factory producing prefabricated houses mainly for export, imports all of its lumber from Brazil.

5. Fishing

The marine fisheries industry is characterized by small under-capitalized artisan fishermen using small boats. There tends to be over-exploitation of the generally narrow coastal shelf (about 1/4 mile wide), under-exploitation of the deep slope (1/4 to 1/2 mile), and only very limited deep ocean fishing of migratory stock. For the latter, there is virtually no practise of remaining at sea overnight, which results in high unit costs for transportation. Sea-beds are rugged, making fishing more difficult. Many of the 40-odd landing sites have poor, high-risk sea-side entry, with little or no storage or cleaning facilities.

With Canadian assistance, the government has embarked on a program of improving and consolidating fish landing sites. Eleven sites now are programmed for upgrading. The goal is to increase annual catch and consumption from the current 500 tons to 2,500 tons by 1993.

There is no commercial exploitation of fresh water lakes and streams. An experimental prawn production project has attracted the interest of some farmers, and shows promise for possible commercial levels of production.

D. Sources and Destinations of Output

1. Crops

Most farmers are quite diversified in their production of crops. However, the smaller farmers tend to produce a larger share of the more labor intensive crops (also used for on-farm consumption) such as root crops, tubers and vegetables. Larger farmers produce a greater share of the more extensively cultivated crops adapted to plantation-type agriculture, such as coconuts and banana. Rough estimates of source of production, by volume and by size of farm, and share of total production consumed on the farm, is as follows:

<u>Crop groups</u>	<u>Estimated share of production by size of farm</u>		<u>Estimated share of production consumed on the farm</u>
	<u>Less than 5 acres</u>	<u>More than 5 acres</u>	
	(percent)		(percent)
A. Traditional permanent crops (coconuts, banana, grapefruit)	20	80	5
B. Roots and tubers	80	20	50
C. Vegetables	60	40	30

Thus, approximately 50% of root crops and 30% of vegetables are produced for family consumption on small farms, whereas larger farms produce most of the plantation-type crops of which relatively little is consumed on-farm. The DBMC reports that under 2,000 (or 24%) of the 8,600 registered banana growers produce over 80% of their supply.

Trends in distribution of market shares among fresh and processed agricultural products by value is shown in Appendix A Table 9 (by percent), and Table 10 (by value). Although 23 different products are exported, in recent years, bananas have accounted for a growing share of the total, increasing from 75% of agricultural exports in 1975 to 92% in 1988. In 1988, no other single agricultural export provided as much as 1% of the total exported.

Table 11 in Appendix A shows the total fresh exports by destination for the twelve significant exported crops. Again, although there is a diversity of market destinations for a broad range of crops, banana exports to the U.K. (plus a significant export to Italy of EC\$13.2 million - exports began to Italy in 1986) totally dominate the market with EC\$103.7 million of total exports of EC\$109.1, or 95% of total fresh product exports. The French West

Indies and the other Caribbean islands constitute approximately 80% of the total non-banana market, while the U.K. and the U.S. Virgin Island divide the remaining 20%. Note also that minor amounts of root crops and flowers/ornamentals were exported to North America.

The diversity of the non-banana export products and destinations suggests that if aggressive and organized marketing were to be carried out for these products, and if farmers were to shift resource use from banana to diversified crop production, significant market penetration and expansion could be expected.

2. Livestock

Livestock is produced both for home consumption and the local market. Approximately two-thirds of livestock production, except for layers for marketed eggs and commercially marketed pigs, is produced by small farmers. A few commercial laying flocks produce the majority of eggs marketed in the larger population centers, and a half-dozen commercial pork producers supply these same population centers. Most producers slaughter sheep and goats on the farm, retaining a portion of the meat for home use and selling the remainder to neighbors or at the local village marketplace. There is one small commercial slaughter facility in Roseau, and one processing plant producing processed hams and sausage. Because of insufficient local supply, this latter plant must import fresh hams to process.

Local production supplies approximately one-third of domestic meat consumption. It supplies over 95% of total pork, mutton (sheep and goat) and eggs consumption, and over 90% of beef consumption. However, less than 10% of dairy products, poultry meat and processed pork demand is supplied locally. Domestic pork production and consumption have been growing rapidly in recent years.

Table 12 provides quantity and value information on consumption, local production and imports of animal products for 1988. Total domestic consumption of animal products is about 6,000 tons, of which 36% is poultry and 31% is dairy products. The annual import bill for animal products in 1988 was nearly EC\$16 million.

3. Forestry

Timber is used as lumber and poles for local construction, for fuel and for making charcoal. No wood products are exported. On the contrary, about one-third of total lumber consumed is imported. Of total estimated use of lumber in 1988 of 10,375M³, 6,900M³ was supplied by local production. 1,900M³ of this was supplied by two commercial sawmills, one since closed, and 5,000M³ was supplied by an undetermined number (perhaps as many as 500) of small "pitsawyers". Some 75% of this lumber was used in the locality, without entering commercial channels. The remaining 25% entered commercial market channels for building construction and furniture. An additional 3,000M³ was imported.

mainly from Brazil, to supply local wood using industries. Although no accurate information exists for fuelwood use and charcoal production, Austria (see Bibliography) estimates 1989 use as follows:

- charcoal - 29,000M³
- fuelwood - 13,700M³

An estimated 40% of wood requirements comes from state lands and 60% from privately-owned forests and farms. Estimated sustainable yields of lumber from areas suitable for managed forest harvesting is 43,000M³.

4. Fisheries

Local production of fish does not satisfy internal consumption. About EC\$3 million was imported in 1988, which is one-half of total estimated consumption. Since much of the fish catch is consumed in the locality where landed and does not enter market channels, accurate estimates of production and consumption are difficult.

E. Processing and Marketing

1. Overview

The processing and marketing subsystems for crops, livestock, timber and fish consistently suffer from high unit costs of production and/or high transaction costs. The small scale of production units increases collection, assembly and transport costs from the supply source to the processing plant or intermediate market point.

In the case of many non-banana crops, competition between fresh produce traders and processors for the reduced supplies that are available often leaves processors without sufficient raw materials to operate at breakeven capacity, resulting in operating losses and consequent decapitalization. Most fresh produce traders and many processing firms appear to have initiated operations with insufficient capital and inadequate business and technical management expertise. The result has been low productivity of labor and capital, and negative cash flows.

2. Fresh and Cottage-Processed Produce Marketing Sub-system

Most marketing of national production of crops, livestock and fish for internal consumption is handled by approximately 500 small individual merchants (called Hucksters). Although there are some larger private food stores in Roseau and Portsmouth, public marketplaces are the primary channels through which Hucksters market fresh fruits and produce, as well as a significant share of domestically produced meats, eggs, fish and some processed foods.

Both Hucksters and farmers sell produce at public marketplaces. Although public marketplaces in Roseau and Portsmouth operate six days a week, the market day in other towns and villages is Saturday. Hucksters may purchase their supplies at the farm or they often make early purchases of the better produce brought to the marketplace by farmers for later resale to the public.

Hucksters also are the primary channel for regional trade, especially to neighbouring islands, including the French Antilles and the Virgin Islands. They purchase in small lots, personally accompany their produce, and sell to established counterparts on other islands. Hucksters handle about 6% of all agricultural exports.

Small volume trading requires only small amounts of start-up capital. Hucksters generally enter into business with little capital, and most decapitalize even more over time. They also possess few business management skills. Volumes handled by each Huckster are low, being limited to the amount of capital available for purchase and what can be handled personally. The net effect is low productivity, high unit transaction costs and an inability to adopt more efficient marketing technologies and strategies that achieve economies of scale and greater market penetration.

An explanation in economic terms of the characteristics of Hucksters, why they are economically inefficient, and what is required to improve efficiency in the market system, is provided in Appendix B.

3. The Banana Industry

Bananas are marketed internally and within the region by Hucksters. Extra-regional exports are the exclusive province of the government-owned DBMC. The DBMC markets bananas through Geest industries to the U.K., with some recent sales to Italy. As stated earlier, in 1988 banana exports accounted for 92% of agricultural exports and 70% of total exports.

The DBMC was established in 1984 to promote the well-being of banana producers and ensure the financial viability of the banana industry. Dominica and the other Windward Islands have enjoyed guaranteed access at premium prices to the U.K. banana market since the end of WWII. This security of a subsidized market has motivated Dominican farmers to increase banana output steadily for many years. Following the nearly total destruction and replanting of banana plantations in 1979 and 1980 (caused by Hurricane David), the growth in banana exports to the U.K. has been rapid. From 1980 to 1988, the value of banana exports increased nearly 13 times, from EC\$8.0 million to EC\$ 104 million (See Table 10 in Appendix A).

This privileged market for bananas is a mixed blessing. It has created an all-encompassing dependency on the U.K. market and subsidy for the economic well-being of Dominica. Farmers have shifted a major part of their land, labor and capital resources from other crops to bananas. For example, in 1975, one-third of agricultural crops exports were non-banana, whereas, by 1987, this had dropped to 8%. The problem is further exacerbated because the EEC (European Economic Community) common market countries are to become fully integrated and institute common external tariff policies in 1992. Although Dominica has received assurances from the U.K. and EEC authorities that its guaranteed market will not be eliminated, it is much less certain that price premiums will continue.

The price premium (or net subsidy effect) of the U.K. arrangement has generally been estimated at 30%. However, data from a 1989 IMF staff report suggests that the U.K. is paying a CIF price at port-of-entry for green wholesale bananas that is double (i.e. 100% higher than) the CIF gulf price paid by the U.S. for green wholesale bananas from Latin America (See Table 13 in Appendix A). Even allowing for greater shipping costs, the U.K. price subsidy appears to be considerably in excess of 30% of the "dollar market" wholesale price.

Dominican production and marketing cost structures, and the economy as a whole, have accommodated to the subsidized price for bananas. Thus, the costs of production and marketing are such that it likely is impossible for Dominica bananas to compete at existing world market prices. Any significant reduction in the subsidy likely will eliminate profitability to all agents in the system, unless these agents can quickly reduce unit costs without affecting volume, quality or services. Thus, economic viability of the DBMC and banana growers is especially vulnerable as 1992 moves closer.

Currently, the DBMC appears to be well-capitalized, has good management and is cognizant of the vulnerability of Dominica bananas. The proposed response of the DBMC to the looming dilemma of increased competition in the heretofore reserved U.K. banana export market is to become more efficient in its own operations, and to assist farmers to improve production efficiency to decrease unit costs of production. To accomplish this, the DBMC proposes to focus technical assistance and producer services on the 20% largest and most efficient of their producers, who produce 80% of the bananas for export. This, they believe, would permit the industry to achieve sufficient economies of scale efficiencies in terms of farm level services, and in providing collection, grading, assembly and transport functions, to be competitive. Also, this 20% of farmers are better managers, better capitalized and can more quickly adjust to lower export prices by increasing productivity and decreasing unit costs of production.

According to a recent cost of production study ^{1/}, the breakeven price for a banana farmer who achieves yields of 9 tons per acre in year three (current average yields are 4.5 tons/acre) is EC0.265/lb. The 1988 "Dollar market" CIF gulf wholesale price to U.S. markets was EC\$0.55/lb. Marketing margins for bananas to the U.K. in the same year were: to DBMC EC\$0.25/lb, to Geest EC\$0.61/lb, for a total of EC0.86/lb. Thus, dollar market bananas apparently were selling for EC\$0.31 less than the U.K. marketing costs to Port-of-Entry.

If the above figures are correct, for Dominican bananas to become internationally competitive will require much lower profit margins and significant increases in production and marketing efficiency.

In 1988, distribution of the wholesale price among participants in the Dominica banana industry was:

	Price Allocation	
	EC\$/lb)	£
- Price paid (CIF U.K.)	1.08	100
- to Geest (Shipper and U.K. wholesaler)	0.47	43.5
- to DBMC (Marketing Services Supplier)	0.25	23.2
- Gross price to growers	0.36	33.3
- Cost of DBMC production services to growers (CESS to growers)	(0.18)	(16.6)
- Net price to growers		
- (i.e., Returns to land, family labor, management and farmers equity)	(0.18)	(16.7)
	\$1.08	100

For Dominica bananas to become internationally competitive and maintain the same profitability, average unit costs must drop by 50%. Of course, increasing banana yields to 14-15 tons/acre will help, but since variable costs also would increase by about 60%, net returns per acre would increase by only 20%. Reducing the number of growers for the same output also will reduce the DBMC's marketing and farmer services costs. Nevertheless, even if these costs can be reduced sufficiently to compete, overall profit margins will be reduced and 80% of the farmers will be forced to go out of banana production. To make up for this loss, both the

^{1/}See, Draft "Cost of Production of Major Tree Crops in Dominica" by Peter Oldham, BDD, January, 1991.

growers and DBMC will need to diversify into other crops to supplement reduced banana profits, and 6,800 small ex-banana farmers must find alternative profitable crops to survive.

Thus, small farmers who will not be able to compete in a competitive banana market, larger farmers who may be able to compete but at sharply reduced profit margins, and the DBMC who may be able to reduce costs of banana marketing sufficiently to survive in a competitive market but at sharply reduced profit margins, all should have a common objective: to organize a diversified crop PPMC system that provides a reliable, expanding and efficiently functioning market which distributes system risks equitably among system participants. A possible means of achieving this common objective is discussed further in the section on policy issues. In addition, a review of options, and a preferred option, for implementation of this means is detailed in Appendix E.

4. The Processing Sub-system

A considerable amount of simple or "cottage" processing is carried out at the household level primarily for family consumption and for sale to neighbours and at the local public marketplace.

Small-scale commercial processing in Dominica is carried out by five firms:

- a. Dominica Coconut Processors, Ltd. (DCP) - processes coconut oil from copra; manufactures coconut oil based laundry and bath soaps; and more recently, cosmetics.
- b. Dominica Agro-industries, Ltd. (DAI) - processes grapefruit and lime juice concentrates.
- c. Corona Development, Ltd. (Corona) - processes passionfruit and other exotic fruit pulps and concentrates.
- d. P.W. Bellot & Company (Bello) - processes a range of consumer products, using both fresh and processed raw materials, e.g., pepper sauce from hot peppers, juice and mixes from concentrates produced by DAI and Corona, bay rum using bayoil, jams, jellies, etc.
- e. Windward Processors, Ltd. (Windward) - Aloe vera gel (90% from aloe leaves produced on its own farm).

In addition, there is a small, well-run meat processing plant, Eagle Farms, producing processed hams and sausages (mainly from imported fresh pork shoulders). There also is a small slaughter house, Royal George, that buys and butchers cattle and pigs, and sells fresh meat cuts to the supermarkets and through its own outlet. There also are two small commercial sawmills, one state-owned which now is closed.

The processing plants all have a common problem. They have difficulty getting raw materials at a price they can afford to pay, sufficient to permit them to operate above breakeven capacity. The reasons behind the problem of short supplies are multiple. Perhaps the most significant reason is that farmers are too busy producing bananas. The subsidized banana price is very attractive, bananas are harvested and marketed almost year round and farmers receive payment every two weeks. They also receive production services from DEMC (such as aerial spraying, input supply, local assembly facilities, etc.), which alleviate severe constraints to the production process. Thus, producers have little interest in or time to spare for other crops.

In contrast, under present conditions and technology levels of many farms, prices paid for other crops, such as coconut and grapefruit, often are not sufficient to pay the cost of hired labor for harvesting and costs of transport to the plant. Thus, farmers virtually have abandoned many of the already established tree crop plantations, especially coconut and grapefruit. This negatively affects the ability of DCP and DAI to obtain sufficient raw product.

Another reason for the short supply to some processing plants is price competition between the fresh and processed markets. When the market for a product is split between fresh and processed, and total supplies produced are relatively small, year to year variations in production can wreak havoc with processing plant profitability. If the supply is low in a given year, fresh market traders bid up the price of available fruit. The processor, who does not have the sales margins of the fresh produce trade in a supply-hungry market, cannot compete on price. This often results in reducing the supply of raw product received by the plant to levels below breakeven, resulting in operating losses. Over time, the plant decapitalizes and goes out of business. When this happens, the farmer is left only with the fresh produce traders as buyers. Then, in a good production year when abundant supplies saturate the fresh market, fresh produce traders lower prices paid to the farmer even lower than had previously been offered by the processing plant. This is to some extent the current situation with the Corona plant, which last year was unable to obtain sufficient passion fruit supplies to operate above breakeven.

96

A third reason for the short supply to processors is that, for diversified crops, there is no organized and orderly product assembly and transport system to reduce unit costs of these activities, nor are there integrated input supply and other production services to farmers. This causes production and marketing cost structures for diversified crops to be higher than for bananas.

In conclusion, until the constraints of 1) skewed comparative advantage favoring bananas, 2) lack of fresh and processed market integration, and 3) lack of orderly marketing infrastructure and integrated on-farm services for diversified crops, are alleviated, prices paid by processing firms will continue to be unattractive to farmers and they will continue to dedicate their land, labor and capital to producing bananas instead of diversified crops.

Currently, total processed agricultural exports are running at about EC\$5-6 million annually. This is around 8% of agricultural exports and 6% of total exports. One estimate suggests that gross value of all agricultural production in 1990 was approximately EC\$100-110 million, of which approximately 75% was exported and 25% was consumed domestically. National production supplies about one-third of total domestic foodstuffs consumption.

F. Public Sector Expenditures and Institutions Involved in Agriculture

1. Public Sector Expenditures in Agriculture

Given the major importance of the agricultural PPMC system to the economic wellbeing of the country, it appears that the share of public sector funding allocated to agricultural recurrent expenditure and capital investment programs is relatively low. Tables a. and b. in Appendix D-III show that agriculture received only between 2.5% and 2.8% of total central government recurrent expenditures annually between 1985/86 and 1989/90. This amounts to less than 2% of annual current value of total agricultural output. For a sector that contributes 30% of GDP, 75% of foreign exchange and one-half of employment, this share appears to be unusually low.

In the case of agricultural sector investment (including agriculture, livestock, forestry, fisheries and parks/gardens), there were approximately 26 on-going projects during the 1990/91 fiscal year, with a total estimated life-of-project cost of EC\$41 million. More than 80% of this is to be funded from external sources. Funding for these projects constitutes about 17% of total (external and internal) financing for all public sector investment programs.

In annual terms, for 1989/90, less than EC\$6.0 million of capital expenditure (EC\$10.7 million were programmed) were invested in all of these sub-sectors, of which about 72% was from external sources. This 1988/89 capital expenditure constituted only about 4% of the annual current value of total 1988 sector output. Although 1988/89 programmed investment in the sector was 14% of total programmed investment, actual capital expenditures in the sector were only 9% of total programmed public sector capital investment. (See Tables c and d in Appendix D-III).

The above data suggests that the sector's relative importance to the economy is not reflected in relative levels of public sector recurrent or capital expenditures, whether from internal or external sources.

2. Public Sector Institutions Involved in Agriculture

Because of agriculture's importance in the economy, virtually all public sector institutions are involved in one way or another with policies and programs affecting the well-being, operation and development of the agricultural PPMC system. Those most directly involved are briefly described below.

a. Ministry of Finance and Development

The most powerful public sector institution in terms of defining policies and determining allocations of public sector resources is the Ministry of Finance and Development (MFD). Since

the Prime Minister also is the Minister of Finance and Development, MFD is the final arbiter in determining policies affecting agriculture and in the allocation of public funds. Not only does MFD allocate public resources but also, through the Economic Development Unit (EDU), it is the key arm of government for formulation of policy initiatives, for assisting other ministries in identification, prioritization, development and implementation of projects and programs, for appraisal of projects and programs, and for monitoring and evaluation of progress.

The EDU currently is assisting the various ministries in the preparation of detailed medium term sector development plans, including plans for agriculture, forestry and fisheries. When sector plans are completed, the EDU has the responsibility for integrating them into an overall National Development Plan, which is expected to be completed by September, 1991.

b. Ministry of Agriculture (MOA)

The MOA is responsible for defining the needs of the crops, livestock, forestry and fisheries sub-systems, in terms of policies, plans, programs and projects. It is responsible for the design and execution of all production-related programs and projects, once approved and funded.

The MOA is divided into four divisions:

- Lands and Surveys
- Forestry
- Agriculture
- Fisheries

Current organization and a brief description of functions and activities of each Division is provided in Appendices D-I and D-II, respectively.

The Ministry of Agriculture staff is generally made up of experienced persons who understand the history, potential and problems of Dominican agriculture. However, staffing levels are limited, and most technical personnel are generalists. There is a need for well-trained crop and livestock specialists who can backstop the general agricultural officers by providing advice and technical support to farmers on all aspects of the production and marketing of specific priority crops.

c. Other Public Sector Institutions

A number of other public sector institutions provide support to the operation and development of the agricultural PPMC system. These are listed below with a brief statement of agriculture-related functions. More details are provided in Appendix D-IV.

i. Ministry of Communications and Works - constructs and maintains feeder and farm access roads.

ii. Physical Planning Unit - plans and maps spatial allocation of lands for settlements and for agricultural development projects.

iii. Cooperative Division (Ministry of Community Development) - provides training, technical assistance and material support for promoting new, and assisting on-going, cooperatives.

iv. Ministry of Education - as a part of general education responsibilities, is responsible for technical and vocational training in agriculture; also maintains a number of school garden plots.

v. Dominica Banana Marketing Corporation (DBMC) - Established in 1984 as the exclusive market channel for extra-regional banana exports, the DBMC dominates the economic life of agriculture. It is charged with promoting the well-being of 8,600 banana growers, and with ensuring the financial viability of the banana industry.

vi. Dominica Export and Import Agency (DEXIA) - Established in 1986 as the exclusive importer of rice and sugar, its only income is from the marketing margin (12%) on these imports.

DEXIA is charged with export promotion and development. It provides market information, carries out test marketing and training, and provides improved export infrastructure. It is prohibited by law from carrying out export business operations.

vii. Agricultural Industrial Development Bank (AIDB) - Charged with providing credit for financing business-related projects in agriculture and industry. Funds come mainly from the Caribbean Development Bank (CDB). In 1989, about 40% of its loans of EC\$11.6 million were for agriculture, forestry and fisheries.

viii. National Development Corporation (NDC) - promotes investment in commercial and industrial activities (including agro-industry).

ix. National Development Foundation of Dominica (NDFD) - assists in small business development.

d. Regional and International Institutions

A number of such institutions are involved in research, promotion, training, infrastructure development, organizational development, technical assistance and financing. Major amounts (more than 70% of the total) of funding for national agricultural investment programs flow from these institutions.

100

These institutions also provide a considerable amount of specialized professional research and technology transfer. Specialist staff currently based in Dominica are as follows:

<u>Affiliation</u>	<u>Number</u>
CARDI	7
Republic of China (ROC)	3
French (FTC)	2
British (BDD)	1
IICA	1
CARDITS	2
FAO (short term)	2
Total:	18

The following regional/international institutions currently are involved in funding or otherwise assisting the development of Dominican agriculture, forestry and fisheries (a summary description of activities of each is provided in Appendix D-IV, Sections j and k.)

Regional

- i. CARICOM (Caribbean Community Common Market organization)
- ii. Windward Islands Banana Association (WINBAN)
- iii. Windward Islands Crop Insurance (WINCROP)
- iv. Caribbean Trading Company (CATCO)
- v. Organization of Eastern Caribbean States (OECS), and OECS - Agricultural Diversification Coordinating Unit (OECS/ADCU)
- vi. University of the West Indies (UWI)
- vii. Caribbean Agricultural Research and Development Institute (CARDI)
- viii. Caribbean Rural Development and Training Services (CARDATS)
- ix. Eastern Caribbean States Export Development Agency (ECSEDA)
- x. Caribbean Development Bank (CDB)
- xi. Inter-American Institute of Agricultural Sciences (IICA)

International/bi-lateral

- i. EDF - European Development Fund
- ii. CIDA - Canadian International Development Agency
- iii. BDD - British Development Division
- iv. ROC - Republic of China
- v. USAID - United States Agency for International Development
- vi. FAO - Food and Agriculture Organization
- vii. FTC - French Technical Cooperation Agency

Past and present USAID projects assisting Dominican agriculture are listed in Appendix D-V, Table a. In addition, other important externally-funded projects are briefly summarized in Appendix D-V, Table b.

G. Producer and Support Organizations

A 1989 study sponsored by IICA provides a detailed review of farmer and support organizations in Dominica. That study reports 17 active farmer organizations and nine support organizations.

Some of these organizations are district (12) and some are national (5) in scope. An estimated 90% of all farmers belong to at least one farmer group. As in most other aspects, bananas dominate farmer membership. The Dominica Banana Growers Association (DBGA) has 8,600 registered members, while the next largest farmer group, the Essential Oils and Spices Cooperative has 450 members. The third largest has only 87 members.

A few farmer groups show dynamic leadership while others demonstrate little sense of direction. None appear to have access to the capital and management expertise (nor have they shown the initiatives required) to organize the provision of common integrated production services such as input supply, credit, technology transfer services, mechanization services, etc.

Support organizations are composed of interest groups (who may be farmers) that directly or indirectly assist farmers by promoting production and marketing of agricultural products or by carrying out activities to improve the quality of rural life.

Appendix C provides a brief descriptive summary from the IICA study, as well as a listing of farmer and support organizations, services provided and other basic information from that study.

In conclusion, insufficient management and organizational skills, lack of access to capital, and absence of initiative to establish income generating services to farmers, are nearly universal limitations on the ability of farmer and support organizations to make a significant contribution to resolution of constraints facing the agricultural PPMC system. However, existing farmer organizations, or a coalition of such organizations, could serve an important role in representing the interests of farmers in the establishment and operation of a vertically integrated market ordering mechanism such as the proposed "vertically integrated market ordering (VIMOE) enterprise" described in Sections VI, VII and VIII.

H. Input Supply and Factor Markets

1. Input Supply

Because of the small volumes required, agricultural inputs (except for planting materials) are virtually all imported in fully processed or blended form. Imported inputs include significant amounts of pesticides, fertilizer, day-old chicks, animal feeds, some tools and breeding stock.

The largest single importer of chemical inputs (pesticides and fertilizer) is the DBMC. Small amounts of these and other minor inputs are imported by other importers, including the Ministry of Agriculture (MOA).

Pesticide use (mainly insecticides, fungicides and herbicides) has risen rapidly in the past five years, increasing from EC\$1.4 million in 1984 to about EC\$5.5 million in 1989. Fertilizer imports were estimated at 10,800 tons in 1989, and increased to 12,600 tons in 1990, of which 90% was imported by the DBMC. Major sources of supply are the U.S., Canada and the EEC. An estimated 80 percent of all chemical inputs are used on bananas.

Relatively small amounts of animal feeds are imported, primarily from St. Vincent, for layers and pigs. The MOA, as the only significant source of improved breeding stock, periodically imports replacement breeding animals (sheep, goats, pigs, and cattle), while egg producers import their own day-old chicks (for layer replacement).

The MOA supplies virtually all planting materials to farmers. Four of seven agricultural stations are dedicated exclusively to plant propagation. Annual plant seedling production currently is as follows:

<u>Type of Plant Seedling</u>	<u>Number</u>
Coffee	200,000
Hot pepper	110,000
Root crops	50,000
Vegetables	50,000
Citrus	42,000
Cocoa	10,000
Avocados	7,000
Mango	7,000
Other fruits	114,000
Spices	29,000
Coconut	2,000
Ornamentals	<u>1,500</u>
	622,500

The MOA distributes plants free (or charges a symbolic price). Thus, no private commercial agricultural plant propagation nurseries exist.

2. Factor markets

The relative scarcity of labor for agriculture already has been discussed. Since opportunities for mechanization, especially tractor mechanization, are limited because of the steep farming terrain, the availability of farm labor is critical to expanding output.

The lack of adequate available farm labor is a constant complaint of farmers. However, it appears that agricultural wage rates do not increase in response to attract labor from other uses. This suggests that farm labor already is being paid at its perceived full productivity value, considering fairly heavy discounting in the case of diversified crops because of market risks. Given the greater tedium of agricultural work and its socially undesirable connotations in Dominica, most unskilled laborers prefer non-farm work even at lower wages.

Although possibilities for major mechanization are limited, there is little indication that farmers are adopting even limited appropriate mechanization as a means of increasing labor productivity, thereby permitting payment of higher wages, as well as making farm work less tedious and more socially acceptable. This suggests that farmers may not have sufficient knowledge of mechanization possibilities, lack access to appropriate equipment supplies, and/or lack available capital to purchase.

The problem of labor scarcity appears to be at a critical stage. Many farmers visited had substantial land areas that were once productive, now standing idle. Much of this idle land has old abandoned tree crops. Universally, these farmers state that lack of available labor is the reason for not bringing idle lands and abandoned trees back into production. Thus, it is likely that if marketing risks for diversified crops were to be substantially reduced, farmers may be willing to pay higher prices to attract labor and/or invest in appropriate mechanization, as assured income and profitability prospects become more attractive.

The agricultural land market appears to be relatively inactive except for sales of farm land suitable for urban uses (often held for speculative purposes). Since Dominica has no agricultural land or use tax, there is no penalty imposed on an owner who continues to hold idle land, nor is there an organized financial market for land purchases. Although commercial banks will lend money secured by a farmland mortgage, lending rates are quite conservative (stated to be less than fifty percent of market price). Most small farmers and new entrants have insufficient equity capital or future income guarantees to qualify.

Additionally, the existing land tenure situation is not conducive to an active land market. Only thirty-four percent of total farms (forty-three percent of land in farms) is self-owned. All other farmland has multiple owners (e.g., family-owned), or someone other than the owner is in possession (e.g., squatters). Under Dominican law, a non-owner in possession of farm land has rights that are not easily extinguished. Thus, someone in possession, even without a formal claim, puts a cloud on the owner's title, which makes that land difficult to sell.

Multiple-owners also complicate easy sale, since all owners must agree to sell. Again, the part-owner in possession has superior rights which he may not be willing to give up for the benefit of his co-owners who may wish to sell. The above described tenure situation tends to remove a considerable amount of farm land from a potential market that might otherwise move idle land into productive uses through sale.

In conclusion, although there are more pressing policy issues, farm land tenure and land market policies need to be reviewed and made more compatible with a fluid farmland market if such policies are to make a positive contribution to increased agricultural productivity and output.

Financially viable farmers appear to have reasonable access to production credit. However, because of the relatively small internal financial market, interest rates tend to be higher than in large financial centers. Commercial banks readily lend working capital to viable commercial farming operations. They also lend (although conservatively) on farmland mortgages, either as purchase money or for capitalization purposes. The state-owned AID bank has lines of credit available from the Caribbean Development Bank (CDB) for capital investments (not for land purchase or working capital) in agriculture and agro-industry. They also have some funds for on-lending on soft terms from the International Fund for Agricultural Development (IFAD). Interest rates currently are 5.5 percent for soft loans and twelve percent for commercial loans.

Several credit unions also operate in rural areas, providing a mechanism for savings and a source for small loans. The DBMC also provides lines of credit on a limited basis to registered banana producers. In general, the DBMC supplies inputs and other services to farmers on a pre-paid basis, made possible by the CESS (discount) system applied to all banana sales to them by farmers.

In conclusion, it would appear that any apparent agricultural credit constraint is more a lack of adequate loan guarantees caused by, a) tenure limitations, b) the endemic undercapitalized condition of many small farmers, and c) market risks associated with non-banana crops, rather than from any inherent weaknesses in the financial/credit system.

I. COSTS OF PRODUCTION AND COMPARATIVE ADVANTAGE

Lack of reliable costs and returns farm budget data makes it difficult to draw clear conclusions concerning the relative profitability of different crops.

Table 14 in Appendix A provides a summary of available data on costs and returns for ten selected crops. This data was extracted from three studies referenced in the Table. Based on that data, the following annual net income comparisons can be made (for tree crops the data is for the first year of full production):

Appendix A, Table 14 Data Adjusted data to reflect
more realistic current yields

Crop ^{1/}	Yield used by referenced studies	Net Returns ^{2/} (EC\$000's)	Estimated current yields	Reductions in costs from reduced yields (EC\$)	Net Returns ^{2/} (EC\$000's)
1. Bananas	9.0 MT	2.3	5.5 MT	300	0.0
2. Coconut (dry for Huckster Trade)	5.0 MT	1.6	4.0 MT	200	1.2
3. Grapefruit					
a) to fresh market	11.3 MT	3.8	4.0 MT	1,200	1.0
b) to processed market	11.3 MT	0.6	4.0 MT	1,100	0.5
4. Avocado	9.5 MT	10.8	6.0 MT	700	6.6
5. Cocoa (rehabilitated)	800 lb/dry	1.3	400 lb/dry	200	0.6
6. Passionfruit	5.0 MT	2.1	3.5 MT	300	1.2
7. Dasheen	9.0 MT	7.6	6.0 MT	400	4.6
8. Ginger	8.2 MT	9.0	5.0 MT	300	4.1
9. Cucumber	4.5 MT	5.3	3.5 MT	100	3.8
10. Tomatoes	3.2 MT	8.9	2.5 MT	100	6.8

1/ Adjusted to pure stand equivalents

2/ Net returns represent returns to land, management and capital, plus profit. Family labor has been costed at the going rate of EC\$20/day.

107

The above comparative summary must be interpreted with caution because of the limitations of the data. However, on the assumption that possible inaccuracies have a similar bias for all crop budgets, tentative conclusions can be drawn.

First, all other things being equal, one would assume that farmers prefer to produce the most profitable crops. The most profitable tree crop is clearly avocado (with no close competitors) and the most profitable annual crop is tomatoes, with both dasheen and ginger as reasonably close competitors.

What is surprising is that bananas appear to provide no profit, nor returns to land, capital and management. All other crops appear to show significant returns to land, management and capital (and/or profit). One must conclude that for some reason, farmers prefer to raise bananas, even though they only earn daily wages. Thus, "farmer decision variables" other than potential net returns apparently lead farmers to continue to focus on banana production instead of alternative crops. In the case of long maturing tree crops, an important "farmer decision variable" likely is the initial investment and long delay from planting to full production (e.g., 8 years for coconut and grapefruit, as compared to one year for bananas). However, that is not an explanation for preference of bananas over 1) existing plantations of long-maturing tree crops, or 2) more profitable annual crops.

The only other significant variables that distinguish bananas from diversified crops from the farmer's perspective appear to be 1) differences in distribution of harvest (and thus incomes), throughout the year, and 2) differences in ease and certainty of market access in addition to stability of price.

Banana harvest takes place throughout the year and the farmer receives payment for his sales on a bi-monthly basis. For most diversified crops, harvest is for a limited period during the year, varying from a few days to 7-9 months, while payment for sales may be both erratic and with little or no distribution over time.

Additionally, banana farmers have an assured market for all bananas they box and deliver to the roadside. Farmers also are sure of being paid by DBMC every two weeks for sales made. In contrast, the diversified crop farmer faces severe market risks. He has no assurance when he harvests his crop, that he can sell it. Also, at the time of planting or annual maintenance on the crop, the market price may be at an attractive level, whereas, at harvest, a much lower price may be offered. Furthermore, a buyer may offer to purchase only a selected part of the crop, with the remainder unsaleable.

105

To illustrate, one estimate shows that a farmer can expect to sell the following percentages of production at harvest of the crops indicated:

	<u>Percent of harvest that is assured of sale</u>
Banana	100
Avocado	22
Grapefruit (fresh market)	30
Coconut (fresh market)	10
Grapefruit (processed market) ^{2/}	30
Coconut (processed market) ^{2/}	N/A
Orange (fresh market)	29
Lime (fresh market)	15
Dasheen	60-100 ^{1/}
Tomato	50-100 ^{1/}
Cucumber	50-100 ^{1/}

It is likely that if problems of market access and price uncertainties for diversified crops were to be alleviated, the Dominican farmer would shift relatively more resources to the production of diversified crops.

The Dominican farmer implicitly is spreading his marketing risks and diversifying the use of his production factors when he intercrops. Although no Dominica data are available for analysis, an economic appraisal ^{3/} of intercropped bananas, cocoa and nutmegs in Grenada is indicative. That appraisal found that Internal Rates of Return (IRR's) for these three crops planted separately, are lower than is the IRR for the same crops when intercropped:

- ^{1/} These products are grown for the huckster trade. If too much is planted for harvest at the same time, the market may become saturated resulting in a severe price drop. Because internal market volumes are so low, a change of even 2-5 acres in plantings or harvest can create scarcity or saturate the market.
- ^{2/} For these products, the cost of harvest plus transport to the processing plant, may be as much as the price offered.
- ^{3/} Economic Appraisal of Cocoa Production - Eastern Caribbean, prepared for AID and PADF by Max F. Bade, 10/19/90.

	<u>Internal Rate of Return</u>
1. Bananas (pure stand)	14.72%
2. Nutmegs (pure stand)	24.92%
3. Cocoa (pure stand)	17.43%
4. Bananas, nutmegs, cocoa (intercropped)	31.50%

There is no clear cut response that can be made to the question of comparative advantage to compete in regional and extra-regional markets. Such a determination requires detailed data and analysis of external market options and size, transport reliability and cost, competing sources of supply, sanitary regulations, etc., which is beyond the scope of this assessment. However, based on trend data of Dominica fresh and processed product sales and destinations, it would appear that a wide range of product markets, both regional and extra-regional, can absorb (without creating price disruptions) a number of diversified crops that Dominica produces. In the longer run, greater production and marketing efficiency must be achieved to permit continued profitability as expanded output results in lower prices.

J. Native Populations

A native Indian population of about 2,500 persons (called Caribs) owns an area in the Northeastern portion of the island. This area is known as the "Carib Territory" and is owned in common by the entire carib population. Internal affairs of the Carib territory are governed by a Carib Chief and Council according to native tradition. Land is allocated to families by the Carib Chief, and is generally passed on from generation to generation.

Caribs are good farmers and have shown a willingness to change as economic conditions, technology and markets dictate. Since the 1970's farm production has grown more rapidly in this area than in other areas of the country. Primary crops are coconuts, limes, avocados, mangoes, bananas and root crops.

For several years, the Ministry of Agriculture has had an organized extension sub-district (part of the Northeast Extension District) covering the Carib territories. A diploma level agricultural officer is assigned to this sub-district and a Farmer Service Center has been established there. This sub-district participates in island-wide agricultural projects, having been most active in the Tree Trops Project, the Coconut Development Project and the Livestock Development Project.

IV. CONSTRAINTS TO AGRICULTURAL GROWTH

Previous sections, in describing the agricultural system, have identified and discussed the constraints to agricultural growth within the context of the structure and performance of each of the sub-systems.

Selected constraints are summarized below:

A. System-wide Constraints

1. The Small Insular Economy with a reduced domestic market inhibits application of economies of scale and competitive interaction to achieve output efficiencies. The small scale of output often makes it difficult to tap export markets because of minimum volume requirements for certain types of ocean transport (e.g., containers) and to enter certain markets (e.g., the U.S. fresh vegetable market).
2. Limited and physically limiting resource base both in terms of quantity and quality. Agricultural land is on steep slopes and much is scattered in small plots. Capital and management capabilities are relatively scarce, resulting in limited application of appropriate technology to diversified crops under Dominican conditions.
3. Weak linkages and poor integration of the production, processing, marketing and consumption/demand (PPMC) sub-systems result in uncertain markets, unstable prices and inability of the participants to effectively manage risk.

B. Production Sub-System Constraints

1. Small farm size, even smaller fields, and steep slopes resist mechanization and other economies of scale.
2. Undercapitalization and absence of technical, economic and financial management skills often result in inefficient use of land and labor, poor choices in selecting from among production options, and low yields due to lack of understanding of benefits to be realized from the capacity to apply appropriate yield enhancing technologies.
3. Production of any one crop is scattered in several locations throughout the country. This causes increased costs for services such as input supply, extension services, product collection and transport to market.
4. Overdependence on a single subsidized crop - bananas. This has distorted competitive advantage in favor of bananas, causing farmers to shift land, labor and capital resources from other crops to bananas.

5. Lack of scientific understanding of rationale for many farmer practices, resulting in poor adaptation of formally generated technology to on-farm conditions.

6. Proliferation of a large number of small, weak farmer organizations that dissipate resources and energy, and who have little access to capital and management capacity needed to take initiatives in improving and integrating farm level services or accessing and ordering markets.

7. Inappropriate land use results in resource degradation and decreasing productivity, as well as siltation of water catchments. Indiscriminate conversion of scarce agricultural land to urban uses takes the most productive land out of production.

8. In livestock production small production units, poor quality breeding stock and lack of a reliable breeding stock re-supply system, combined with poor feeding practices, result in high unit costs of production and lack of profitability. Thus, livestock rearing is usually relegated to a "backyard", spare-time activity.

9. Small scale, undercapitalized artisan-type fishermen and foresters generate low output, have high unit costs and suffer from low productivity.

10. Poor fish landing sites and lack of storage or cleaning facilities increase risks of boat damage, product loss, quality deterioration, and results in discouraging incomes to fishermen. Thus, most fishermen fish as a sideline activity.

C. Marketing and Processing Sub-systems Constraints

1. Existence of a large number of small, under-capitalized fresh produce market traders (called Hucksters), limits capacity to up-grade marketing efficiency through grading, larger volumes and provision of ancillary services. This results in high transaction costs, reduced competitiveness, and "survival" incomes that do not permit capitalization and expansion.

2. Processing firms generally are under-capitalized. This, combined with weak management especially in the areas of financing, marketing and business planning, results in disappointing economic performance and contributes to problems of high costs and negative cash flows.

3. There is little diversification by marketing/processing firms to achieve profitable volumes of business and to diversify price risks.

4. Processing firms do not sufficiently exploit the economic value of sub-products as a means of spreading overhead costs.

5. Pricing does not adequately reflect quality differences. Overall product quality suffers from inadequate post-harvest handling, excessive handling and inappropriate packaging.

6. The internal transport system for moving production from the farm gate to the processing facility or market assembly point is fragmented and high cost.

7. Sea transport for export markets, both regional and extra-regional, still is unreliable and often inappropriate. Air transport services from Dominica are limited and high cost. Products destined to extra-regional markets must be transferred at international airports on other islands.

V. GOVERNMENT AGRICULTURAL DEVELOPMENT POLICIES AND PROSPECTS FOR GROWTH

A. Agricultural Development Policies of the GOCD

The government of Dominica has set the following national policy objectives:

- improve external competitiveness in the productive sectors;
- enhance institutional capability to undertake programs that result in improved economic performance;
- institute legislation and undertake programs designed to influence human behaviour towards the physical environment in a manner that meets the economic needs of citizens, without compromising the ability of future generations to meet their own economic and aesthetic needs.

More specific policy and program objectives for agricultural, forestry and fisheries development are:

- (1) to expand the existing level of agricultural export earnings of bananas, citrus, coconut and bayoil;
- (2) to diversify the agricultural commodity base and to exploit a wider spectrum of markets;
- (3) to encourage import substitution, particularly in foods with high protein content;
- (4) to encourage the cultivation of commodities amenable to simple processing, preservation and storage techniques;
- (5) to promote measures to increase productivity and rising incomes, and
- (6) to improve land conservation, protection and rehabilitation practices.

Historically, GOCD policies to achieve agricultural growth appear to have relied primarily on two approaches:

1. The primary approach has been to seek to obtain maximum production response by farmers in order to reap all possible benefits from the U.K. banana subsidy. To achieve this, in 1984 the government established the DBMC, which has vertically integrated marketing activities from the farmgate to the Geest boats, and which provides farmers with common integrated production-related services. The DBMC apparently has been quite successful in carrying out its responsibilities. Banana production and acreage have doubled since 1984.

2. The second area of emphasis by government has been re-settlement of former "estate lands". By the end of the 1970's, several large estates had fallen into misuse and disuse, especially after the devastation of Hurricane David. The government set out to put these estate lands back into production by subdividing and settling (and confirming possession to squatters on) the land into small farms, most under 5 acres in size. Government has been quite successful in re-settling an estimated 2,000 farmers on these former estate lands.

It should be noted that both of the approaches described above have primarily involved land expansion. Only very modest progress appears to have been achieved in terms of productivity gains. For example, even in the case of bananas, yields per acre have not increased significantly since 1984 when the DBMC took over marketing. Rather, yields have remained rather steady at 4-5 tons per acre. While acreage planted to bananas has increased almost at the rate of growth in banana output. This has been achieved by bringing into production idle farm land or by shifting land from the production of other crops to bananas (or adding bananas in an intercropping pattern). Additionally, the re-settlement program brought into production lands previously not cropped, idled or largely abandoned. The net effect of the above-described policies has been to focus farmer attention on land expansion.

Land expansion appears to have come close to reaching its practical limits. Most estate lands have or are in the process of being re-settled. Bananas now occupy 60% of the cultivated land area, and there is considerable evidence that banana production through land expansion has motivated some farmers to plant on slopes too steep to sustain banana production. Perhaps of most concern, there is the looming possibility that the banana subsidy upon which the banana boom has been built will soon diminish substantially or disappear. Furthermore, at present levels of productivity of most diversified crops, as well as of bananas, unit costs of production are too high to compete in world export markets, even if marketing constraints are alleviated. Thus, productivity must increase and unit costs of production must decrease for both bananas and other crops, if agricultural exports are to continue in a competitive world market.

116

In conclusion, from every perspective, the challenge is clear:

1. Achieve increased factor (land, labor, capital) productivity for expanded areas of diversified crops, and reduce marginal areas in bananas. Progress in increasing factor productivity may reduce unit costs of production sufficiently to assure that some banana producers and diversified crop producers can compete in the world marketplace.
2. DEMC must achieve even greater efficiency in its banana marketing operations by cutting costs and streamlining operations, thereby reducing unit transaction costs.
3. The marketing system(s) for diversified crops must be organized and streamlined to stabilize and expand markets, increase farmgate prices, reduce unit transaction costs and equitably distribute risks.

B. Prospects for Export Growth

Aggressive attention to the three areas listed above should permit Dominican producers to compete and expand placements in fresh and processed export markets for the following crops:

- | | |
|---------------------|---|
| Grapefruit | - fresh and processed (juices, concentrates, segments, by-products for domestic use) |
| Coconut | - fresh and processed (oil, oil-based products, other exportable products from by-products) |
| Cocoa | -processed, initially as dry beans |
| Passionfruit | - fresh and processed pulp, nectar, juices, specialty products |
| Avocado | - fresh |
| Hot pepper | - fresh and processed (sauces) |
| Coffee | - specialty blends |
| Selected vegetables | - fresh |

In addition, various specialty crops with fresh and processed market potential include: ginger, cinnamon, bay, flowers/ornamentals, aloe vera, exotic fruits, other spices, organically grown products.

C. Prospects for Growth in Import Substitution Products

There are several import substitution products worthy of attention: Whole broilers and choice parts, irish potatoes, selected vegetables, pork, mutton, beef and fish. There is a need to immediately review existing economic feasibility analyses for these products, and to develop a strategy for government action in promoting private sector investment for import substitution agriculture. Such a strategy should be a part of the development plan now being formulated.

In the case of fish, a development plan and strategy has been formulated. Several activities are being implemented with Canadian assistance.

VI. POLICY ISSUES

A. The Banana Industry and Diversification Policy

To date, benefits of unearned profits (surpluses) generated by the extra-regional export banana subsidy have been destined to:

1. Income transfers to farmers via banana prices above general market equilibrium.
2. Investment in common, vertically-integrated production services to banana producers such as input supply, aerial spraying, credit and extension assistance.
3. Investment in DBMC business infrastructure such as buying stations and packing sheds, transport equipment, other equipment, and a new office building.
4. Obtain and retain good business and marketing management capabilities in the DBMC.

The negative impacts on diversified crop expansion of the banana subsidy (and the application of funds it generates) already have been discussed: 1) skewed comparative advantage in favor of bananas; 2) major shifting by farmers of land, labor and capital resources from other uses to banana production; 3) shifting of major banana production and marketing risks from farmers without concomitant shifts in risks for diversified crops; and 4) a strong, well-capitalized, vertically-integrated marketing system for bananas from the farm gate to the banana boats, as contrasted to an under-capitalized, undermanaged, dispersed, disarticulated and erratic marketing system for most other crops.

The PPMC system gap between export bananas and other agricultural export products must be redressed if Dominican agriculture is to develop. Efforts must be made to improve the comparative advantage of other crops through increased efficiencies in the non-banana PPMC system. Optional ways to achieve this are discussed in Sections VII and VIII.

B. Market Ordering System

Preceding sections have discussed the lack of integration, organization and order (and consequently inefficiencies and instabilities) characterizing the non-banana marketing sub-system, and the negative price and risk signals that this situation passes back to farmers.

Well-tested policy mechanisms exist that can create conditions for putting order in the marketing sub-system, thereby improving its efficiency and stability, which, in turn, passes on

more positive price and risk signals to farmers. One such mechanism that has worked successfully in the U.S. and many other countries, is a Vertically-Integrated Market Ordering System (VIMOS) through supply management. This form of market ordering works especially well for perishable products destined to both fresh and processed markets.

In the U.S., market ordering mechanisms are used for the citrus industry, as well as for many other perishable fresh/processed products, such as grapes, plums, cranberries, milk, nuts, etc. Major elements of such a market ordering system are:

1. A single (or strictly coordinated) market channel for all production. This would be limited to production for export in the case of Dominica, since National consumption for most exported crops is so small as not to have significant impact on the overall market. Further, in the case of Dominica, the small supplies of any particular crop would suggest that a number of crops should be marketed through a single marketing channel to increase volumes traded and to diversify risks.
2. An institutionalized means for realizing "collective bargaining" among all of the participants or actors in the PPMC system for a particular crop. Purposes of the "collective bargaining" process are to reach agreement among all affected "interests" for a given crop period, on marketing margins and producer prices to be paid (based on quality, not on intended use), as well as on volumes to be purchased. The collective bargaining process also includes reaching agreement on allocation of production quotas to producers, and on supply allocations to fresh and processed markets (based on projections of minimum and maximum needs). In Dominica, collective bargaining "interests" probably include producers, processors, hucksters and the Government, the latter representing the interests of the entire population. Under Dominican conditions of small supply and relatively few participants, consideration might be given to institutionalizing the collective bargaining system through eventual joint ownership of one island-wide vertically integrated market ordering enterprise (VIMOE) as a single marketing channel. Under such an arrangement, the collective bargaining forum becomes the Board of Directors of the enterprise.

171

3. Grading and allocation of product between the fresh and processed export markets would be carried out by the VIMOE. Nevertheless, actual marketing may be carried out by any number of marketing agents if they are able to compete. Products can be exported only through, or with clearance from, the VIMOE. This permits the VIMOE to pay a quality-based amalgamated price to producers who have approved supply quotas, thereby stabilizing the market and price to these producers.

The objective of the system is to achieve a combined fresh/processed market demand that absorbs all available supplies, assures at least minimum breakeven supplies to processors, and also permits payment of a price to efficient farmers that covers cash production costs while providing a reasonable return to management, family labor and capital, plus a profit.

4. Collectively approved and centrally or regionally managed harvest and farmgate-to-market transport scheduling will be required in order to achieve economies of scale and transportation efficiencies.
5. Provision of other vertically-integrated common producer services amenable to economies of scale would also need to be organized and managed by the VIMOE, perhaps as a joint undertaking with a parallel national producers coalition. Such services might include input supply, credit, savings/income distribution schemes (in order to compete with the banana bi-monthly income advantage), contract harvesting, contract pest control, etc.

A more detailed discussion of options for implementing the proposed vertically integrated market ordering system for diversified crops is included in the next two Sections (VII and VIII).

C. Labor and Mechanization Policy

1. Limited availability of agricultural labor, combined with the lack of significant increases in agricultural wage rates over the past three years, suggests that current wages closely equal the value-added by agricultural labor. Investment in appropriate mechanization can increase labor productivity and decrease job tedium, thereby making agricultural work relatively more attractive and permitting payment of higher wages.

2. Increased skills and management training will expand the pool of technical and managerial talent needed to increase demand for high quality human resources throughout the agricultural PPMC system, as diversification and mechanization occur.

3. Current early retirement policies for both public and private sector employees may be removing managers and technically skilled employees from key positions at an age when their experience permits them to continue to make productive contributions to operating efficiency and productivity, especially in the marketing and processing sub-systems.

4. Relatively high emigration rates of motivated and trained persons suggests that neither the public nor private sectors place a high enough value on trained manpower and managerial talent. Policies to a) encourage rewarding and retaining capable and experienced management, b) expand management training, c) expand use of management contracts, and d) promote use of the International Executive Service Corps (IESC)* and "Project Sustain",* can increase the presence of capable management talent.

D. Land Use Policy

1. Although not yet severe, there are signs of increasing encroachment of agriculture on lands that should remain in conservation/protection forest. Catchment areas for water supplies are beginning to show serious siltation in some areas. At the same time, prime agricultural land near population centers is being converted to urban uses. There are some indications that significant speculative purchases are being made of agricultural land to hold for future urban development. Also, some villagers located near forest reserves are encroaching on these in search of fuel wood.

2. There is an increasing need to manage the use of land, forest and water resources in the best interests of all sectors, in order to sustain agricultural production and timber yields, and to conserve the natural character and beauty of the countryside for the aesthetic pleasure of the population and for tourism.

3. Consideration should be given to further developing the existing data and large-scale mapping base to permit classifying land in each farm according to environmentally sound uses and appropriate conservation practises.

4. There is a need to place more actively on the public agenda review and dialogue concerning policy mechanisms that can achieve environmentally sound uses of natural resources in the long run. This should include review and discussion of such options as

*See explanation in "List of Acronyms."

buffer zone forests, reforestation, conservation easements, land use and crop zoning, integrated upper watershed management, and property/conservation/nonconforming use taxation.

E. Market Information

Producers, marketers and consumers need market information to make rational production, marketing and consumption decisions. There is an urgent need to expand market information, and to disseminate such information through the media and through educational programs. Additional external assistance to DEXIA or other organizations may be needed to achieve these objectives.

F. Research and Development

1. Research activities need to be integrated with and build upon existing practises. For example, research should generate technologies that can be adapted to an intercropping situation. Also, marketing improvement efforts should consider elements of success in the structure and operation of banana and bay oil export marketing.

2. The private sector should be encouraged to invest in all types of economically productive services including input supply and technology transfer. The public sector should focus investment of financial and human resources in education, Research and Development (R&D), testing and demonstration, social welfare and public infrastructure.

3. Production research should be prioritized on the basis of economic analysis of the potential market and comparative advantages for the product. Technology transfer activities should be conditioned on the actual or imminent presence of an assured market and, where processing is required, subject to the existence of a processing facility. Too often, economic feasibility is not addressed until the production research is completed, farmers have been encouraged to plant, and they have products ready to go to market.

4. In order to assure proper technology transfer support services on a continuing basis for priority crops, the MOA extension service, and/or the proposed VIMOE, should have at least one trained crop specific production and marketing specialist for each priority crop. This specialist may be assisted by one or more trained and experienced farmer-cooperators in each production zone who specializes in producing the crop himself. These farmer-cooperators could be contracted on a continuing basis to provide on-going operational advice to farmers in their areas.

VII. A PROPOSED VERTICALLY INTEGRATED MARKET ORDERING SYSTEM (VIMOS) FOR DIVERSIFIED AGRICULTURAL EXPORTS

The purpose and role of the proposed VIMOS was described in the last section. This section discusses VIMOS functions and possible institutional options for implementation.

A. Functions

Major functions of the VIMOS are 1) Market Order Regulation, and 2) Commercial operations.

1. Market Order Regulation (MOR)

MOR is a public sector function, the purpose of which is to balance interests of VIMOS participants, and promote national economic development interests and objectives.

An appropriate public agency will be assigned the responsibility for executing MOR functions by: a) participating in analytical work upon which commercial operations guidelines (COG's) and market orders (MO's) are based, b) assisting in formulation of COG's, and of individual crop MO's as each crop is incorporated into the system; c) providing final GOCD approval of COG's and MO's, d) monitoring compliance with COG's and MO's during implementation, and e) participating in continuing evaluations of VIMOS impacts, and in formulating adjustments to COG's and MO's.

As proposed in the following discussion of institutional options, it would appear that DEXIA may be the preferred alternative for assuming public sector responsibilities related to MOR functions.

2. Commercial Operations (CO)

It is proposed that commercial operations (CO) functions be assigned to a national scope private sector based Vertically Integrated Market Ordering Enterprise (VIMOE). The proposed VIMOE would be responsible for carrying out CO functions by 1) serving as the exclusive marketing channel for all crops subject to MO's from the farmgate to the fresh exporter and processor, 2) managing application of approved COG's, including grading, packaging and pricing, and 3) providing to MO producers on a "CESS" basis vertically integrated production and post-harvest services amenable to economies of scale.

The following sections consider and discuss a range of options to serve as the institutional and organizational base for establishing and evolving the proposed VIMOE. Finally, one of the options discussed is suggested as the preferred alternative.

124

B. VIMOE - Options Considered

Several options should be considered for developing an ordered market through a Vertically Integrated Market Ordering Enterprise (VIMOE) for diversified crops destined to fresh and/or processed export markets. These include, but are not necessarily limited to, the following:

1. Option 1-Foreign Investors: Seek to attract one or more regional or international investors to provide the capital and know-how for developing an island-wide diversified VIMOE and to link it with overseas markets.

2. Option 2-Huckster Development: Provide technical, financial and training assistance to selected progressive Hucksters, and/or their association, seeking to motivate them to modernize and expand quality and volume of business in order to become island-wide in scope.

3. Option 3-Producer Associations: Assist producer associations to amalgamate, organize, develop management capability and capitalize sufficiently to assume responsibilities for operating a vertically integrated market ordering system.

4. Option 4-National Institutions or Firms: Identify, stimulate and assist one or more existing institutions or firms in Dominica to accept the challenges and responsibilities of developing island-wide vertically integrated marketing services for diversified crops. Sub-options include:

- a. Sub-option 4a-DEXIA: Restructure functions, staffing and resources to DEXIA for assuming this role.
- b. Sub-option 4b-Existing Agro-industries: Provide incentives and resources to one or more existing agro-industries (e.g., DAI, DCP, Bello, Corona) to take responsibility for organizing and operating a VIMOE.
- c. Sub-option 4c-DBMC: Restructure DBMC to assume non-banana vertically integrated market ordering commercial operations.

Each of the above options are discussed below.

C. Discussion of VIMOE Options

Option 1-Foreign Investors: There likely will be difficulty in attracting a sufficiently well-capitalized enterprise to take a lead role in providing risk capital and management in such an incipient undertaking. Further, such enterprises may have business objectives not necessarily compatible with country development objectives, especially with regard to organizing and supporting non-banana farm input supply and technical services. Foreign investors might be attracted to participate in the long-run, but the process could take considerable time, especially in view of the current worldwide stagnant economic situation. The need is too urgent to take such an uncertain approach. However, a foreign investor (or the Agriculture Venture Trust-AVT) as a minority venture capital partner should be vigorously pursued.

CATCO is a regional enterprise that would appear at first glance to be appropriate for taking on this responsibility. However, CATCO is a young, struggling organization, without either the financial or management depth to take on such a country-specific challenge.

2. Option 2-Huckster Development: This option likely would be a long-term undertaking, with limited prospects for success. One or more hucksters (or their Association) would need to evolve into a large, modern island-wide VIMOE. This would require capitalization of business earnings, enhancement of management skills, etc. Currently, hucksters, and their Association, are characterized by low capital and low management levels. Furthermore, hucksters would tend to focus on the fresh market and might not provide an equitable balance with processor interests and needs.

Although Hucksters are likely to continue to carry out domestic marketing activities, as well as inter-island wholesale to retail activities in an integrated market ordering system, no individual huckster or their Association have current potential to develop the vision, capital base and management know-how to take leadership in establishing a VIMOE offering services from the farm gate through fresh and processed wholesale supply.

3. Option 3-Producer Associations: Existing producer associations are fragmented, undercapitalized and undermanaged. It is not likely that, in the foreseeable future, they can become sufficiently consolidated and capitalized to assume a leadership role in establishing a VIMOE. Nevertheless, their interest in efficiently accessing stable markets suggests that they should be participants in such an enterprise.
4. Option 4-National Institutions or Firms: Under this option, the need is for one or more well-capitalized and well-managed enterprises with a) an appropriate experienced base, b) initial capacity base, and c) motivation, to permit immediately moving into this new set of diversified market ordering activities.
 - Option 4.a: Under the above criteria, DEXIA would need time and considerably enhanced staffing and resources to expand into this challenging new area of effort. Unless privatized, changing DEXIA from a promotional and test marketing agency to commercial operations would be a return to the "Public Marketing Board" approach that existed for bananas prior to 1986. Consideration should be given to active participation of and support by DEXIA in a VIMOS, especially in terms of market intelligence and analysis requirements, as well as the MOR function of approving and monitoring compliance with market orders.
 - Option 4. b: Each of the agro-industries that might be candidates under this option has its own limitations. DAI and Corona both are seriously under-capitalized and under-managed. DCP recently launched a new cosmetics plant which will require considerable management attention. It's oil and soap activities also have a number of existing management and marketing problems that may seriously compromise its ability to open new fronts.
 - Windward is too small and too focussed on one specialty product to be seriously considered, while Bello, although a solid company, may not have the capital or management base to launch such a large and initially high-risk undertaking. Furthermore, if an agro-industry were to take the lead in the proposed VIMOE, it would not be as likely to welcome substantial involvement of the other participants in the system.

Nevertheless, all of the above-mentioned processing enterprises, as users of non-banana agricultural raw materials, should have a strong interest in supporting and participating in a VIMOE that would stabilize and expand their raw materials supplies.

- Option 4.c: DBMC appears to have the necessary infrastructure to serve as the basis for leading non-banana market ordering activities on a vertically integrated, island-wide basis. DBMC already is experienced in vertically integrated marketing for bananas. Also, in view of the future uncertainty of the U.K. banana market, DBMC should be motivated to diversify its marketing operations to enhance future income opportunities and spread risks. In order for DBMC to take the lead in such an undertaking, it would need to strengthen and expand its management capabilities and would need to have access to additional specialized expertise and resources to assist in developing necessary management capability and to defray start-up costs.

D. Suggested Option

Of the options discussed in the previous section, the option of DBMC serving as the institutional leadership base for organizing the proposed VIMOE offers reasonable prospects of success. However, assigning to the DBMC a leadership role in meeting the diversified crop market ordering challenge is not without risk. Launching such an undertaking requires careful planning and likely should be implemented on a carefully phased basis initially with only 2 or 3 crops. The strategy would be to assist the DBMC to incorporate other business participants in the diversified crops PPM/C system, and, together, to establish all major elements of a vertically integrated market ordering system and enterprise (VIMOS and VIMOE) capable of dealing over time with a range of diversified crops destined to fresh and processed export markets.

The following minimal steps appear necessary to establish a DBMC-led diversified VIMOE.

1. Expand ownership of DBMC to include appropriate "interested parties" to an island-wide diversified VIMOE, as a mechanism for collectively representing their interests. The following "interested parties" would need to become shareholders in the new DBMC-VIMOE if its Board of Directors is to be sufficiently representative to serve as such a "collective bargaining" mechanism:

- Representative Organization of Producers. This likely would require the formation of an island-wide "Agricultural Producers Coalition (APC)" of producer groups/associations representing each diversified crop as it is incorporated into the system. This APC would require a legal status capable of shareholding in the new DBMC-VIMOE. Since such an entity likely would not initially be legally constituted nor have capital to invest in shares, its allocation of shares would need to be put in a trust that in turn receives a check-off (CESS) income based on producer sales, to apply to APC share purchases.

- Export based agro-industries using non-banana agricultural raw materials (e.g., DAI, DCP, Bello, Corona) would need to become shareholders in order to represent their interests on the Board of Directors. Some initial purchases of shares by agro-industries could be expected, but because of their limited available capital, they would be required to make a subscription commitment to future share purchases. These future subscriptions would be paid for through a check-off (CESS) system based on their purchases of raw materials.

- Hucksters, through their Association, would need to be represented on the DBMC-VIMOE Board since they will continue to be an important intra-regional marketing channel. Here again, because of lack of initial investment capital, shares would be placed in trust, using a check-off (CESS) system (based on huckster purchases from the new DBMC-VIMOE for export resale) to pay for shares held for them by the trust.

- Government of Dominica (GOCD), representing the interests of the national economy, through retention of a minority shareholder position in the re-organized DBMC-VIMOE. Consideration might be given to making DEXIA the owner of GOCD-retained shares to assure its active participation in market intelligence and market analysis required for effective functioning of the VIMOS.

Possible share distributions among current and future owners could be:

- GOCD: 30%
- Hucksters Association: 20%
- Producers Coalition 30%
- Agro-industries 20%

This distribution of ownership will permit the new DBMC-VIMOE Board of Directors to be an effective collective bargaining forum, representing the major actors in the overall production, processing, marketing and consumption (PPMC) system, for setting prices, and for determining source and use allocation of supplies.

2. Provide the new DBMC-VIMOE with exclusive marketing rights for approved diversified crops from the farm gate to processors and/or all fresh produce export marketers. Crops to be incorporated would be proposed to the Board for approval only after approval by producers representing that crop. Initially, only two or three crops should be incorporated, until experience is gained and consolidation achieved.

3. Provide a Processing/Marketing Diversification (PMD) Fund available to the new DBMC-VIMOE to cover costs of start-up in marketing new crops. Resources for the PMD Fund could come from

a) a portion of profits flowing from banana marketing operations (especially any fees or export duties that might be imposed to neutralize the distorting price effect of the U.K. subsidy), b) a portion of the AID-ESF Grant (both US dollars and local currency generations), and c) funds received from the check-off (CESS) for buying shares held in trust.

4. Expand the existing DBMC management team to include a diversified commodity general marketing manager, plus appropriate crop-specific marketing operations managers. These would initially be paid from the PMD Fund through a management contract with a management firm (and/or with IESC or the AID supported "Project Sustain").

5. Utilize the PMD Fund for initial equipment purchases required to assemble, transport, grade and temporarily store diversified products to be marketed.

6. Institute a strict grading system and provide vertically integrated on-farm production and post-harvest related services as needed for approved diversified crops.

Several modifications of the above scenario might be envisioned. For example: 1) DEXIA and DBMC might be merged into a single mixed private-public corporate entity; 2) initially, until appropriate feasibility studies are completed and structural and organizational changes are in place, an ad hoc "Representative Committee" could be established in lieu of the new DBMC-VIMOE Board of Directors to issue Market Orders for pricing, allocation of supplies, etc., of diversified crops selected for initial inclusion. This Committee might receive staff support in market intelligence and analysis from DEXIA. It should be kept in mind, however, that the longer the delay in implementing the final model, the greater the chances are of never achieving a fully functioning VIMOS.

VIII. SUMMARY OF BASIC FUNCTIONS STRUCTURE AND
CHARACTERISTICS OF PROPOSED VIMOS AND VIMOE

The following schematics and listings provide a consolidated portrayal of the basic functions, structure and other characteristics of the VIMOS and the VIMOE, as well as the inputs required from groups and institutions involved in its implementation.

1. DIVERSIFICATION: VERTICALLY INTEGRATED MARKET ORDERING SYSTEM (VINOS)

A. Market Order Regulatory (MOR) Functions

- Institutions - Responsibilities

- 1. **DERIA:**
 - a) MARKET ORDER COMPLIANCE
 - b) MARKET ANALYSIS
- 2. **MOA**
 - a) SANITATION (Plant/animal)
 - b) LAND USE/conservation
 - c) SUPERVISION/BACKSTOP MONITORING OF PRODUCTION SERVICES

B. Commercial Operations (CO) Functions

- Institution

VERTICALLY INTEGRATED MARKET ORDERING ENTERPRISE (VINOE)

- Responsibilities

- 1. **MARKETING FUNCTIONS:**
 - a. **EXCLUSIVE CHANNEL FOR FARM-TO-MARKET EXPORT PRODUCE:**
 - 1) PURCHASE FRESH PRODUCE FROM FARMERS
 - 2) SELL FRESH PRODUCE TO:
 - FRESH PRODUCE EXPORTERS
 - PROCESSORS
 - b. **GRADING AND PRICING**
- 2. **PRODUCTION AND POST-HARVEST SERVICES (paid by CESS).**
 - a. **Producer inputs supply**
 - b. **Extension services to producers:**
 - Crop Specialists
 - Farm management services
 - Post-harvest handling services
 - c. **Market Information - Grading and Quality Control**
 - d. **Transport - Farm to buying depot/processor**
 - e. **Farm operations services: e.g., Coconut husking, crew harvesting, pruning, pest management, etc.**
 - f. **Disaster insurance.**

JOINT REPRESENTATIVES

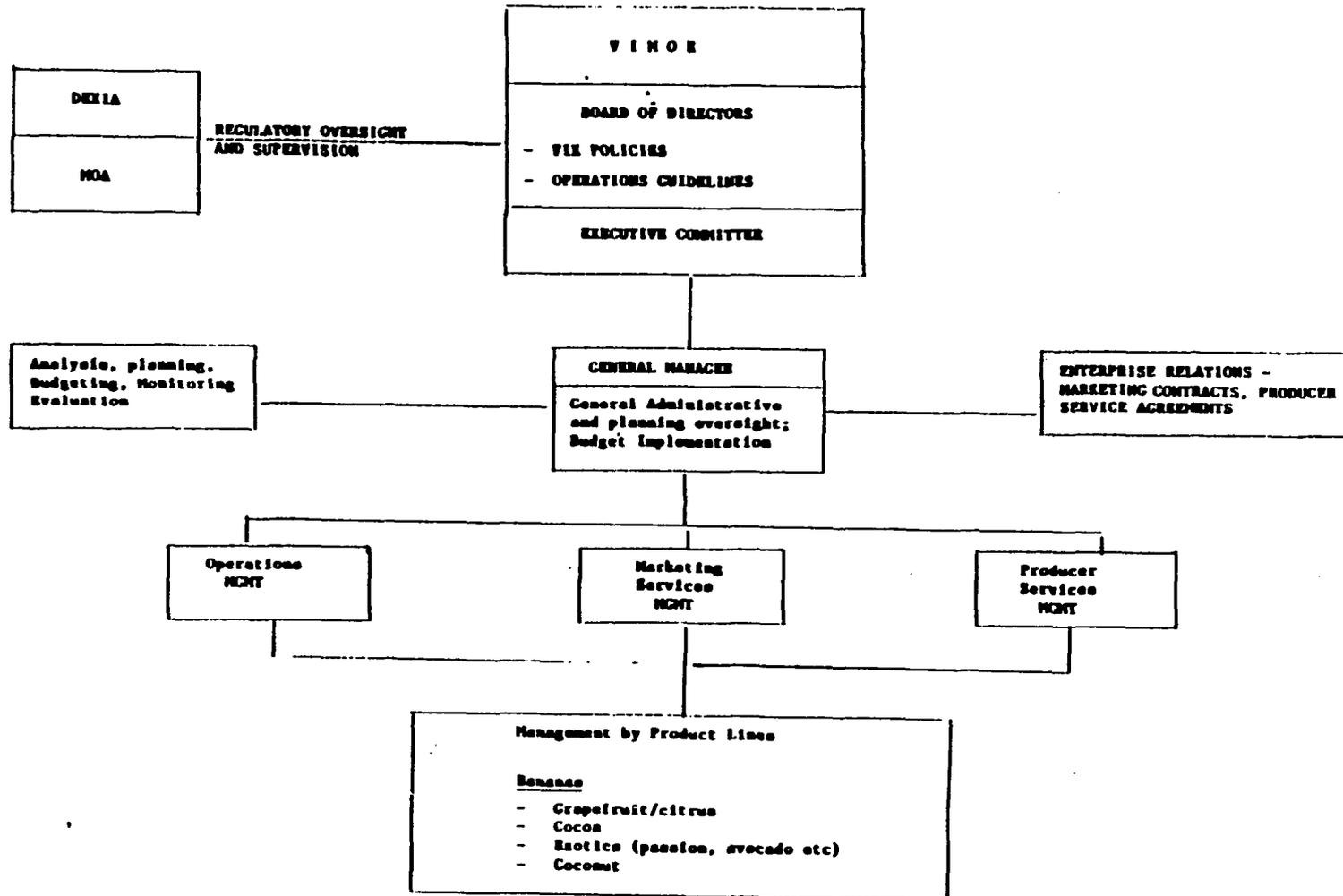
- a. **ESTIMATE SUPPLIES, FRESH EXPORT DEMAND AND PROCESSING DEMAND (BREAKVEN AND TOTAL CAPACITY).**
- b. **ESTIMATE EQUILIBRIUM PRICES, BREAKVEN PRICES, ELASTICITIES.**
- c. **DETERMINE PRICES TO BE PAID, LEVELS OF CESS FOR SERVICES AND FOR SHARE PURCHASES.**

197

VIII-IV.: - ORGANIZATIONS AND ROLES IN VINUS

A. MARKET ORDER REGULATION (MOR)

B. COMMERCIAL OPERATIONS (CO)



100

VIII-III: SOURCES AND TYPES OF CONTRIBUTIONS
TO ESTABLISH AND IMPLEMENT VIMOS

- A. GOCD IN-KIND AND SERVICES CONTRIBUTIONS, through:
1. DBMC ASSETS (in exchange for shares in Vertically Integrated Market Ordering Enterprise-VIMOE):
 - Physical infrastructure.
 - Management and operations knowhow for vertically integrated marketing.
 - Operating systems, perscnnel, goodwill.
 2. DEXIA CAPABILITIES:
 - Approve, Assist, Monitor and Evaluate Execution of Commercial Operations Guidelines and Market Orders.
 - Provide Market Intelligence.
 - Provide Analytical Capability (economic analysis of markets, prices, supply/demand).
 - Carry Out Test Marketing and Provide Storage/Warehousing Facilities.
 - Access Technical Assistance in Marketing.
 3. MINISTRY OF AGRICULTURE (MOA):
 - Provide backstopping and support services to production subsystem: plant material; access to subject matter specialists (via CARDI, UWI, etc).
 - Supervisise/monitor private sector crop specialist services and other specialist services.
 - Prepare and distribute audio-visuals and extension materials.
 - Oversee compliance with sanitary controls and regulations.
 - Supervisise/monitor land/water conservation and use.
 - Provide crop promotion/publicity.
 - Test/demonstrate appropriate equipment/machinery testing/demonstration.
 6. OTHER CONTRIBUTIONS VIA CABINET/PARLIAMENT AND OTHER GOCD OFFICES.
 - a. Legal arrangements for:
 - Establishing VIMOS and VIMOE.
 - Authorizing DEXIA as the regulatory, approval and supervisory agency for Market Orders.
 - b. Resources (manpower, financial, etc.).
 - c. Promotion, public education.

B. ESF CONTRIBUTIONS (yr. 1: US\$1.0 million)

(yr. 2: proposed US\$1.0 million)

1. GOCD-CONTROLLED FOREIGN EXCHANGE (yr. 1: US\$1.0 million)
(yr. 2: US\$1.0 million)
 - Equipment for diversified crop production, processing, marketing (PPM) system, including VIMOE and the Cocoa Fermentary and Marketing Enterprise (CFME).
 - Contract management for:
 - a) VIMOE.
 - b) CFME.
 - c) Trust ownership account (see below).
 - d) Revolving funds (see below).

2. GOCD CONTROLLED LOCAL CURRENCY (yr.1: EC\$2.7 million)
(yr.2: EC\$2.7 million)
 - GOCD equity participation (i.e., purchase shares) for operating/working capital in:
 - a) VIMOE.
 - b) CFME.
 - Initial contribution to Processing and Marketing Diversification (PMD) Fund (See V,B, below).
 - Initial contribution to Diversified Agricultural Export and Food Security Production and Productivity Enhancement (PPE) Fund (See V,C, below).
 - Analyze, develop and implement an Agricultural Export and Food Security Diversification Program (ADP).
 - MOA budget enhancement for implementing ADP program.
 - Plant propagation station rehabilitation (perhaps as part of ADP program (funds could flow through PPE fund).
 - Site, equip, construct and provide start-up capital for CFME (funds could flow through PMD Fund).
 - Planning and start-up capital for VIMOE (Funds could flow through PMD Fund).

C. AGRICULTURE VENTURE TRUST (AVT) CONTRIBUTIONS

1. Temporary equity shareholder (34%) in VIMOE.
2. Temporary equity shareholder (39%) in CFME.

D. OTHER DONOR CONTRIBUTIONS (CIDA, U.K, EEC, etc.)

- Technical assistance.
- Training.
- Equipment and construction.
- Marketing contracts.
- Local currency enhancement of PMD and PPE funds.

VII-II.: - OWNERSHIP AND ORGANIZATIONAL STRUCTURE OF VIMOE*

Shareholders:

Initial Ownership

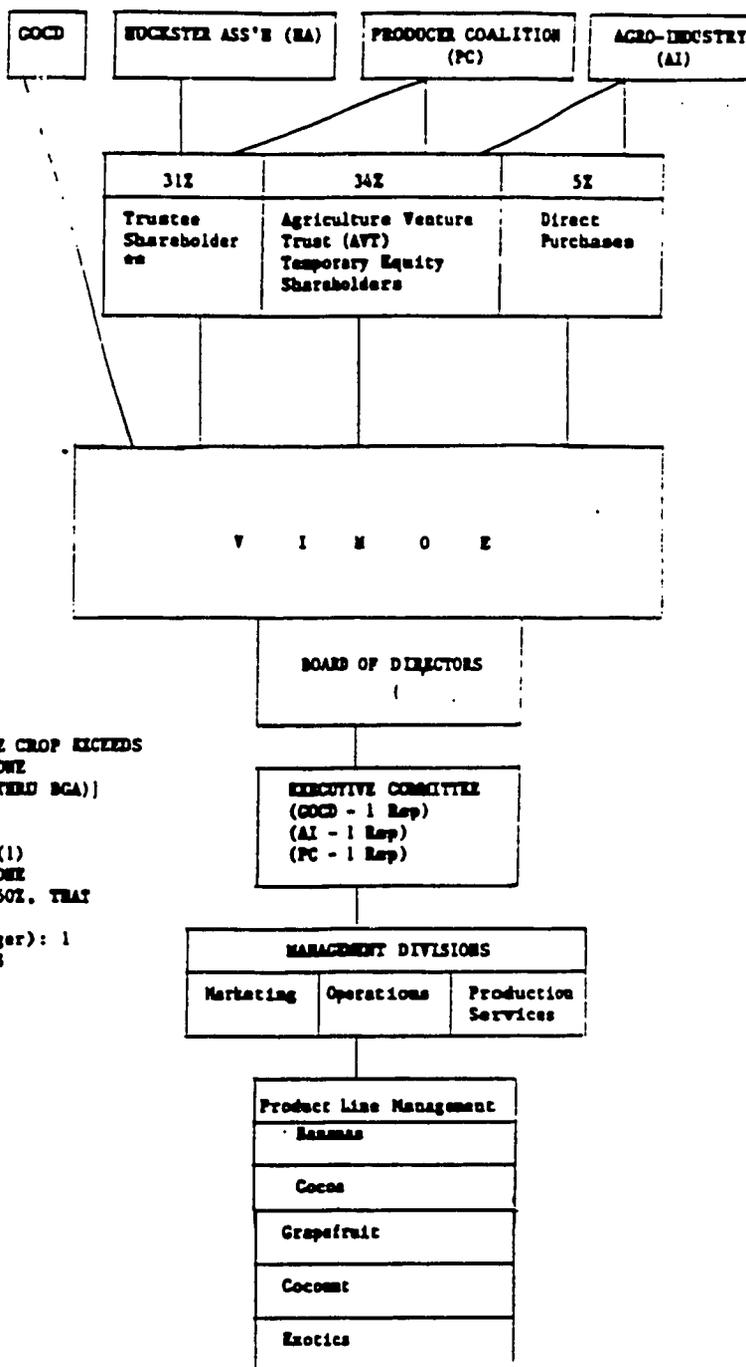
- A. GOCD - DEKIA: 30%
- B. Trustee for:
 - NA - 20%
 - PC - 21%
 - AI - 15%
- C. AVT - 34%
- D. AI - 5%

Final Ownership

- A. GOCD - DEKIA 30%
- B. NA - 20%
- C. PC - 30%
- D. AI - 20%

BOARD OF DIRECTORS

- A. GOCD: 3
 - DEKIA: (1)
 - NDA: (2)
- B. NA (TRUSTEE): 2
- C. PC (TRUSTEE): 3
[IF MARKET VOLUME OF ONE CROP EXCEEDS 30% THAT CROP ELECTS ONE DIRECTOR (e.g., BANANA THEN BGA)]
- D. AI: 2
 - TRUSTEE: (1)
 - DIRECT OWNERSHIP - (1)
- E. VIMOE (General Manager): 1
- F. TOTAL - 11 DIRECTORS



* GOCD receives shares in VIMOE in exchange for in-kind and cash transfers to VIMOE, as follows:

A. From DMIC assets:

- 1) Physical infrastructure (e.g., buying depots, vehicles, office equipment).
- 2) Operational know-how in vertically integrated systems.
- 3) Personnel and operating systems.

B. From ESP and other donor contributions:

- Foreign exchange and local currency generations from ESP (cash contributions).

** Part of GOCD shares are transferred to a trustee shareholder, for benefit of the Hucksters association and producers coalition, who gradually pay for shares through a CESS.

VIII-V.: SPECIAL FINANCIAL ELEMENTS OF VIMOE

A. OWNERSHIP TRUST ACCOUNT (OTA)

1. Purpose: Serve as depository and manager for VIMOE (and possibly CFME) shares to be purchased by diversified (private) shareholders.
2. Functions:
 - Initial majority ownership of shares in VIMOE and CFME to qualify for AVT participation.
 - Hold shares in trust for benefit of proposed diversified (private) shareholders of VIMOE and CFME.
 - Contract with VIMOE, CFME and proposed diversified shareholders for collection and reception of share purchase CESS (i., e., 5%-10% of volume of business done with diversified shareholders).
 - Administer CESS income for benefit of proposed diversified shareholders:
 - a. buy AVT shares.
 - b. Pay GOCD for shares transferred to trust.
3. Trustee Options:
 - International Commercial Bank.
 - NDFD.
 - Regional Organization.
 - Individual.
4. GOCD Role:
 - Transfer to trustee ownership of a majority of total shares issued by VIMOE and/or CFME, (from shares received in exchange for in-kind and cash transfers).
 - Receive promissory note from trustee in name of proposed diversified shareholders, with pledge of income shares as security for repayment to be amortized from CESS based on specified formula.
 - Facilitate sourcing disaster insurance to cover Acts of God.

B. PROCESSING AND MARKETING DIVERSIFICATION (PMD) FUND.

1. Purpose: Revolving fund to receive and disburse funds to cover costs of private sector-based, vertically integrated diversified market ordering enterprise (and for subsidiaries or related enterprises such as CFME) feasibility, analyses, planning, design and start-up. Eligible costs would be cash flow deficits prior to reaching breakeven volumes.

2. Initial Funding: ESF local currency.
3. Continuing Source of Funds:
 - a. CESS (5%_10%) on all sales to and purchases from VIMOE, e.g.,:
 - Sales by farmers.
 - Purchases by fresh exporters.
 - Purchases by processing firms.
 - b. Future contributions by external donors, GOCD.
4. Governing Board: one representative each from:
 - VIMOE
 - DEXIA
 - GROWERS COALITION.

C. PRODUCTION AND PRODUCTIVITY ENHANCEMENT (PPE) FUND:

1. Purpose: Revolving fund to receive and disburse resources to cover costs of a production-based producer assistance program to increase diversified (both for export and for internal markets) agricultural output and improve their productivity. Eligible costs include plant propagation materials, tree crops rehabilitation, new plantings and maintenance costs until harvesting begins, production services (e.g., technology transfer, spraying, pruning, harvesting, breeding stock supply, etc.).
2. Initial Funding: ESF local currency.
3. Continuing Source of Funds:
 - a. CESS of 5%_10% discounted from all sales to VIMOE and CFME by assisted producers.
 - b. CESS to cover all inputs and services costs after harvesting begins.
 - c. Future contributions by other donors, GOCD.
4. Governing Board: one representative from Producers Coalition; two representatives from MOA.

VI. COCOA FERMENTARY AND MARKETING ENTERPRISE (CFME) OWNERSHIP AND OPERATION OPTIONS TO BE CONSIDERED.

A. Option One: 1) Initial site, construction and equipment provided by GOCD, using ESF resources for cash costs, 2) GOCD signs long term lease (e.g., 99 yrs.) with VIMOE to manage and operate the facility, with start-up operating/working capital coming from the PMD Fund.

B. Option Two: 1) Initial site, construction and equipment provided by GOCD (using ESF Funds for cash costs) to VIMOE in exchange for VIMOE shares, 2) CFME constituted as share company with VIMOE as majority shareholder, 3) AVT becomes temporary equity investor/shareholder to provide start-up operating/working capital, 4) cocoa producers form an Association and establish a CESS on sales of cocoa to CFME to purchase the AVT shares.

XI. SUGGESTIONS FOR USAID ASSISTANCE.

A. Strategy

Given existing pressures on traditional markets and the considerable competition faced in most non-traditional markets, the USAID strategy should recognize that there are limited prospects for rapid transformation. Rather, the strategy should be to assist in 1) retaining traditional products and markets to the extent that improved productivity permits, and 2) in achieving steady growth over the longer term in non-traditional and specialty products and markets.

More specifically, the conclusion to be drawn from the preceding assessment report is that USAID assistance should support the GOCD and private sector in motivating farmers to shift their focus, and a greater share of their land, labor, capital and management resources, from export bananas (currently a sure thing) to other export crops (currently ripe with uncertainties and risks). That can be achieved by making non-banana processing and marketing sub-systems competitive with the banana marketing sub-system, in terms of producers' 1) ease of market access, 2) relative price levels and stability, and 3) risk levels. Only then can one expect farmers to shift a greater proportion of their attention and their resources to other crops.

To make the non-banana processing/marketing sub-systems competitive Dominica needs external assistance in implementing the following:

1. Institutional

Organizational restructuring and staffing required to achieve vertical integration and market order in the system from the farm gate through wholesale in a way that permits effective management of the market-dictated relationships between fresh and processed supply and demand, and efficient provision of a range of PPM services that are amenable to economies of scale and specialized management.

2. Functional

In order for organizational restructuring and staffing to achieve its objectives, attention must be given to improving the following interactive functional areas: a) reduce unit costs of production while improving product quantity and quality, b) improve post-harvest handling to reduce handling costs and to preserve the quality produced, c) improve quality and efficiency of both internal and external transportation to reduce costs, and d) improve timeliness of supplies to be more responsive to market signals.

Although quality control begins at planting time, and is a function of production technology and production management until

harvest, the rest of the PPMC system can preserve the value of the quality produced. Thus, if a quality product can be produced, the marketing system must be able to preserve that quality as the product moves through the system as well as send appropriate price signals back through the system to the farmer so he knows that high quality production is rewarded and low quality is discounted.

When the elements of the system from the farm gate upward to the final market can properly handle and aggressively sell quality products, the farmer then can be expected to not only accept, but seek out, technical information and technological changes that improve quality. Thus, alleviation of constraints in the marketing processing sub-systems must be achieved before (or at least parallel with) efforts to improve on-farm quality.

B. Specific Areas Recommended for Assistance

High priority assistance needs aimed at alleviating constraints that cut across diversified product lines are recommended below in order of relative priority.

1. Market Ordering and Marketing technology - Vertical integration of output marketing, input marketing and other farmer services, including technology transfer:

- a. Technical assistance for the design and start-up of a vertically integrated market ordering system and enterprise (i.e., the proposed VIMOE) and VIMOE;
- b. Management assistance during start-up;
- c. Equipment;
- d. Management and technical training.

2. Appropriate Mechanization and Labor Productivity - Testing and demonstration of equipment and tools appropriate to small and steep slope farms:

- a. Technical assistance;
- b. Demonstration equipment.

3. Management and Skills Training and Management Support

- a. Farm management training for agricultural technicians and professionals;
- b. Farm management skills training program for farmers and farm youth;

- c. Marketing, financial and business management skills training for marketing and processing personnel
 - d. Processing operations management skills training
 - e. Technical assistance and management contracts through IESC and Project Sustain.
- 4. Capital investment
 - a. Multi-purpose access roads
 - b. Equipment and start-up of cocoa fermentary.
 - c. Appropriate production equipment/machinery
 - d. Off-shore short-term training and apprenticeships
 - 5. Land Use and Conservation
 - a. Technical assistance to review data and mapping base for identifying on-farm land use suitability, and assistance in generating any further data and maps needed.
 - b. Technical review and dialogue on pros and cons for options in land use policy instruments
 - 6. Market information - additional technical assistance and training.

A few crops with especially attractive comparative advantage and market niche potential, especially for export but also for the internal market, should be selected for assistance.

- 1. Cocoa - for high flavored guaranteed markets, in production, processing and marketing activities. This may require short-term technical assistance, resources for construction and start-up, and management training.
- 2. Passionfruit - there are both production and marketing problems to be solved. Needs are for short-term technical assistance and training.
- 3. Avocado and Mango - Improved cultural practices and market development. Short-term technical assistance and training are required.

4. Specialty market products; e.g., organically-grown products, exotic and fruits products, unique flowers/ornamentals:

- a. Market and production analysis
- b. Identification of and encouragement to product "champion(s)"
- c. Start-up short-term technical and management assistance

5. Training of crop specialists and farmer assistants for crops selected.

6. Specific Import Substitution Opportunities

- a. capital investment in breeding stock (goats, sheep, pigs, cattle).
- b. Technical assistance in organizing MOA-assisted farmer-owned breeding herds and distribution systems.

C. Considerations related to sources and applications of USAID resources.

Only limited USAID resources are available for assistance in the recommended areas. Additionally, it is not feasible for USAID to initiate new projects because of present and even more severe future staff limitations for project management.

In terms of USAID resources, except for limited country specific resources now committed to regional projects (e.g., Agricultural Research and Extension - AREP; Tropica Produce Support - TROPRO; Agriculture Venture Trust - AVT), the only other funding that may become available in the short-term to assist Dominica in its agricultural diversification efforts are US\$1.3 million of Economic Support Funds (ESF).

If the USAID and the GOCD were to agree, these ESF funds could be targeted to determine feasibility, carry out design and provide start-up resources for the proposed VIMOS and VIMOE, as well as to fund other activities recommended in previous sections.

Local currency costs involved can be budgeted from ESF funds by the GOCD. However, since it is proposed that the VIMOE be a majority private sector institution, it is likely that special legislation would be required, e.g., establishment of the proposed PMD Fund that can be utilized by the VIMOE to pay initial start-up costs.

Foreign exchange needs such as short-term technical assistance, commodities procurement and off-shore training, as well as some local currency inputs such as in-country training and, initially perhaps, local short-term professionals (crop specialists and some local management expertise) could best be managed within a project context. This could assure maintaining focus, timeliness and complementarity.

In order not to add to the USAID project management and administrative burden, it is recommended that these resources be channelled through OECS/ADCU the TROPRO Project, given the high correlation between the purposes and objectives of TROPRO and the recommended areas for assistance to Dominica in improving the diversified crops PPMC system.

More specifically, the purpose of TROPRO is to increase "capacity to produce and market non-traditional agricultural export commodities through provision of supporting infrastructure, technical assistance and hands-on training. Specific Project foci address: 1) product quality and quantity, 2) post-harvest handling, 3) transportation, and 4) market knowledge. This purpose and foci correlate well with the high priority production and marketing linked diversification problems and recommended solutions indicated in this assessment.

General categories of ESF resource needs for Agricultural diversification purposes are estimated as follows:

	<u>US\$</u>
1. GOCD local currency transfer to proposed diversification financing (PMD and PPE Funds)	1.0 million
2. Projectized funds to OECS/ADCU under TROPRO	
a. Short-term external and local technical assistance (for feasibility, design and initial start-up)	100,000
b. Technical and management training	80,000
c. Field operations	80,000
d. OECS management and local operating costs	40,000
TOTAL:	US\$1.3 million

APPENDIX A

STATISTICAL TABLES

TABLES 1 THROUGH 14

TABLE 1-

DOMINICA: STRUCTURE AND PERFORMANCE OF THE NATIONAL ECONOMY ^{1/}

	1985	1986	1987	1988	1989	(Estimated) 1990
1. Population (estimated)	83,000			85,000		87,000
2. Economically active population (EAP)						40,000
3. GDP in BCS MN at constant factor cost and 1977 prices	110.0	117.5	125.5	135.4	133.5	
4. Agricultural sector contribution to GDP (%)	27.9	30.3	29.3	30.9	28.3	30.0
5. Unemployment (% of EAP)	20.0					10.0
6. Balance of visible trade (BCS MN)						
- Exports	76.8	117.2	129.6	150.0	121.7	158.2
- Imports	149.4	150.7	179.2	236.3	289.1	310.5
- Balance of trade	(-72.6)	(-33.5)	(-49.6)	(-86.3)	(-167.4)	(-152.3)
7. Net private transfers and (as % of GDP)	6.6	8.2	8.5	8.0	12.3	13.3
8. Consumer price index (annual % change)	5.4	3.0	3.0	1.5	6.3	3.0
9. External public debt (US\$ MN at end of year)	47.7	54.0	64.9	64.4	69.6	73.3
10. Debt service/export of goods and NFS	11.2	9.1	11.1	11.4	11.3	
11. Public sector current finances (BCS MN)						
- Current revenues (excluding grants)	139.6	137.0	162.4	170.6	172.0	180.7
- Current expenditures	87.8	91.9	101.7	108.9	118.0	132.4
12. Public sector Capital expenditures	43.8	31.7	50.3	76.6	78.7	
13. Foreign grants						
- BCS millions	38.4	19.1	29.0	23.5	30.3	23.9
- As % of GDP	13.4	5.9	7.9	5.8	6.9	6.9
14. Concessional debt (as % of total)	73.3	77.8	83.3	89.5	94.3	96.5
15. Commercial bank deposits	140.3	171.8	208.0	249.7	269.4	
16. Commercial bank loans	117.5	115.7	109.8	143.5	190.1	
17. Commercial bank loans to agriculture/fishing (% of total)	4.4	2.4	3.0	3.1	3.0	
18. Real per capita GDP (annual % change)		6.8	6.8	8.0	-1.5	
19. Per capital GDP BCS			3,960		5,144	
20. Minimum wage (BCS/day)						16.00
21. Public sector investment (% of GDP)	16.6	10.7	13.0	13.1	21.3	18.9

^{1/} Prepared by the author from official and unofficial sources, April, 1991.

TABLE 2-
DOMINICA: ESTIMATED LAND USE BY CROP,
1988 AND 1990, IN ACRES

<u>CROPS</u>	<u>1988^{1/}</u>	<u>1990^{2/}</u>
1. Coconut	16,000	19,000
2. Bananas	15,000	20,000
3. Grapefruit	3,715	13,000
4. Dashees	2,500	2,875
5. Oranges	1,400	3,134
6. Limes	1,200	1,150 ^{1/}
7. Tannia	1,200	720
8. Mango	1,100	1,100
9. Coffee	893	900
- Seberica	600	600
- Arabica	(202)	(270)
10. Cocoa	(398)	(330)
11. Avocado	450	400
12. Bay	350	230
13. Plantain	300 ^{4/}	2,000 ^{4/}
14. Passionfruit	250	450
15. Pumpkin	150	273
16. Cassava	126	N/A
17. Irish potato	7,100	100
18. Hot pepper	25	33
19. Yam	25	N/A
20. Sweet potato	N/A	1,055
21. Ortiniques	N/A	200
22. Anthuriums	N/A	152
23. Tangerines	N/A	150
24. Ginger	N/A	50
25. Lucky Lily	N/A	13
26. Aloe vera	N/A	10
(Cereal grains)	N/A	110
27. (Sugar crops)	(Estimated at 100)	
(Legume crops)		
28. Other crops ^{3/}	N/A	N/A
	(Estimated at 350)	
29. Gross acreage in crops: 41,784 to 52,946 acres (1988 and 1990 estimates respectively).		

- ^{1/} OECS, "The Windward Islands - Agricultural Profile of Dominica for 1988"
- ^{2/} Information gathered by Dr. Clarence Dunn, FAO expert assisting the GOCD in the preparation of their Agricultural Sector Plan for 1992-95, April, 1991.
- ^{3/} Minor or unspecified amounts of the following crops also are produced: other fruits and vegetables, other flowers/foliage, spices such as cinnamon, cloves, nutmeg, vanilla, etc.
- ^{4/} 300 acres (although considered to be low) probably refers to acres harvested, while 2,000 acres is the estimated gross area with bay trees.

TABLE 3
DOMINICA: ESTIMATED LAND IN FARMS - DISTRIBUTION
AND USE 1991 ^{1/}

1. Land in farms		40,000 acres ^{2/}	
2. Number of farms		10,000 ^{2/}	
3. Major Crops	<u>Acres planted ^{3/}</u>	<u>Acres Intercropped ^{7/}</u>	<u>Acres</u>
a. Coconuts	19,000	75	14,250
b. Bananas/plantain	13,500	70	9,450
c. Grapefruit	2,800	70	1,960
d. Bay trees	2,000	70	1,400
e. Other permanent crops	3,600	80	2,880
f. Poots/tubers	5,600	50	2,800
g. Other seasonal crops	1,500	30	450
4. Gross acreage ^{10/} farmed	48,000	N/A	N/A
5. Estimated net acreages farmed			
a. Intercropped ^{5/}			14,250
b. Pure stands ^{9/} (not multi-cropped) ^{6/} ^{8/}			10,400
c. Pure stands ^{9/} (multi-cropped)			350
Total net acreage ^{11/} farmed			25,000
Forests, unutilized lands and wastelands in farms			15,000
Total land in farms			40,000

- Footnotes:
- ^{1/} Prepared by author based on official and unofficial sources, April, 1991.
 - ^{2/} From table compiled by Peter Oldham, IEO, Dominica, April, 1991 (derived from National Farms Register).
 - ^{3/} From information provided in Table 2.
 - ^{4/} Percentages based on opinions of experts in the Dominica Ministry of Agriculture, April, 1991.
 - ^{5/} Assumed to be equal to the largest individual crop intercropped acreage (coconuts).
 - ^{6/} Residual percentage of cropped area not intercropped or multi-cropped.
 - ^{7/} "Intercropped" means two or more crops interspersed within the same land area.
 - ^{8/} "Multi-cropped" means short season crops planted and harvested two or more times from the same land area in the same year.
 - ^{9/} "Pure stands" means not intercropped.
 - ^{10/} "Gross acreage" is the sum of acreages planted to each crop, without adjustment for intercropping.
 - ^{11/} "Net acreage" is the actual land surface covered by all crops, after adjusting for intercropping.

TABLE 4-

DOMINICA: APPROXIMATE LAND DISTRIBUTION BY CURRENT AND PREFERRED USE ^{1/}

	<u>Acres</u>
<u>Total land mass</u>	195,000
<u>A. Current situation</u>	
1. <u>Land in farms</u>	40,000
a. not in crops ^{2/}	(15,000)
b. Planted to permanent and seasonal crops ^{2/}	(25,000)
2. <u>Land in Forest Reserves/National Parks</u>	45,000
3. <u>Other forest vegetation</u>	75,000
4. <u>Urban/settled uses</u>	4,000
5. <u>Other not in farms</u> <u>(includes wasteland areas covered by water)</u>	31,000
<u>B. Preferred use based on suitability</u>	
<u>Land in farms</u>	45,000
- Conservation agro-forestry/wasteland	(20,000)
- Cultivated permanent and seasonal crops	(25,000)
<u>Forest/Conservation Reserve/National Parks</u>	45,000
<u>Other conservation uses</u>	24,000
<u>Managed production forest</u>	50,000
<u>Actual and projected urban/settled uses</u>	6,000
<u>Other (includes wasteland and areas covered by water)</u>	25,000

^{1/} Prepared by author in April, 1991 based on official and unofficial sources, especially the draft "Assessment of the Agricultural Sector of the Commonwealth of Dominica, Ministry of Agriculture" (written by Raymond Austrie), January, 1991.

^{2/} From Table 3.

**TABLE 5- DOMINICA: EXTENT OF LANDS IN FARMS BY DISTRICT,
FARMERS, ACREAGE AND TENURE, 1990 ^{1/}**

District	SELF-OWNED		FAMILY OWNED		RENTED		SQUATTED		OTHER		TOTAL ACREAGE					
	No.	Parcel	No.	Parcel	No.	Parcel	No.	Parcel	No.	Parcel						
1.	454	1,028	295	476	290	442	860	308	13	49	13	12	13	12	2,833	
2.	378	1,752	201	354	791	276	159	285	134	18	45	17	9	21	9	2,894
3.	434	1,614	329	426	1,147	351	330	901	277	63	260	57	25	114	25	4,035
4.	205	739	94	2	8	2	13	27	11	2	3	1	457	1,558	213	2,334
5.	412	1,156	291	163	851	133	109	587	169	98	246	85	1	1	1	2,842
6.	137	396	93	51	106	39	37	87	33	16	65	16	8	13	6	667
7.	278	1,046	178	302	474	194	78	114	61	61	147	47	20	49	19	1,829
8.	298	542	165	271	377	171	52	89	40	25	27	18	21	18	21	1,053
9.	357	484	162	259	316	140	155	168	122	93	103	75	4	4	4	1,074
10.	221	402	152	210	934	157	523	735	372	22	23	17	34	28	34	2,122
11.	138	557	110	117	531	98	151	398	134	38	73	33	6	345	6	1,904
12.	329	1,048	289	265	509	233	301	314	264	165	286	140	21	83	18	2,240
13.	155	1,142	135	38	141	34	51	94	39	37	43	28	22	966	18	2,385
14.	175	910	119	183	588	115	21	53	20	42	827	33	2	3	2	2,380
15.	49	309	34	40	115	28	26	87	18	41	133	32	4	2	4	647
16.	116	836	107	154	605	135	51	192	47	23	63	23				1,696
17.	290	1,049	188	363	896	269	99	141	86	6	10	6	7	6	5	2,102
18.	163	634	116	170	466	128	100	1,050	92	20	36	19				2,186
19.	227	817	180	227	438	195	174	363	148	102	405	86	23	320	23	2,342
20.	151	313	78	121	273	75	64	88	44	1	1	1	7	13	7	688

Totals:

4,967 16,772.3 3,396 4,192 10,449.3 3,063 3,016 6,630.9 2,419 886 2,843.1 747 683 3,553.9 427 40,250

Percentage: 42% 34% 26% 31% 16% 24% 7% 7% 9% 4% 100%

Total plots 13,744 Average farm size is 4.0 acres
 Total acreage 40,250 acres Average plot size is 2.9 acres
 Total farmers 10,052

^{1/} Source: Data compiled by Peter Oldham, BDD, based on National Farmer Register.

**TABLE 6: DOMINICA: APPROXIMATE LAND IN FARMS - ESTIMATED
DISTRIBUTION BY NUMBER AND SIZE OF FARMS, 1991 ^{1/}**

<u>Size category</u>	<u>Farms</u>		<u>Acreage</u>		<u>Average farm size</u>
	<u>Number</u>	<u>%</u>	<u>Acres</u>	<u>%</u>	
Less than 5 acres ^{2/}	7,900	79	14,000	35	1.8
5 to 20 acres ^{2/}	2,000	24	16,000	50	8.0
20 to 100 acres ^{2/}	90	0.9	4,800	12	53
100 to 1000 acres ^{3/}	10	0.1	5,200	13	520
Over 1,000 acres ^{3/}		0	0	0	0
TOTAL:	10,000²	100	40,000	100	4.0

^{1/} Based on 1976/77 agricultural census data, with adjustments for changes to date based on opinions of knowledgeable persons.

^{2/} 1976/77 agricultural census showed 7,922 farms of which 5,940 were under 5 acres in size. It is estimated that another 2,000 farmers have been settled on former estates with an average size farm of 4,00 acres. It also is assumed that subsequent sub-divisions and consolidations of farms have been approximately equal.

^{3/} Based on information from knowledgeable persons in Dominica.

TABLE 7-
DOMINICA: GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY, AT FACTOR COST
In Constant Prices (EC\$ million), 1977 to 1989

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Agriculture	31.93	35.31	24.16	21.66	28.92	29.99	29.84	21.47	30.68	36.50	38.34	40.65	35.45
Crops	27.04	30.57	19.97	17.82	26.82	21.55	21.57	22.86	21.25	28.88	28.44	30.45	25.20
Livestock	1.12	1.12	1.34	1.44	2.14	2.32	2.51	2.39	3.32	3.49	3.39	1.70	3.81
Forestry	1.41	1.41	1.58	1.69	2.54	2.60	2.69	2.55	2.20	2.13	2.17	2.21	2.25
Fishing	2.36	2.41	1.20	3.34	3.42	3.12	3.16	2.57	3.82	4.00	4.12	4.29	4.19
Mining & Quarrying	1.04	1.06	0.72	0.72	0.74	0.80	0.79	1.09	0.97	0.92	1.12	1.28	1.28
Manufacturing	4.24	5.85	4.85	6.20	7.30	8.57	8.74	7.87	8.90	9.28	9.83	10.83	12.06
Electricity & Water	1.80	1.92	1.65	1.67	1.81	1.83	1.78	2.12	2.27	2.40	2.57	2.74	2.94
Construction	5.43	5.41	6.64	11.90	10.18	8.75	8.76	11.64	10.37	8.75	9.86	12.88	12.00
Wholesale & Retail Trade	9.81	11.38	8.85	11.46	12.40	12.05	11.82	11.70	13.88	14.37	16.00	17.20	15.13
Hotels & Restaurants	1.13	1.33	0.99	0.90	0.87	0.96	1.19	1.13	1.09	1.23	1.25	1.26	1.56
Transport	4.34	4.63	4.21	4.46	3.74	4.28	3.77	6.76	6.75	7.46	7.89	8.62	8.40
Road Transport	3.43	3.97	3.31	3.60	2.74	3.26	4.66	4.88	5.34	6.09	6.33	6.84	6.65
Sea Transport	0.60	0.80	0.97	0.66	0.81	0.81	0.88	1.01	0.97	1.11	1.27	1.44	1.43
Air Transport	0.23	0.26	0.21	0.20	0.19	0.21	0.23	0.25	0.24	0.26	0.27	0.34	0.32
Communications	1.09	1.27	1.28	1.40	1.74	1.96	2.13	2.23	2.47	2.75	3.00	4.10	4.36
Banking & Insurance	3.88	4.74	3.23	3.64	3.77	3.88	3.83	3.95	6.25	6.44	6.78	7.34	7.82
Real Estate & Renting	4.90	5.82	3.81	3.52	3.62	3.71	3.82	3.88	3.94	6.04	6.13	6.31	6.30
Government Services	16.86	19.26	20.28	21.89	21.93	22.97	22.93	22.79	23.97	24.21	24.82	25.56	25.87
Other Services	1.88	1.89	0.93	1.09	1.10	1.17	1.19	1.21	1.23	1.27	1.31	1.36	1.44
Less Imputed Service Charge	2.64	3.29	3.63	3.28	3.28	3.61	3.65	3.78	3.97	4.09	4.29	5.28	3.52
TOTAL	84.84	95.00	71.17	92.23	98.12	108.45	102.57	108.15	109.78	117.38	123.07	133.43	133.49
PERCENT CHANGE		12.45	-16.97	16.44	6.41	2.37	2.11	5.44	1.69	6.84	6.88	7.92	-1.43

SOURCE: Dominica Statistical Dept./ ECSTAT
 (1989 Data Provisional)
 May 1990

152

TABLE 8-

DOMINICA: PERCENTAGE SHARE OF PRINCIPAL DOMESTIC EXPORTS, 1975 - 1989

DOMINICA

COMMODITY	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 Banana	60.4	61.4	59.0	58.4	60.3	51.6	60.7	43.7	42.0	44.4	38.3	44.9	71.1	70.4	57.7
2 Plantain	1.9	1.5	1.2	1.1	1.0	0.8	0.7	0.8	1.1	1.4	1.4	1.2	0.8	0.9	1.1
Sub-total 1..2	62.3	62.9	60.2	59.4	61.3	52.3	61.4	44.5	43.0	45.8	39.7	46.1	71.9	71.3	58.7
3 Orangefruit	12.4	6.0	3.0	4.4	3.2	4.1	2.0	3.2	2.4	2.3	1.9	1.4	0.3	0.0	1.0
4 Sweet orange	1.5	1.3	0.9	1.1	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.2
5 Juice, fresh	0.8	0.7	0.7	0.7	1.0	0.3	0.4	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1
Sub-total 3..5	14.7	7.9	4.6	6.5	3.4	4.9	2.8	3.9	3.0	3.1	2.7	2.1	1.0	1.2	1.4
6 Pumpkin	0.2	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
7 Tomato	0.7	0.6	0.6	0.4	0.4	0.5	0.4	0.7	0.3	0.7	0.6	0.3	0.4	0.4	0.7
8 Yamou	0.4	0.8	0.9	0.3	0.4	0.4	0.8	0.3	0.7	0.9	0.6	0.3	0.2	0.1	0.2
9 Yau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1
10 Broccoli	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.1	0.2	0.2	0.1	0.2
11 Vegetable soup & extracts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
12 Cut flowers (allpurpose)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2
13 Coconut	1.9	1.4	1.7	1.7	1.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
14 Coconut (Copra) Oil refined	2.1	2.3	0.9	1.1	1.0	0.2	0.1	0.1	3.4	4.3	0.0	0.0	0.0	0.0	0.0
15 Coconut (Copra) Oil crude	2.7	7.1	3.1	4.1	3.2	3.4	0.3	0.8	2.4	3.4	2.7	2.3	1.1	0.9	1.1
16 Rapeseed	1.2	2.4	3.7	3.3	3.2	1.0	1.0	1.9	1.4	1.0	1.4	1.1	1.0	0.9	1.3
17 Rape seed oil	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.7	2.9	1.2	1.1	0.1	0.0	0.0	0.0
18 Sesame	0.4	0.3	0.9	0.0	0.7	1.3	0.7	0.3	0.6	0.7	0.4	0.4	0.4	0.4	0.0
19 Lime Juice	1.3	2.0	2.2	1.7	1.7	0.1	1.0	0.4	0.4	0.3	0.3	0.0	0.0	0.1	0.1
20 Grapefruit juice concentrate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 Christmas & sim. tree flowers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0
Sub-total Agriculture 1..23	88.0	87.4	81.2	80.1	78.0	68.7	87.7	58.0	56.4	62.4	62.3	70.2	77.0	75.0	62.2
24 Household soap	1.7	2.0	1.7	2.3	10.4	29.1	22.1	19.4	22.0	0.3	11.0	7.4	7.4	0.2	12.2
25 Toilet soap	0.7	0.7	1.0	0.4	0.2	22.9	10.3	10.4	13.2	13.3	12.3	10.3	10.1	7.0	11.2
26 Spring water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2
27 Other water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.2	0.1	0.2	0.2
28 Aluminum sheets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	7.4	7.0	1.7	2.1	0.0	0.0	0.0
29 Paints & varnishes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.3	0.0	0.2	0.7
30 Cements	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	0.4	0.2	0.2	0.0
31 Other paints	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0
32 Glycerol & glycerol prep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.4	0.2	0.2
33 Shingles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
34 Prefab. & sectional building	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 Furniture n.e.c. of wood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
36 Glass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	0.1	0.9	1.2
37 Bricks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.2
38 Others	7.4	7.0	11.3	0.0	10.2	2.3	1.7	1.0	0.0	2.4	2.7	2.3	2.4	1.0	1.7
Sub-total Man. Apric. 24..38	12.4	12.4	10.4	19.9	29.2	30.3	22.3	22.4	22.4	27.2	21.3	22.4	22.4	22.2	22.0
TOTAL DOMESTIC EXPORTS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Items, whether agricultural or otherwise, not listed are included in the category 'Others', 38.38.

Source: Records of the Central Statistics Office. Prepared by The Agricultural Statistics Unit, Dec-64 1990.

TABLE 9 - DOMINICA: CROP PRODUCTION AND USE, 1988 (Tonnes)

Item	Total Production (Volume)	Fresh or Cottage Processed for Export		Commer- cially Processed for Export		Apparent Internal Consumption and Waste		
		(Volume)	(Volume)	(%)	(Volume)	(%)	(Volume)	(%)
I. Permanent Crops								
A. Traditional								
1. Banana	75,000	72,284	96	-	-	2,716	4	
2. Bayleaf	21	-	-	21	100	-	-	
3. Cocoa	569	3	1	6	1	560	98	
4. Coconut	38,000	225	-	1,844	-	1,000	-	
5. Coffee	595	2	-	13	-	580	-	
6. Grapefruit	21,179	1,266	-	3,940	-	6,400	-	
						9,573		
7. Lime	5,870	87	-	220	-	1,500	-	
8. Orange	5,771	221	-	-	-	2,900	-	
9. Plantain	6,217	1,032	-	5	-	5,180	-	
10. Tangerine	N/A	6	-	N/A	-	N/A	-	
11. Other Citrus	N/A	1	-	N/A	-	N/A	-	
B.								
1. Avacado	358	107	-	-	-	251	-	
2. Breadfruit	173	39	-	-	-	134	-	
3. Cinnamon	13	5	-	-	-	8	-	
4. Cut flowers	N/A	41	-	N/A	-	N/A	-	
5. Mango	4,374	81	-	-	-	4,293	-	
6. Passion fruit	1,250	6	-	-	-	-	-	
7. Paw paw (papaya)	N/A	3	-	-	-	-	-	
8. Pineapple	N/A	2	-	N/A	-	N/A	-	
9. Sorrell	N/A	1	-	N/A	-	N/A	-	
10. Other fruits	N/A	3	-	N/A	-	N/A	-	
11. Other spices	N/A	2	-	-	-	-	-	
12. Other flowers	N/A	142.0	-	-	-	-	-	
II. Roots and Tubers								
A. Cassava	600	1	-	-	-	843	-	
B. Dasheen (50%)	14,106	370	-	-	-	13,736	-	
C. Irish Potatoes	175	0	-	-	-	-175	-	
D. Sweet Potatoes	1,732	4	-	-	-	1,728	-	
E. Tannia (50%)	4,516	66	-	-	-	4,450	-	
F. Yam (50%)	6,300	53	-	-	-	6,247	-	
G. Other Roots/Tubers	N/A	3	-	N/A	-	N/A	-	
III. Vegetables								
A. Cabbage	944	1	-	-	-	418	-	
B. Carrot	419	1	-	-	-	81	-	
C. Christophene	128	47	-	-	-	81	-	
D. Cucumber	1,880 (1987)	8	-	-	-	1,872	-	
E. Ginger	203	15	-	-	-	188	-	
F. Lettuce	128	N/A	-	-	-	128	-	
G. Okra	3	N/A	-	-	-	3	-	

TABLE 9 CONT'D: CROP PRODUCTION AND USE, 1988 (Tonnes)
DOMINICA

<u>Item</u>	<u>Total Production</u>	<u>Fresh or Cottage- Export Volume</u> (%)	<u>Variety for Export Volume</u> (%)	<u>Apparent Internal Consumption and Waste Volume</u> (%)
R. Peas/beans	90	N/A	-	90
I. Pepper (Hot)	125	1	59.0	65
J. Pumpkin	685	85		
K. Tomato	184	1	N/A	183
L. Watermelon	195	10	-	9.3
M. Other Seasonal crops	N/A	2	N/A	N/A
IV. Edible nuts	N/A	1	N/A	N/A
V. Animal products				
Fish	477	-	-	477
Poultry/meats	88 (1987)	-	-	88
Beef	423	-	-	423
Pork	420	-	-	420
Sheep/mutton	132	-	-	132
Goat/mutton	204	-	-	204
Eggs	204	-	-	325
Milk	325	-	-	244
	244	-	-	

Source: Draft "Assessment of the Agricultural Sector of the GOCD," Ministry of Agriculture (written by R. Austrie - January, 1991).

2469b

TABLE 10

DOMINICA: PRINCIPAL DOMESTIC EXPORTS, 1975 - 1989 (EC\$ 000'S)

CATEGORY	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 Bauxite	14,467	17,249	18,547	24,748	11,170	7,177	24,610	26,910	3,224	20,437	23,864	44,127	46,477	107,654	67,309
2 Phosphate	441	600	282	474	271	212	340	475	742	64	1,623	1,274	1,421	1,723	1,241
Sub-total 1-2	14,908	17,849	18,829	25,222	12,441	7,389	24,950	27,385	3,966	20,481	25,488	45,401	47,898	109,377	68,550
3 Oranges	2,975	1,114	954	1,975	577	1,072	1,044	1,795	1,700	1,571	1,212	1,205	640	1,148	1,140
4 Sweet oranges	322	277	299	469	94	95	199	244	229	231	411	510	411	303	222
5 Lemons, fresh	195	197	214	315	252	125	189	150	140	180	176	152	124	157	154
Sub-total 3-5	3,562	1,670	1,467	2,747	823	1,292	1,332	2,134	2,170	2,002	1,999	2,167	1,275	1,708	1,614
6 Pumpkin	45	50	102	125	50	104	46	154	157	141	123	147	104	102	141
7 Barbados	175	167	174	177	163	121	219	194	279	472	391	345	454	521	774
8 Tomatoes	144	231	271	274	144	140	241	374	427	417	394	354	294	177	179
9 Yams								111	199	276	144	210	179	114	144
10 Avocado								31	73	140	104	179	221	174	254
11 Vegetables, roots & tubers								44	75	97	119	174	179	244	277
12 Cut flowers (wholesale)											10	10	0	122	11
13 Coconut	442	474	524	119	434	25	12	74	22	5	10	10	0	122	11
14 Coconut (Copra) oil refined	544	647	274	462	447	44	74	2,542	2,574	2,471				12	15
15 Coconut (Copra) oil crude	644	1,972	1,619	1,743	1,247	44	217	317	1,724	1,644	1,927	2,475	1,227	1,234	1,217
16 Soy oil	279	1,010	1,144	1,477	1,244	244	591	747	1,024	1,241	1,110	1,125	1,245	1,249	1,275
17 Soybean oil						37	431	2,044	427	744	139	0	0	0	27
18 Sesame	92	137	275	374	143	224	372	325	449	474	424	444	774	441	444
19 Linseed	244	375	743	777	419	24	474	244	444	224	372	41	0	122	12
20 Oranges & citrus-fruit concentrates													444	774	274
21 Cassava & cassava flour								44	77	124	44				
Sub-total Agriculture 1-23	24,744	24,529	25,444	33,444	17,444	11,244	27,444	33,744	43,779	33,244	44,744	77,444	62,279	112,779	74,779
24 Household soap	417	575	1,474	1,444	2,474	7,223	11,722	11,924	10,223	5,744	4,224	4,444	4,444	12,444	12,224
25 Toilet soap	157	244	444	1,444	2,444	3,775	4,279	11,449	9,219	9,114	10,224	10,224	12,224	12,174	12,224
26 Spring water										474	244	244	112	244	179
27 Other water										474	244	244	112	244	179
28 Solenoid sheets								1,274	2,574	4,974	1,224	2,444	1,444	444	444
29 Potatoes & vegetables								274	174	274	274	274	274	444	444
30 Lard								74	74	44	44	44	44	44	44
31 Other goods										44	151	347	429	444	444
32 Glycerol & glycerol lines										44	151	347	429	444	444
33 Candles										27	179	224	44	222	444
34 Prefab. & sectional building														44	1,444
35 Furniture e.o.c. of wood										44	7	11	44	122	1,224
36 Others											772	1,122	172	1,224	1,444
37 Services														2,444	2,722
38 Others	2,223	2,744	3,223	3,444	2,222	391	444	1,444	2,475	2,271	2,427	2,774	3,775	1,279	2,422
Sub-total Non Agric. 24-38	2,640	3,244	3,927	4,444	2,712	12,741	21,275	25,443	27,244	24,447	24,443	27,444	27,774	34,172	24,774
TOTAL DOMESTIC EXPORTS	27,384	28,073	29,444	37,666	25,153	19,990	56,219	63,028	71,023	67,731	70,187	104,888	121,572	146,951	93,334

Note: 1. Items, whether agricultural or otherwise, not listed are included in the category 'Others', 24-38.

Source: Records of the Central Statistics Office. Prepared by the Agricultural Statistics Unit. Dec-444 1999.

156

**TABLE 11 - DOMINICA EXPORTS OF FRESH PRODUCE
BY DESTINATION, 1988**

Crop ^{2/}	French West Indies		Rest of Caribbean (incl. PR)		United Kingdom		U.S. Virgin Islands		Total	
	Tons	EC\$ 000's	Tons	EC\$ 000's	Tons	EC\$ 000's	Tons	EC\$ 000's	Tons	EC\$ 000's
1. Bananas	19	19	628	597	62,249 ^{1/}	89,868	69	66	72,284	103,654
2. Grapefruit	882	879	145	134	239	152	8	3	1,266	1,165
3. Lime	40	80	38	64	9	13	5	7	87	157
4. Mango	3	5	60	99	13	21	1	1	81	136
5. Dasheen	185	270	150	211	33	39	111	155	353	497
6. Tannia	20	41	44	94	1	1	4	9	66	137
7. Sweet Potatoe	1	1	2	3	1	1	1	1	4	5
8. Yams	10	14	42	90	1	2	11	21	33	116
9. Pumpkins	34	45	47	53	4	14	13	85	107	174
10. Avocado	6	11	94	154	6	9	1	1	107	174
11. Sweet Orange	155	277	63	103	1	2	1	1	219	383
12. Plantain	69	95	807	1,066	156	174	11	14	1,032	1,335
13. Total Fresh	<u>1,517</u>	<u>1,856</u>	<u>1,970</u>	<u>2,904</u>	<u>62,895</u>	<u>90,375</u>	<u>287</u>	<u>357</u>	<u>76,185</u>	<u>109,109</u>
14. Total Fresh	1,498	1,837	1,342	2,307	646	567	218	291	3,901	5,455
15. Distribution by destination	38	34	34	42	17	10	6	5	95	91

^{1/} In addition 9,319 tons worth EC\$13.1 million were exported to Italy.

^{2/} Minor amounts of breadfruit, tannia and dasheen were exported to North America (EC\$1,600.00); also anthurium and other ornamentals were exported to North America worth (about EC\$55,000).

Source: Central Statistics Office.

2469h

TABLE 12 DOMINICA: COMPARISON OF QUANTITY AND VALUE OF IMPORTS
WITH LOCAL PRODUCTION OF LIVESTOCK PRODUCTS, 1988

Item	<u>Imports</u> ^{1/}		<u>Local Production</u> ^{2/}		<u>Total Domestic Consumption</u> ^{1/} (tonnes) (%)	
	Quantity (tonnes)	Value (BC\$)	Quantity (tonnes)	%		
Beef	44.6	338,543	508.9	92	553.5	9
Milk (fresh, powdered, evaporated, condensed, other)	1427.1	5,410,668	244	15	1,671.1	27
Butter	54.8	157,908	0	0	54.8	1
Other Dairy Products (cheese and curd)	170	1,149,870	0	0	170.0	3
Pork (fresh)	18.9	70,781	420	96	438.9	7
Mutton - sheep	6.7	64,207	132.0	95	138.7	2
- goat	0	0	203.9	100	203.9	3
Poultry (dead)	2,216.9	6,594,788	18.0	1	2,234.9	36
Eggs	0	0	325 (308,000 dozen)	100	325.0	.5
Meat preparations (bacon, ham, sausage etc.)	<u>345.7</u>	<u>2,103,517</u>	<u>10</u>	<u>3</u>	<u>355.7</u>	<u>6</u>
TOTAL	<u>4,284.7</u>	<u>15,964,867</u>	<u>1,861.8</u>	<u>30</u>	<u>6,146.4</u>	<u>100</u>

^{1/} Source: Central Statistics Office.

^{2/} Source: Ministry of Agriculture Animal Production Unit

TABLE 13 AVERAGE BANANA PRICES FOR DOMINICA
COMPARED TO U.S. IMPORTS FROM LATIN AMERICA
(PRICES QUOTED IN EC\$/LB)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
1. CIF green wholesale price at U.K. entry port	0.79	.80	.94	1.04	1.08	
2. FOB price received by DBMC	0.42	0.47	0.59	0.62	0.61	
- mark-up for shipper (%)	88	70	59	69	77	
3. Gross price to growers (before discounts for services)	0.22	0.26	0.31	0.35	0.36	0.38
- mark-up for marketers (%)	90	81	90	77	69	
4. Net price received by growers (after discounts for services)	0.14	0.15	0.17	0.19	0.18	
- mark-up for services (%)	57	73	82	84	100	
5. CIF green wholesale price at U.S. entry port (from Latin America)	0.45	0.46	0.47	0.46	0.55	
6. Premium paid by U.K. (as % of U.S. price paid)	76	74	100	126	96	

Source: Based on data from IMF Staff Report for Dominica, November 30, 1989.

158

**APPENDIX A: TABLE 14 - COMPARATIVE COSTS AND RETURNS
FOR SELECTED CROPS PER ACRE OF PURE STAND - PART I
(EC\$000)
(YEARS 1-3)**

Crop	Useful Life	Start-up Invest-ment	Yrs to full prod.	EC\$ Price	Annual Costs and Net Income 1/											
					Year One				Year Two				Year Three			
					Costs	Yield	Gross Income	Net Income	Costs	Yield	Gross Income	Net Income	Costs	Yield	Gross Income	Net Income
1. Banana	5 yrs	-	2	33¢/lb	4.4	5.6	4.1	(0.3)	4.3	9.0	6.6	2.3	4.1	8.0	5.8	1.7
2. Coconut (Dry/Muchoter)	30+ yrs	(3 Yrs) 1.3	0	25¢/lb	0.0	0	0	(0.8)	0.2	0	0	(0.2)	0.3	0	0	(0.3)
3. Grapefruit		(3 Yrs)														
a. Fresh mktg	30+ yrs	1.7	0	25¢/lb	1.3	0	0	(1.3)	0.3	0	0	(0.3)	0.5	0.9	0.5	0
b. Process mktg	30+ yrs	1.7	0	7.5¢/lb	1.3	0	0	(1.3)	0.3	0	0	(0.3)	0.4	0.9	0.2	(0.2)
4. Avocado	30+	(2 Yrs) 1.9	0	63¢/lb	1.9	0	0	(1.9)	0.7	0.8	1.1	0.4	0.8	1.6	2.2	1.4
5. Cocoa (Rehabilitated)	30+	(1 Yr) 0.7	3	2.20/lb dry	0.8	152 lb	0.3	(0.5)	1.0	391 lb	0.9	(0.1)	0.4	487 lb	1.0	0.6
6. Dasheen	1	0	1	50¢/lb	2.4	9.0	10.0	7.6	-	-	-	-	-	-	-	-
7. Ginger	1	0	1	75¢/lb	4.5	8.2	13.5	9.0	-	-	-	-	-	-	-	-
8. Cucumber	1	0	1	70¢/lb	1.7	4.5	7.0	5.3	-	-	-	-	-	-	-	-
9. Tomatoes	1	0	1	1.50/lb	1.6	3.2	10.5	8.9	-	-	-	-	-	-	-	-
10. Passion fruit	5	4.5	3	37¢/lb	4.5	2.0	1.6	(2.9)	1.6	4.0	3.3	1.7	2.0	5.0	4.1	2.1

Sources: Cost of production and Returns for Selected Dominican crops, by Raymond Austrie, Statistics Unit, MOA, 1988
 - Draft Cost of production of major tree crops in Dominica, January, 1991, by Peter Oldham, BDD
 - Economic appraisal of cocoa production in Eastern Caribbean, prepared for AID and PADP by Max Bade, 10/19/90

- 1/ In year of production
 2/ Life of crop (or 21 years for longer life crops)
 3/ Returns to land, management and capital, plus profit.

**COMPARATIVE COSTS AND RETURNS
FOR SELECTED CROPS PER ACRE OF PURE STAND - PART II
(EC\$000)
(YEARS 4-7)**

Crop	Annual Costs and Net Income 1/																Annual Labor Required (PD)	IRR (%) 2/
	Year Four				Year Five				Year Six				Year Seven					
	Costs	Yield	Gross Income	Net Income	Costs	Yield	Gross Income	Net Income	Costs	Yield	Gross Income	Net Income	Costs	Yield	Gross Income	Net Income		
1. Banana	4.1	8.0	5.8	1.7	3.8	4.4	0.6										101	60
2. Coconut (Dry/Nuckater)	0.4	0.5	0.3	(0.1)	0.4	0.6	0.5	0.1	0.7	2.2	1.2	0.5	1.2	5.0	2.8	1.6	33	33
3. <u>Grapefruit</u>		(Year 5)				(Year 6)				(Year 7)				(Year 8)				
a. Fresh mkts	0.6	1.7	1.0	0.4	1.3	5.2	2.9	1.6	1.9	8.7	4.8	2.9	2.4	11.3	6.2	3.8	66	47
b. Process mkts	0.4	1.7	0.3	(0.1)	0.7	5.2	0.9	0.2	1.0	8.7	1.4	0.4	1.3	11.3	1.9	0.6	24	10
4. Avocado	1.2	3.2	4.4	3.2	1.5	4.8	6.6	5.1	1.8	6.3	8.8	7.0	2.4	9.5	13.2	10.8	104	79
5. Cocoa (Rehabilitated)	0.4	5641b	1.2	0.8	0.5	8001b	1.8	1.3	0.5	8001b	1.8	1.3	0.5	8001b	1.8	1.3	10	20
6. Dasheen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-64	-
7. Ginger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	-
8. Cucumber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-
9. Tomatoes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	-
10. Passion fruit	2.0	5.0	4.1	2.1	2.0	4.0	3.3	1.3									63	-

Sources: Cost of production and Returns for Selected Dominican crops, by Raymond Austrie, Statistics Unit, MOA, 1988
 - Draft Cost of production of major tree crops in Dominica, January, 1991, by Peter Oldham, BDD
 - Economic appraisal of cocoa production in Eastern Caribbean, prepared for AID and PADP by Max Rade, 10/19/90

- 1/ In year of full production
 2/ Life of crop for 21 years for longer life crops
 3/ Returns to land, management and capital, plus profit.



APPENDIX B:

ECONOMIC CHARACTERIZATION OF PRESENT
AND PROPOSED AGRICULTURAL PRODUCE MARKET
SYSTEM IN DOMINICA

APPENDIX B:

ECONOMIC CHARACTERIZATION OF PRESENT
AND PROPOSED AGRICULTURAL PRODUCE MARKET
SYSTEM IN DOMINICA

Marketing of fresh and cottage-processed agricultural products in Dominica, both for internal consumption and regional trade, is characterized by small, undercapitalized traders (known as "Hucksters") with limited business management knowhow. They buy small lots of a limited range of produce (fresh and/or semi-processed) for resale in Dominica or on neighboring islands. They buy directly from the farm or from farmers who bring their produce to a public marketplace. They personally resell at public marketplaces or to their counterparts on other islands. Volume of trade is limited by available capital and by what the trader can personally handle, assisted at times by family members.

These small traders inevitably encounter capitalization problems. Since entry into business can be initiated on a very small scale with low capital requirements, they are generally undercapitalized from the outset. Most decapitalize even more over time as their costs and consumption requirements exceed income. Some traders may encounter a market niche which permits them to temporarily capitalize earnings and expand volume of business. But as other traders become aware of the opportunity and enter that market niche, margins diminish and market shares are implicitly divided, resulting in erosion of capital to a point where all competing traders reach a "survival" equilibrium between minimum capital required to stay in business and minimum consumption levels. This, in turn, increases unit transaction costs, and, in a "revolving door" effect, decapitalized and discouraged traders exit from business and new entrants appear.

The characteristics exhibited by these small traders fits an economic phenomenon that economists call "over-entry" into a limited market by sellers of a slightly differentiated product. Because of low capitalization, they handle buying, selling, transporting, selection and pricing function on a personal and itinerant basis. This limits their ability to expand operations through promotion, product differentiation or offering ancillary services that expand total market demand. Capital and management limitations do not permit them to differentiate their products through brand names, improved packaging, lower prices that result in lower transaction costs and increased volumes, or significant quality differentiation catering to upscale clientele demand. Slight differentiation is achieved through cultivating personal relationships, superior "hawking", or "doing a favor" in an initial transaction that results in repeat sales.

The net effect of the trading methods described above is to create a condition of economic over-entry by traders. The excessive number of traders creates a condition of imperfect competition that implicitly divides the existing market among them in a manner that permits general survival but not sufficient capacity for expansion by any of them to achieve economies of scale and improved capitalization. This condition creates economic waste as prices are set at a level above the lowest equilibrium average cost for the trade as a whole, as well as at levels higher than marginal cost. The result is lower total volume traded, higher unit transaction costs, lower (or non-existent) net returns, and wasteful social losses. There is a continuous turnover of traders as some decapitalize and leave, while new traders with fresh capital enter.

The situation of these traders is illustrated graphically in Figure C of Chart I. The early entrants' original profitable price G' is eroded as his individual demand curve ($d'd'$) is shifted down and to the left (represented by demand curve dd) as new traders enter into business. Entry reaches "saturation" when each trader finds himself in a long-run, no-profit position where prices reach point G on demand curve dd . Inadvertently, the existing traders divide up the available market. They do this because no one can lower his price to the marginal cost level and survive, as would happen in a competitive situation (See Figure A). Each and all traders end up with a selling price G , considerably above the marginal cost (MC) , and each is on the left-hand side of the low point of the average cost (AC) curve. Note also that the marginal revenue curves in both the new entry (MR') and imperfect equilibrium (MR) situations are significantly below their respective demand curves.

Further, in order to try to cover their costs, traders lower prices paid to farmers for produce, farmers cut back production because it is no longer profitable to produce, thereby reducing the available supply of product which further reduces market transactions and forces unit transaction costs higher.

Total sales (Q_a) under small trader survival equilibrium conditions are lower than sales (Q') generated at the competitive equilibrium price (G^b) . A comparison of Figure C with Figure A reveals how the over-entry situation described differs from that of competitive equilibrium. A comparison of Figure C with Figure B shows how it differs from an oligopolistic situation.

Note that there are many similarities between the Dominica small traders situation illustrated by the demand curve dd in Figure C, and the oligopolistic situation illustrated in Figure B. In both, there is imperfect competition, a slightly differentiated product, a reduced market and socially wasteful use of resources. However, there is one fundamental difference. Under the oligopolistic situation, "unearned" profits (i.e., profits above implicit and opportunity costs) accrue to the oligopolist. This is

16c

illustrated by the difference between the selling price (G) which is considerably above average cost, and price (E) which is the price at which marginal cost equates to marginal revenue. In the over-entry situation, traders continually enter, erode what little capital they have, and then leave (or remain, but in a "distressed" subsistence state). In the oligopolistic situation, the seller continues to pocket "unearned profit" in a reduced market at the expense of society.

Another factor is relevant in the small trader situation. This is illustrated in Figure D. Because these small traders are undercapitalized and undermanaged, they are unable to offer ancillary services that are economically sound, such as purchase advances, credit sales, improved packaging and quality control, sales promotion, technical counselling to farmer suppliers, proper inventory management, etc. Furthermore, their own low volume does not allow them to pass on volume discounts to buyers. Their lack of capital does not permit them to invest in developing and penetrating new, higher volume or more upscale markets. Thus, the total demand for what they sell is DD and price is (P^a). If they were able to offer some or all of the ancillary services described, effective demand would tend toward D'D' i.e., the total effective demand curve would shift upward and to the right. This will result in a price (P') and quantity (Q') that intersect at the low point of the average cost (AC) curve point (G), and marginal cost (MC) will equal average cost (AC). A larger total quantity of sales will result at a lower price without social waste, and with improved total marginal revenues, some of which could be passed on to the producer in order to increase the available supply. Although (P') is illustrated under perfect competition, some product differentiation would not shift marginal revenues downward on the (MC) curve as low as in the over-entry situation.

In conclusion, a shift to the D'D' demand situation will result in lower sales prices, increased sales and increased marginal revenues.

How might the D'D' situation of Figure D be achieved in the Dominica produce supply trade? Adequate capitalization and management capability through consolidation of product marketing from the farm gate to the shipping dock would permit economies of scale that reduce unit transaction costs, as well as provision of ancillary services to suppliers (e.g., transport, credit, inputs and technical assistance) and to buyers (e.g., grading, packaging, delivery), thereby triggering a shift in the total effective demand curve upward and to the right.

Combining supplies into larger lots during initial field assembly for improved efficiency in handling, grading, packaging and

transport can reduce transaction costs both per unit purchased and per unit sold. Additionally, provision of ancillary services, based on a larger volume traded, can achieve economies of scale, thereby shifting the "P equals MC" equilibrium downward and to the right in terms of cost of services.

Achievement of the economic efficiencies described and illustrated above will require institutional changes in existing market structures to permit consolidation of supply assembly, ancillary services and wholesaling functions. Such changes will necessarily result in reduced "ease of entry" by small traders. Some existing traders will be unable to remain in business. However, total volume of sales will increase, farmers will have easier access to markets at better prices resulting in increased total agricultural output and increased productivity of factors used in production and marketing. Furthermore, a positive economic multiplier effect will enhance total income in the trade area. Although some traders who are now making only a marginal livelihood likely would go out of business, in the long run an improved economy will result in greater alternative opportunities for them.

The Central Marketing Services Enterprise proposed in the body of this report incorporates characteristics that would tend to achieve the economic results of the D'D' supply/demand and price equilibrium situation illustrated in Figure D.

In the changed market structure proposed, many small traders can remain in business by shifting their talents to the retail aspects of their trade, including public marketplace sales, fixed places of business, and home and institutional delivery services. But the functions of supply collection and assembly, and large volume exports, will be consolidated at the central marketing services level, thereby permitting lower unit transaction costs through application of organization, management and marketing technologies that achieve economies of scale, resulting in reduced unit transaction costs and improved market access at higher farm gate prices and lower final market prices. Since this will lower prices at the wholesale level, small traders who focus on the retailing function may realize greater marginal revenues than they previously realized while carrying out all of the supply assembly, wholesaling and retailing functions themselves.

GRAPHIC ILLUSTRATION OF ECONOMIC RELATIONSHIP
IN DIFFERENT MARKET STRUCTURES

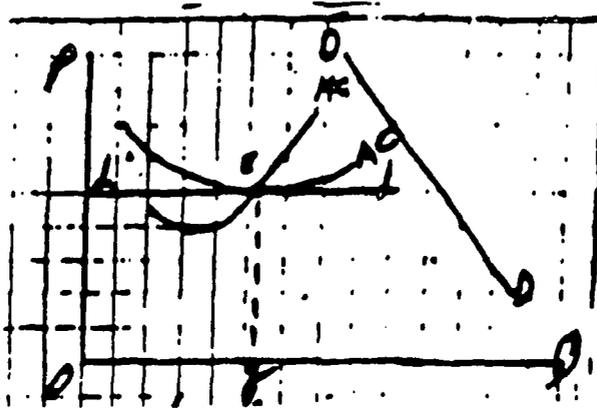


FIGURE A

Illustrates perfect competition position of individual firm in equilibrium, where

- E = Price equilibrium
- d = Individual firm's demand curve
- D = Total market demand curve.

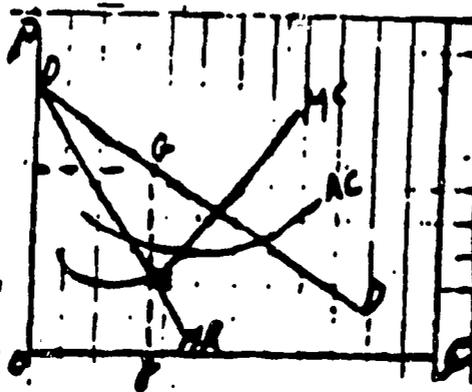


FIGURE B

Illustrates imperfect competition position of individual firm in equilibrium when few sellers sell identical or slightly differentiated products, where

- G = Price charged
- D = Total market demand curve, as well as individual firm's demand curve.

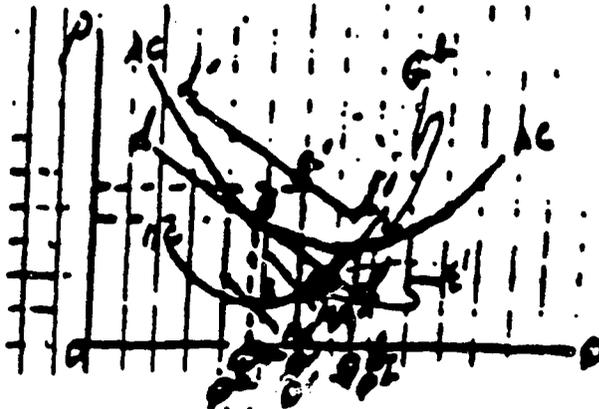


FIGURE C

Illustrates imperfect competition in equilibrium with over-entry of slightly differentiated sellers who implicitly divide the market, where

$d'd'$ is early entrants' individual demand curve;

G' is early entrants' price;

dd is individual and total market demand curve at over-entry equilibrium;

G is price charged at over-entry equilibrium when each trader is in a long-run, no-profit position;

AC is average cost curve for both the early entrant and over-entry situations;

MC is marginal cost curve for both the early entrant and the over-entry situations;

MR' is the marginal revenue curve for the early entrants and E' is the quantity and price intersection point at which his marginal costs and marginal revenues are equal;

MR is the marginal revenue curve for the over-entry situation while E is the quantity and price intersection point at which marginal costs and marginal revenues are equal;

Q^a is total quantity sold in the over-entry situation;

Q' is total quantity sold in the early entrants' situation; and

Q^b is the quantity that could be sold if the market structure causes prices to be set at the lowest point on the average cost curve.

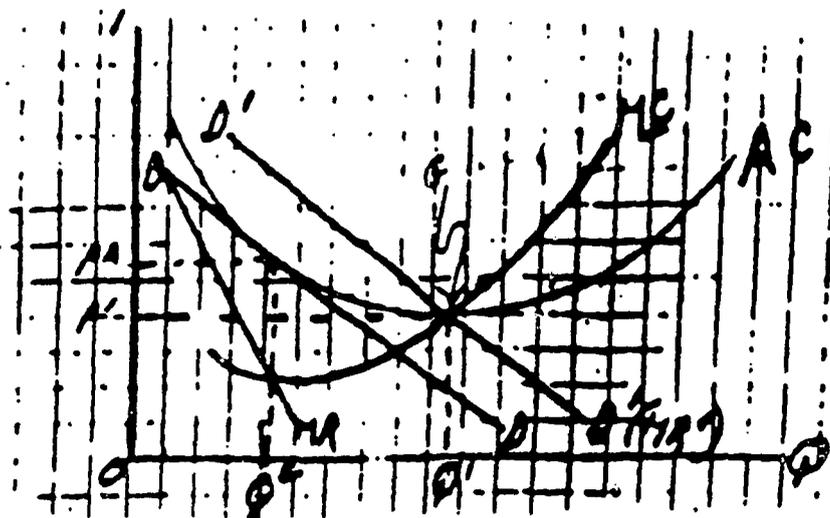


FIGURE D

Compares economic results of present and potential produce trading for domestic consumption and export if the proposed central marketing services enterprise is established, where

DD represents the present total demand curve since small produce traders activities determine market equilibrium;

D'D' represents the potential total demand curve if the central marketing services enterprise activities determine market equilibrium;

Q^a is quantity sold under present conditions;

Q' is potential quantity sold under proposed marketing arrangement;

P^a is price charged under present conditions;

P' is potential price under proposed arrangement;

NOTE: Under the present situation, economic waste is represented by the difference between the marginal revenue (MR) and marginal cost (MC) curves' intersection and the average cost (AC) and demand (DD) curves' intersection. Under the proposed arrangement there is no economic waste, since price (P') and quantity (Q') intersect at the point where marginal cost (MC), average cost (AC) and marginal revenue (MR) curves intersect the demand (D'D') curve.

2553b

APPENDIX C

SUMMARY

INFORMATION ABOUT FARMER AND SUPPORT ORGANIZATIONS
(FROM "PROFILES OF FARMER ORGANIZATIONS
IN DOMINICA", IICA, MAY, 1989)

ADDRESSES AND CONTACTS FOR FARMER ORGANISATIONS - CONTINUED

Living Waters
Cooperative Study Group

Hope Farmers
Cooperative Study Group

Bellevue Farmers
Improvement Services

Soufriere Small
Farmers Association

Emanuel John
Salisbury Village

Harold Francis
Petite Savanne Village

Matthew Ormond
Bellevue Village

Hobson Francis
Soufriere Village

ADDRESSES AND CONTACTS FOR SUPPORT ORGANISATIONS IN DOMINICA

Dominica Banana
Growers Association

Jefferson Scotland
Bath Road
Roseau
Telephone 82671

Agricultural Industrial
and Development Bank

Patricia Charles
64 Hillsborough St.
Roseau
Telephone 82853

Dominica Farmers Union

Lloyd Pascal
17 Church Street
Roseau
Telephone 84244

Association for
Caribbean Transformation

Neville Graham
34 Hillsborough St.
Roseau
Telephone 8879

Special Projects Assistance Team

Joey Baltier
6 Fort Lane
Roseau
Telephone 84377

Dominica Hucksters Association

Cecil Joseph
Bay Street
Roseau
Telephone 83258

Farm To Market

F. Osborne Riviere
16 King George V Street
Roseau
Telephone 88116

National Development Foundation

Milton Lawrence
25 Kennedy Ave.
Roseau
Telephone 83240

Dominica Export
and Import Agency

Hannah Clarendon
Charles Avenue
Roseau
Telephone 83494

LOCATION OF FARMER ORGANIZATIONS IN DOMINICA
MAP REFERENCE KEY

- 1 Peineville Farmers Group, Peineville
- 2 Temple Livestock Group, Woodford Hill
- 3 Sineku Farmers Cooperative, Sineku
- 4 Grand Pond Piggery, Grand Pond
- 5 South East District Plantain Association, La Plaine
- 6 Hope Farmers Cooperative Study Group, Petite Savanne
- 7 Soufriere Small Farmers Association, Soufriere
- 8 Bellevue Farmers Improvement Services, Bellevue
- 9 Organic Plant Grovers Cooperative, Roseau
- 10 National Pig Producers Association, Roseau
- 11 Cooperative Citrus Grovers Association, Roseau
- 12 Dominica Banana Marketing Corporation, Roseau
- 13 Dominica Essential Oils and Spices Cooperative, Roseau
- 14 Multipurpose Youth Group, Warner
- 15 Living Waters Cooperative Study Group, Salisbury
- 16 Rock Vegetable Grovers Cooperative Study Group, Salisbury
- 17 Northwest Goat Producers Association, Salisbury

The following organizations have their headquarters in Roseau with membership scattered throughout the island:

Cooperative Citrus Grovers Association

Dominica Banana Marketing Corporation

Dominica Essential Oils and Spices Cooperative

SUMMARY:

Seventeen farmer organizations are active in Dominica, while nine organizations provide support services. These can be grouped as follows:

- Traditional commodity associations (banana, citrus, & essential oil/spices);
- Livestock associations (pig, cattle & goat);
- Crop producers (banana, plantain, fruit, citrus, vegetables & roots);
- Specialty crops (flower, bay oil);
- Public sector support organizations (AIDBANK, DEXIA), and
- Private sector support organizations (DEGA, DFU, ACT, NDP, SPAT, DHA & FTM).

Farmer Organizations

While Dominica's farmers are independent and self-sufficient individuals, they recognize that the accomplishment of certain activities requires cooperation with their neighbors. They tend to show a willingness to work with others for the achievement of mutual goals, and demonstrate an eagerness to help friends and neighbors with special needs.

Farmer organizations in Dominica represent a large majority of all farmers. In many cases, these organizations have accomplished the original purpose for which they were organized. In some cases the effectiveness of the membership in accomplishing the initial objective, for example the building of a road, led the members to continue the organization so as to pursue additional group goals.

Dominica's primary agricultural societies closely reflect the agricultural population and their varied interests and activities. They are located in the population centers of the island and most are geared primarily to the interests of food crop producers. The oldest traditional commodity associations are focused on the production and marketing of bananas, citrus and bay oil, three of the most important crops.

* From "Profiles of Farmer Organizations in Dominica", IICA, May, 1989.

175

The majority of Dominica's primary societies are five years or less in age (Table 1) and only two of the 14 primary societies have existed for more than ten years. However, the age of these societies is not a reliable measure of their effectiveness. The younger organizations tend to be more vigorous and able than the older organizations. Even among the traditional commodity associations, the youngest of the organizations has the most dynamic and ambitious program.

Support Organizations

Organizations supporting agriculture show a great deal of experience, diversity of interest and expertise. Five of the nine organizations have operated for more than ten years. Support organizations assist farmers directly or indirectly by promoting the production and marketing of agricultural commodities. Some organizations focus on activities related to the quality of life in rural areas and particularly among agricultural producers.

Major Accomplishments of Farmer Organizations

There are a number of notable accomplishments of farmer organizations. The South East District Plantain Association has developed into a very effective production and marketing association which has had major effects on the profitability of producers in the south east of Dominica. The National Pig Producers Association also is moving steadily toward becoming a viable production and marketing association.

Other organizations have made significant accomplishments and serve as good models. The Ornamental Plant Growers Association has effectively increased the quantity and the quality of exports of flowers from Dominica, through its training of producers and marketers of foliage and flowers. The Living Waters Cooperative Study Group has developed an impressive program of education for its members and the Hope Farmers Group has shown a great deal of ingenuity in the development of income producing projects. The leadership of the Grand Pond Piggery led to the development of the National Pig Producers Association, the largest livestock producers association.

Among commodity associations, the Dominica Banana Growers' Association has helped to make bananas the leading industry of Dominica. This organization provides a model for the development of other farmer organizations in its ability to organize and market production and in providing a complete range of services necessary to produce bananas. The Dominica Essential Oils and Spices Cooperative has consistently provided effective marketing of locally produced bay oil. This organization is also showing leadership through the production of consumer products using bay oil as the major ingredient.

Major Problems of Farmer Organizations

For the most part, farmer organizations are guided by a sense of purpose with an understanding of the reasons for their association.

Nevertheless, farmer organizations tend to lack the direction that could be provided by a strong mandate from their members. Two of the oldest of these organizations (Sineku and Temple) have accomplished their initial objective, but have not redefined the purpose of their association. As a result, they lack dynamism and energy and their accomplishments have been limited.

In respect to problem areas identified by farmer organizations, difficulties in marketing their produce heads the list. Specific problems include the lack of vehicles to transport produce to market, inadequate and uncertain cargo space for air shipments, high cost of international transport (both sea and air) and lack of trust in overseas buyers.

Production problems identified by the different groups cover a wide range, including: lack of irrigation facilities, pest and disease problems, small volumes of marketable produce grown by individual farmers, high costs of production of many products, and insufficient working capital.

Members of farmer organizations identify insufficient management and organizational skills as serious constraints. These deficits are apparent in most primary societies. In some cases these groups are working to overcome these constraints, albeit slowly.

Conclusion

Farmer organizations are distributed throughout the island. It is estimated that nearly 90% of Dominican farmers belong to at least one group. Farmer organizations are viewed as perhaps the most reasonable means of reaching small farmers with effective services. Their improvement is crucial for rural development to take place.

Although primary societies are relatively young, some of them have grown quickly in terms of members and offer services which are both unique and effective. While these organizations are somewhat uneven in their development, some have acquired characteristics and abilities which can serve as models for other organizations. On the other hand, most of the groups have needs for improving their level of organization and management and nearly all are deficient in planning their production and marketing their produce. Very few have levels of economic activity which permit sustainability.

Taken together, existing farmer and support organizations have the potential for providing a wide range of services required by agricultural producers. With better planning and continuous and more concentrated technical and financial assistance, these groups can assist in meeting the challenge for more effective production and marketing of farm produce.

If Dominica is to implement a national diversification program effectively, and if it is to become a productive member in the OECS diversification effort, it should organize and carry out a systematic program to strengthen and consolidate farmer organizations. Such an effort must give priority to the development of managerial capability at all levels. Likewise, technical assistance and improved access to financial resources will be required to permit farmers organizations to reach an economical level of self-sufficiency.

TABLE 1: INFORMATION ON FARMER ORGANISATIONS IN DOMINICA

Type of Organisation	Year Founded	Number Members	Primary Activity
Cooperative Citrus Growers Association	1949	87	Grapefruit marketing
Dominica Essential Oils and Spices	1965	450	Bay oil production and marketing
Dominica Banana Growers Association	1934	8600	Banana production and marketing
Sineku Farmers Cooperative	1976	40	Banana and plantain production
Temple Livestock Group	1978	38	Cattle production
Rock Vegetable Growers Cooperative Study Group	1982	16	Vegetable production and marketing
Grand Fond Piggery	1982	12	Pig production
Ornamental Plant Growers Cooperative	1983	50	Plant production and marketing
Multipurpose Youth Group	1984	10	Fruit and vegetable production
South East District Plantain Association	1986	47	Plantain production and marketing
Paineville Farmers Group	1986	25	Root crop and fruit production
Northwest Goat Producers Association	1987	17	Goat production and marketing
National Pig Producers Association	1987	67	Pig production and marketing

* In 1984 the Dominica Banana Growers Association was divided into two organisations: DBGA and DBMC.

TABLE 1: INFORMATION ON FARMERS ORGANISATIONS IN DOMINICA
- continued -

Type of Organization	Year Founded	Number Members	Primary Activity
Living Waters Cooperative Study Group	1987	30	Vegetable production
Hope Farmers Cooperative Study Group	1987	21	Root crop and bay oil production
Bellevue Farmers Improvement Services	1987	26	Vegetable and flower production
Soufriere Small Farmers Association	1987	30	Line, fruit and banana production

TABLE 2: INFORMATION ON SUPPORT ORGANISATIONS IN DOMINICA

Organisation	Year Founded	Primary Activity
Dominica Banana Growers Marketing Corporation	1984	Promoting production and marketing of bananas
Agricultural Industrial and Development Bank	1971	Financial and technical support for agriculture, industry, housing and student loans
Dominica Farmers Union	1972	Ensuring that farmers have a voice in all matters affecting their welfare
Association for Caribbean Transformation	1972	Technical support and guidance to small farmers
National Development Foundation	1979	Credit and technical assistance to small entrepreneurs
Small Projects Assistance Team	1980	Contributing to the education, social, cultural and economic betterment of Dominican groups
Dominica Hucksters Association	1982	Promoting economic interests of Hucksters and marketing of Dominican commodities
Para To Market	1982	Marketing all types of agricultural commodities produced in Dominica
Dominica Export and Import Agency	1986	Promoting export of agricultural commodities and import of essential commodities

TABLE 3: SERVICES PROVIDED TO MEMBERS BY FARMERS ORGANISATIONS

Organization	Input Supply	Credit	Infor- mation	Tech- nical assis- tance	Market- ing	Trans- porta- tion
Cooperative Citrus Growers Association	x	x	x	x	x	
Dominica Banana Growers Association)	x	x	x	x	x	x
Dominica Essential Oils and Spices		x	x	x	x	x
Sineku Farmers Cooperative			x			
Teaple Livestock Group			x			
Rock Vegetable Growers			x		x	
Grand Pond Piggery			x			
Ornamental Plant Growers Cooperative	x		x	x	x	x
Multipurpose Youth Group			x			
South East District Plantain Association	x	x	x	x	x	x
Peineville Farmers Group			x		x	
Northwest Goat Producers Association	x		x			
National Pig Producers Association	x	x		x	x	

*Together with the Dominica Banana Marketing Corporation.

182

TABLE 3: SERVICES PROVIDED TO MEMBERS BY FARMERS ORGANIZATIONS
- continued -

Organization	Input Supply	Credit	Infor- mation	Tech- nical assis- tance	Market- ing	Trans- porta- tion
Living Waters Coop- erative Study Group			x	x		
Hope Farmers Coop- erative Study Group	x	x	x		x	
Bellevue Farmers Improvement Service			x	x		
Soufriere Small Farmers Association			x	x		

APPENDIX D

PUBLIC SECTOR INSTITUTIONS

FOR

AGRICULTURE, FORESTRY AND FISHERIES

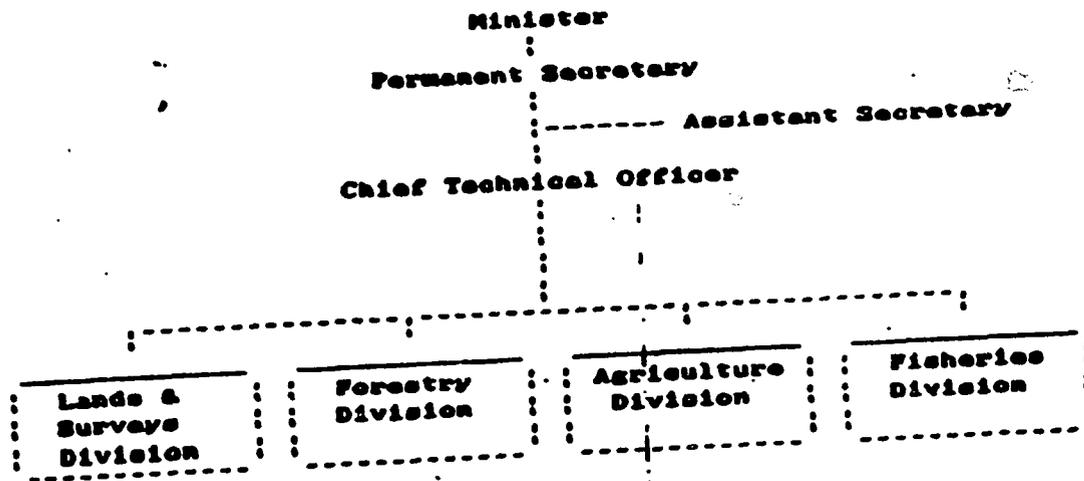
APPENDIX D - I

ORGANIZATION CHARTS

DOMINICA MINISTRY OF AGRICULTURE

Figure D-I-1

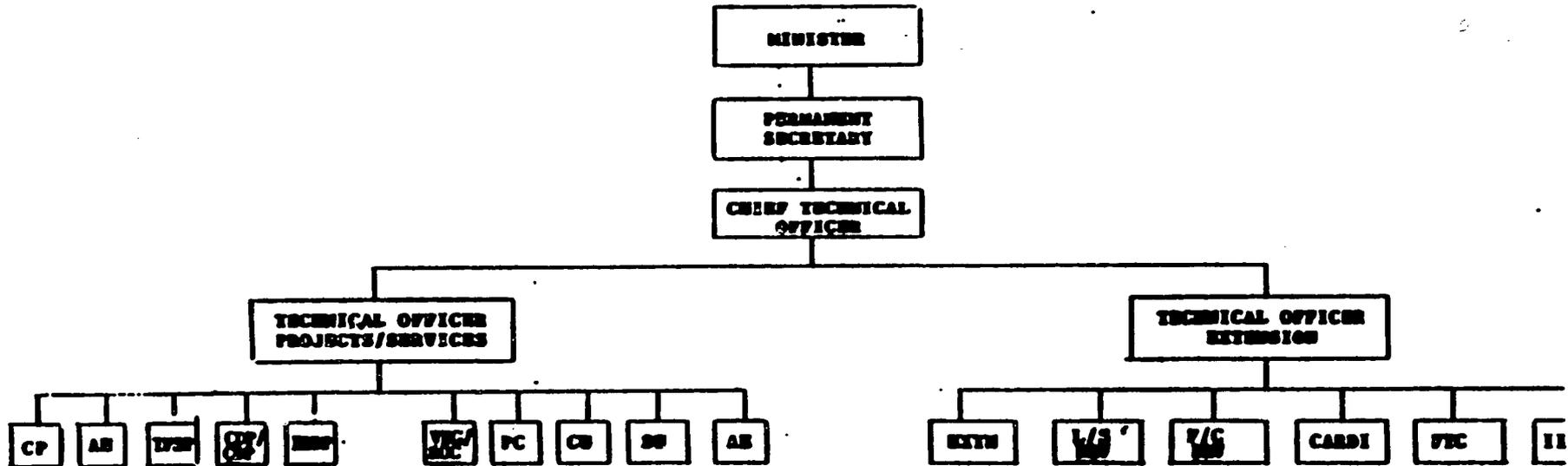
ORGANISATIONAL CHART OF THE MINISTRY OF AGRICULTURE
.....



152

Figure D-I-2

ORGANIZATIONAL CHART
DIVISION OF AGRICULTURE

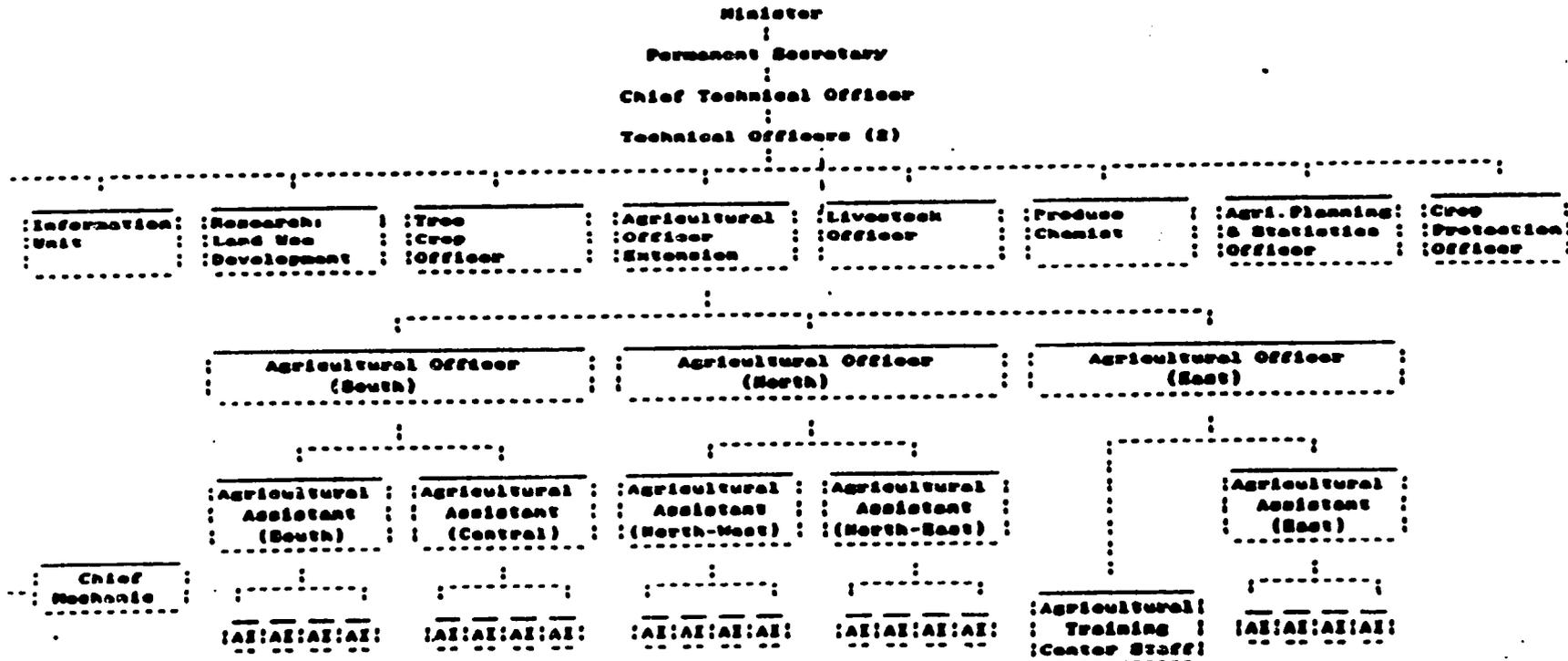


Key

- | | | |
|---|--------------------------------------|---|
| CP - Crop Protection | CU - Communications Unit | FTC - French Technical Mission |
| AH - Animal Health | SU - Statistical Unit | CARDI - Caribbean Agricultural Research & Development Institute |
| TFSP - Tropical Fruit & Spices Project | VEG/ROC - Rice/Vegetable Project/ROC | IICA - Inter-American Institute for Co-operation on Agriculture |
| CDP/CDP - Coffee Development Project | PC - Produce Chemist | EXTN - Extension |
| CDP - Cocos Development Project | AE - Agric Engineering | L/S DEV - Livestock Development |
| TRDP - Integrated Rural Development Project | | F/C DEV - Floriculture Development |

Figure D-I-3

ORGANISATIONAL CHART OF THE DIVISION OF AGRICULTURE



AI : Agricultural Instructor

Figure D-I-4

ORGANIZATION CHART OF THE DIVISION OF FORESTRY

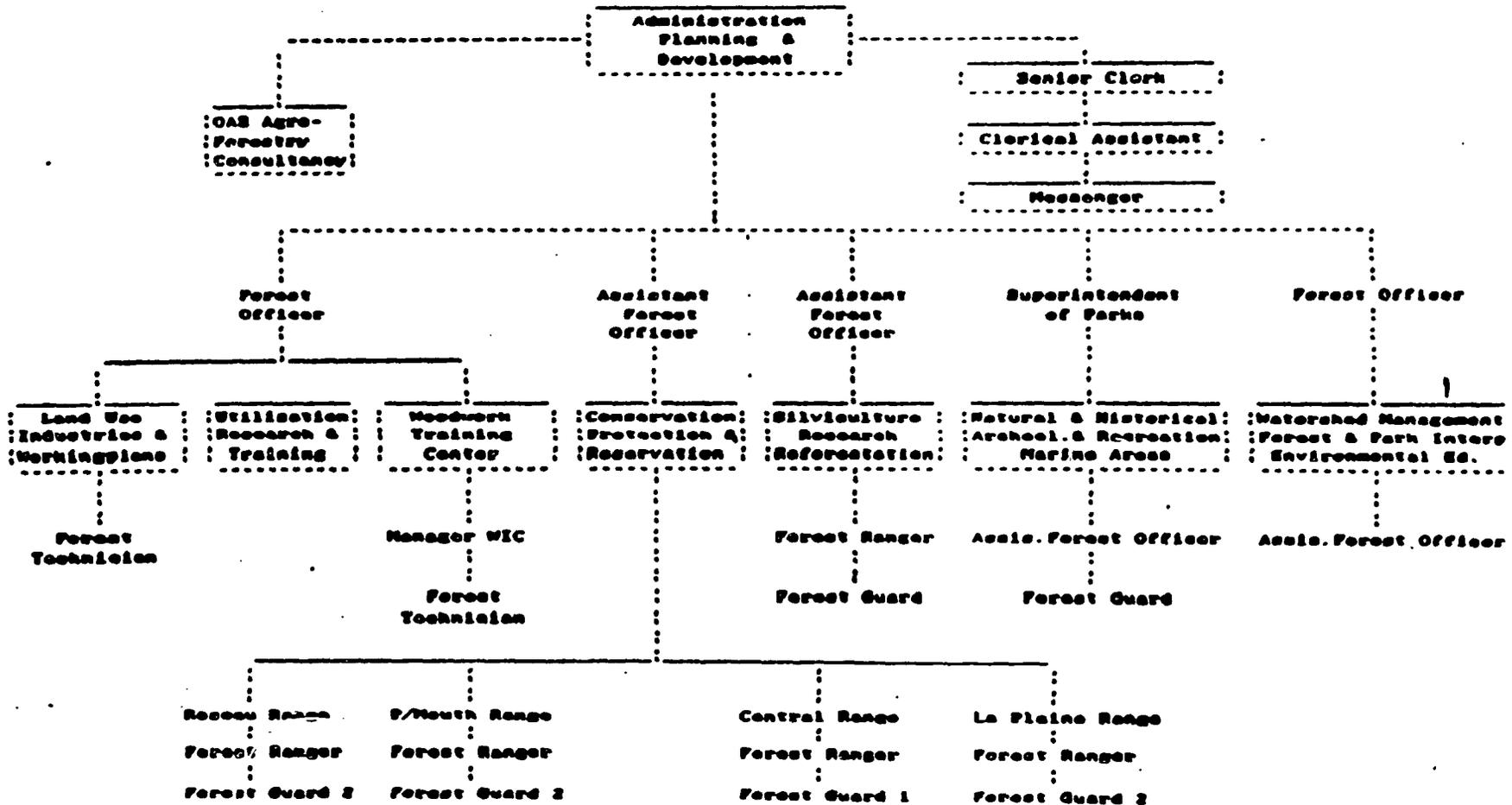


Figure D-I-5

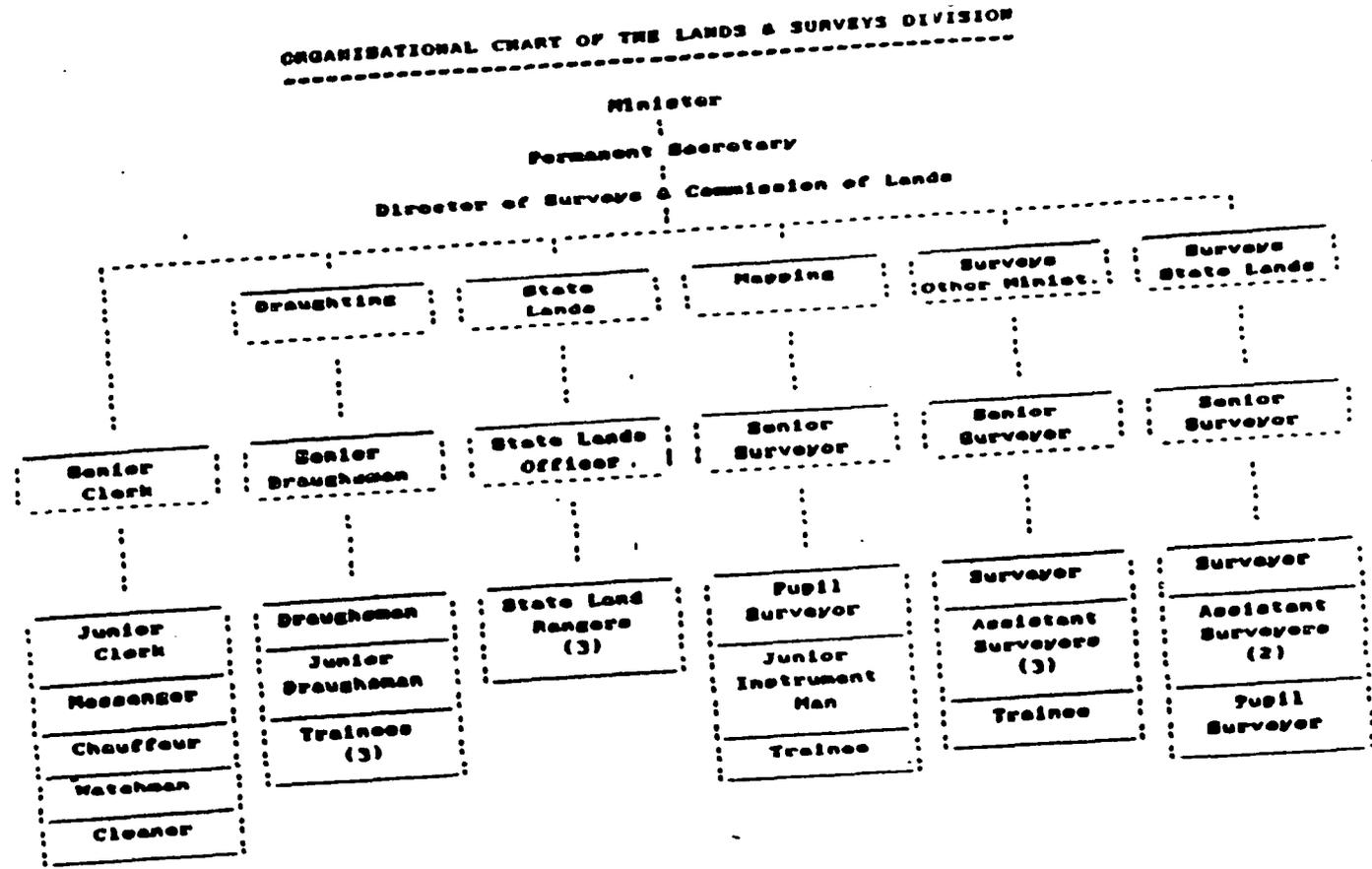
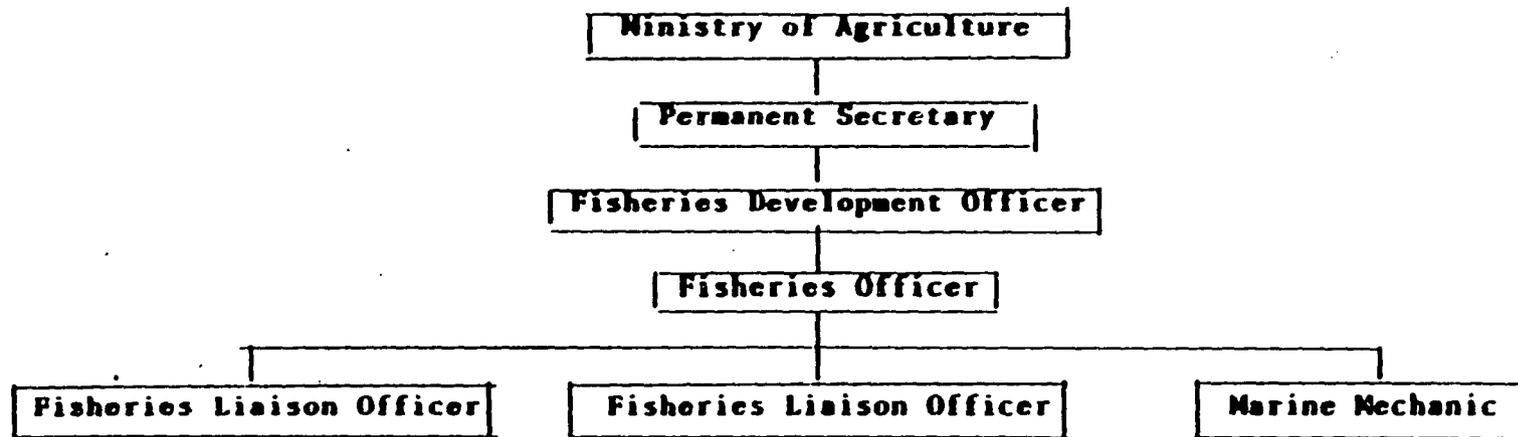


Figure D-I-6

PRESENT STRUCTURE OF FISHERIES DEVELOPMENT DIVISION F.D.D.



APPENDIX D- II-1

MINISTRY OF AGRICULTURE:

SUMMARY DESCRIPTION OF FUNCTIONS AND
ACTIVITIES BY DIVISION

MINISTRY OF AGRICULTURE:
SUMMARY DESCRIPTION OF FUNCTIONS
AND ACTIVITIES, BY DIVISION*

A. DIVISION OF AGRICULTURE

The Division of Agriculture is the biggest department of the Ministry of Agriculture. It has a staff complement of about 75. Annual recurrent expenditure is about EC\$3.0 million and capital expenditures average EC\$6 million. The Division has a fairly substantial amount of physical facilities, including a main office complex in Roseau with computing facilities, laboratory, mechanics shop, library and office space. There are seven agricultural stations in various locations throughout the country with plant propagation capabilities of over 600,000 plants per annum. These stations have office and storage space, and some offer stud service and animal breeding facilities. In addition, there are four farmer service centres capable of sitting a total of 200 farmers. A farmer training centre is capable of sitting 50-100 farmers, with sleeping accommodations for 17 persons.

The major functions of the Division of Agriculture are agricultural extension, promotion of diversification, and advisory services. The main line function consists of the delivery of technical knowhow and includes, in some cases, the provision of material inputs, usually made possible through various projects funded by external donors.

The island is divided into three main extension zones, the North, the South and the East. Each of these zones is manned by an agricultural officer who is responsible for managing the extension program in his area.

There are five extension districts (two in the North, two in the South and one in the East). Each agricultural district is manned by an agricultural assistant who supervises four field agents responsible for actual field work with farmers. Methods used by these field agents are method-and-result demonstrations and individual farm visits.

* Extracted and summarized from draft "Agricultural Sector Assessment", Dominica Ministry of Agriculture (written by Raymond Austria), April, 1991.

Support functions of the Division consist of a miscellany of a number services, namely:

- livestock development
- veterinary assistance
- plant protection
- agro-processing
- communication and information
- agricultural statistics
- project planning
- tree crops development
- agricultural engineering
- floriculture development

These services, together with extension, constitute the core programs of the Division of Agriculture, which also supervises implementation of a number of externally supported specific projects. Staff responsible for the various support sections, unlike their colleagues in mainstream extension, are mainly technical and professional specialists in their particular fields. They usually have university level training, some of them possessing masters degrees.

The Division has little capability in 1) land and water conservation and use, 2) planning, monitoring and evaluation, 3) agricultural statistics, or 4) market intelligence. Neither does it have a staff development and training unit.

The Communications Unit which is responsible for the preparation and dissemination of technical information, agricultural news, public notices and other mass communication activities related to agriculture, is well-equipped and has capability for video production. Other strong units are Plant Propagation, Plant Protection and Animal Health. The machinery section repairs project and program vehicles and equipment, and also maintains a small farm machinery pool designed to provide tractor and related machinery and implement support to small farmers. This latter function has diminished over the years, because of problems with replacement parts, and shortages of funds to purchase necessary machinery and equipment.

B. FORESTRY DEVELOPMENT DIVISION

The Forestry Development Division is responsible for managing all forestry resources. The Division has a staff of 40. Recurrent expenditures for the Forestry Division average about EC\$900,000 per annum, while capital expenditures average a little over EC\$700,000. The Forestry Division has two offices in Roseau, six forest stations with living quarters for 6-8 persons each, and three forest nurseries capable of producing over 4,000 plants each.

In fulfilling its role, the Division is divided into five major functional areas as follows:

- Forest Utilization and Land Use;
- Conservation, Protection and Reservation;
- Silviculture, Research and Reforestation;
- Natural and Historical Parks, and
- Watershed Management, Environment, Education and Interpretation

A recently completed Forestry Sector Plan provides recommendations for strengthening the Forestry Development Division.

C. LANDS AND SURVEYS DIVISION

The Lands and Surveys Division administers government land and provides survey services to all sectors of government. The Division's main clients are farmers, but also include other land owners and the legal profession. The Division has a staff of 55. Its recurrent budget averages EC\$764,000, while capital expenditures average EC\$50,000. Main program activities are:

- administration and training;
- mapping;
- surveys for other ministries;
- state land surveys;
- state land protection and allocation;
- integrated rural development.

Opportunities may exist for strengthening linkages of the Lands and Surveys Division with the work of the Division of Agriculture in areas such as land use planning, natural resource conservation and production forecasting, through the development of a geographic information system.

D. FISHERIES DIVISION

The Fisheries Division is quite small, with a staff of eight. Average annual recurrent expenditures are EC\$117,000 and average annual capital expenditures are EC\$410,630. The Fisheries Division has a fisheries mechanics shop for repairing boat engines, a small research vessel, and an aquaculture research facility with six ponds.

Major functions of the Division are:

- fisheries management;
- fisheries development;
- liaison with the industry and international agencies.

Main program activities are:

- fisheries extension and marketing
- aquaculture
- research
- resource assessment
- marine mechanics shop.

APPENDIX D - III

PUBLIC SECTOR RECURENT AND CAPITAL

EXPENDITURES IN AGRICULTURE

Table D-III-a-Dominica: Summary Finances of the Consolidated Public Sector

	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73
(In millions of Eastern Caribbean dollars)								
Total revenue and grants	187.4	177.8	182.4	172.7	172.2	187.7	187.5	187.7
Current revenue	151.1	147.9	151.7	144.7	142.2	157.7	157.5	157.7
Central Government	(81.9)	(82.7)	(82.7)	(82.7)	(82.2)	(82.7)	(82.7)	(82.7)
Rest of general government	(32.4)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)
Saving by EPFLs (net)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)
Capital revenue	29.1	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Foreign grants	6.2	19.1	20.8	27.1	22.1	22.1	22.1	22.1
Total expenditure	212.5	212.4	212.3	212.9	212.2	212.2	212.2	212.2
Current expenditure	181.1	181.1	181.1	181.1	181.1	181.1	181.1	181.1
Central Government	(81.9)	(82.7)	(82.7)	(82.7)	(82.2)	(82.7)	(82.7)	(82.7)
Rest of general government	(32.4)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)	(32.7)
Capital expenditure	29.1	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Central Government	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)
Outgoing to ECLEC 2/	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
Rest of general government	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)
National public enterprises	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)
Current account balance	36.3	30.0	30.7	28.0	30.0	30.0	30.0	30.0
Overall balance after grants	17.1	18.4	18.9	18.7	18.1	18.1	18.1	18.1
Financing	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
International foreign financing (net)	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
International financing (net)	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
Foreign	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
Domestic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(As percent of GDP)								
Total revenue and grants	48.7	46.2	44.1	48.3	49.3	47.7	47.2	47.7
Current revenue	(38.5)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)
Central Government	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
Capital revenue	(7.5)	(7.5)	(7.5)	(7.5)	(7.5)	(7.5)	(7.5)	(7.5)
Foreign grants	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)
Total expenditure	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
Current expenditure	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
Capital expenditure	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Current account balance	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Overall balance after grants	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
International financing	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
(In millions of Eastern Caribbean dollars)								
Summary data								
GDP at market prices (C)	387.9	384.4	413.2	357.5	349.7	392.2	398.9	393.9
GDP at market prices (T)	387.7	384.3	413.1	357.4	349.6	392.1	398.8	393.8

Source: Ministry of Finance.

1/ Fiscal year beginning July 1.

2/ Dominica Electricity Services, Ltd., in which the Government holds a 50 percent share.

**Table D-III-b-Dominica: Government Expenditures in
Agriculture by Type of Service, 1984/85-1989/90**

Type of Service	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	TOTAL
AGRICULTURE							
Agricultural Admin. & Supervision	190,781.00	254,772.00	263,040.00	254,270.00	200,930.00	307,060.00	3,006,116.00
Agricultural Extension, Diversification And Advisory Services	1,009,370.00	979,249.00	1,126,061.00	1,069,262.00	1,153,005.00	1,477,070.00	11,622,101.00
Plant Protection & Quarantine Services	134,920.00	104,233.00	107,399.00	139,926.00	141,264.00	157,600.00	1,304,221.00
Land Resource Development							
- Land Use Planning, Statistics & Info.	91,967.00	75,019.00	81,110.00	80,270.00	124,230.00	124,600.00	916,150.00
- Crop Research & Field Experimentation	123,294.00	136,930.00	125,912.00	160,612.00	160,352.00	154,500.00	1,272,049.00
Livestock Development	353,244.00	370,070.00	394,769.00	301,203.00	370,274.00	400,740.00	4,045,274.00
Produce Chemist Laboratory	85,903.00	87,571.00	96,646.00	97,572.00	79,992.00	117,700.00	1,023,616.00
Plant Propagation & Distribution	0.00	0.00	0.00	0.00	0.00	0.00	1,940,573.00
Veterinary Services	120,365.00	167,074.00	102,593.00	205,140.00	205,917.00	232,720.00	1,530,717.00
TOTAL Agriculture	2,120,652.00	2,154,070.00	2,370,330.00	2,396,335.00	2,404,052.00	2,900,070.00	26,774,025.00

Table D-III-c-Dominica: Public Sector Investment Program (PSIP), by Sectors and Services, 1984/85 to 1988/89^{1/}

	FY 1984/85		FY 1985/86		FY 1986/87		FY 1987/88		Prel FY 1988/89	
	Total	External	Total	External	Total	External	Total	External	Total	External
(In millions of Eastern Caribbean dollars)										
Total	37.0	33.3	61.8	55.1	61.0	36.9	20.7	28.0	62.2	39.9
Agriculture	7.8	7.4	9.0	7.1	6.8	5.8	6.0	4.4	10.7	6.6
Education	1.1	1.1	1.5	1.4	1.1	1.2	1.3	1.2	1.4	1.4
Energy	0.3	0.3	9.2	7.3	4.6	4.6	2.4	2.4	15.6	7.3
Health and social services	1.9	1.9	3.4	2.5	2.5	2.2	3.4	3.0	9.4	8.4
Housing	—	—	1.8	0.9	6.3	3.7	4.2	3.9	1.4	0.4
Manufacturing	0.9	0.9	0.3	0.1	0.7	0.2	1.6	1.2	0.7	0.6
Roads	37.9	37.3	30.1	28.8	11.6	10.8	17.2	16.4	10.4	8.3
Tourism	—	—	0.6	0.4	0.7	0.1	1.0	0.4	1.1	0.6
Transportation	0.5	0.5	0.3	0.3	2.9	2.8	3.3	3.0	0.4	0.2
Water and sewerage	—	—	1.3	1.3	0.4	0.1	3.1	0.4	4.1	1.8
Other	5.6	3.9	4.3	5.0	5.3	5.7	7.0	1.8	7.0	3.3
Sources of external financing										
Canada		17.3		5.8		7.3		3.2		3.7
OECD		3.2		3.5		6.6		6.6		0.2
EEC		3.7		0.7		5.4		11.0		6.9
IDA		4.1		1.2		—		—		—
United Kingdom		4.6		8.0		4.1		6.5		7.3
U.S. AID		13.7		21.7		6.9		0.4		0.3
Other		4.7		4.4		11.6		10.3		21.3
(As percent of total public sector investment)										
Total investment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	13.7	14.0	14.6	13.4	16.8	13.9	11.8	10.8	17.1	14.0
Education	1.9	2.1	2.4	2.6	2.7	3.1	3.0	3.0	2.2	3.0
Energy	0.5	0.6	14.9	13.8	11.2	13.0	4.7	5.9	25.0	33.1
Health and social services	5.1	5.5	5.5	4.7	6.1	6.2	6.7	7.4	15.1	17.8
Housing	—	—	2.9	1.7	10.3	10.3	8.3	9.6	2.2	0.8
Manufacturing	1.6	1.7	0.5	0.2	1.7	0.6	3.2	3.0	1.1	1.3
Roads	66.5	70.9	48.7	54.3	28.3	20.6	33.9	40.4	16.7	17.6
Tourism	—	—	1.0	0.8	1.7	0.3	2.0	1.0	1.8	1.3
Transportation	0.9	0.9	0.5	0.6	7.1	7.9	6.5	7.4	0.6	0.4
Water and sewerage	—	—	2.1	2.5	1.0	0.3	6.1	1.0	6.6	3.8
Other	9.8	4.3	7.0	5.5	12.9	11.6	13.8	10.6	11.5	7.0
(As percent of total external financing)										
Canada		32.7		10.2		6.2		8.4		9.3
OECD		6.0		6.4		17.9		17.4		0.5
EEC		6.9		1.3		14.6		28.9		17.3
IDA		7.7		2.2		—		—		—
United Kingdom		8.6		14.5		11.1		17.1		18.3
U.S. AID		29.3		37.5		18.7		1.1		0.8
Other		8.8		8.0		31.4		27.1		53.9
(As percent of fiscal-year GDP)										
Total public sector investment	32.3	28.7	21.4	18.4	12.6	10.9	14.1	11.3	15.9	12.0

Source: Ministry of Finance.

^{1/} Includes the on-lending of concessionary funds from external sources by the Dominica Agricultural, Industrial and Development Bank. The external component refers to disbursements of project-related grants and loans under the PSIP.

Table D-111-a-Dominica: PUBLIC SECTOR EXPENDITURE
Agriculture by Projects, 1980/81 to 1989/90 (EC\$000's)

Year	1980/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	TOTAL
Bank		210.00			427.00						637.00
100	477.00	8.00									485.00
101			26.00	26.00	19.00						71.00
102			403.00								403.00
103											40.00
104											10.00
105											131.00
106	492.00	1,255.00									1,747.00
107			176.00	176.00	141.00	2,400.00	1,727.00				4,619.00
108											477.00
109	12.00										119.00
110	91.00			235.00	193.00	216.00	214.00	204.00	372.00	199.00	1,824.00
111				31.00	14.00	14.00					59.00
112	6.00										67.00
113	121.00	30.00	191.00	15.00							417.00
114											0.00
115	124.00	24.00	63.00	20.00	4.00	7.00	66.00				272.00
116									205.00		205.00
117	243.00	507.00	433.00	525.00	430.00	430.00	374.00	471.00			4,041.00
118								42.00	275.00	386.00	703.00
119											174.00
120		600.00									600.00
121		1,044.00	325.00	1,484.00	276.00	569.00	610.00		1,706.00		4,924.00
122									270.00		270.00
123	21.00	25.00	20.00	146.00	72.00						285.00
124				21.00	3.00	241.00	42.00	115.00	20.00		412.00
125				370.00							370.00
126											0.00
127				63.00	23.00	15.00					101.00
128											27.00
129						45.00	10.00	15.00			70.00
130					7.00	707.00	17.00				731.00
131											0.00
132					22.00	4.00					26.00
133											0.00
134				175.00							175.00
135				175.00							175.00
136									110.00		110.00

Table D-III-d (cont'd)-Dominica: Capital expenditure in Agriculture by Projects

Agency	PROJECTS	10/71	11/72	02/73	03/74	04/75	12/76	30/77	27/78	00/79	07/80	TOTAL
IDP	Agricultural Training (Use Essential Oils & Sprays)						40.00	14.00	55.00	179.00	71.00	319.00
	Integrated Rural Dev. IDPP							76.00	206.00	255.00	260.00	817.00
	Land Development & Settlement	591.00	1,226.00	576.00	484.00	619.00	78.00	103.00	37.00	2,005.00	235.00	6,023.00
	Melville Hall Est. Dev				665.00	543.00	670.00	602.00	912.00	646.00	670.00	4,148.00
	Plant Propagation & Distrib.						63.00	55.00	47.00	41.00	45.00	211.00
	Pilot Veg & Rice Farm	5,702.00	500.00									6,202.00
	Agricultural Subsidy						212.00	250.00				462.00
	Forestry Development Proj		227.00	639.00	960.00	550.00	172.00					2,548.00
	Food Production								712.00	550.00	742.00	2,014.00
	Integrated Rural Dev. IDPP											54.00
GAS	Restoration Dry Oak Stalls		24.00	30.00								54.00
	RAMB- repairs & equipment			302.00		264.00	107.00					673.00
TOT	Farm Roads			433.00	131.00	550.00						1,114.00
	Input Supplies (bananas)	317.00										317.00
USAID	Cocoa Rehabilitation Project				124.00	164.00						288.00
	Extension Improvement CAEP				51.00	33.00						84.00
	Farm Roads								64.00	110.00		174.00
	Fruit Fly Control											0.00
90-TOTAL (Agriculture)		3,295.00	4,583.00	3,913.00	6,273.00	4,405.00	4,410.00	4,221.00	2,002.00	4,326.00	4,969.00	40,421.00
LIVESTOCK												0.00
USAID	Livestock Development Demonst.-				116.00	217.00						333.00
	Livestock Fencing/Mustering				46.50	134.00						180.50
	Livestock Disease Control											52.90
	Swine Fever Control	14.20	0.70									14.90
r	Pig Breeding & Development											15.00
	Goat Fencing Trials	0.40	6.70	0.50								7.60
90-TOTAL (Livestock)		22.60	7.40	0.50	163.10	391.40	0.00	0.00	0.00	0.00	0.00	449.90

Table D-III-d (cont'd)-Dominica: Capital expenditure in Agriculture by Projects

AGENCY	PROJECTS	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTAL
	FISHERIES											
	Boat Building Programme	-	-	-	-	-	-	-	-	-	-	50.00
	Fisheries Disaster Relief	-	-	-	-	26.00	-	-	-	-	-	26.00
	Fishing Equipment	-	-	-	-	-	-	-	-	-	-	189.00
	Outboard Motors	-	-	-	-	-	-	-	-	-	-	115.00
	Vielle Case Co-op WH/Shop	-	-	-	-	-	-	-	35.20	6.70	-	41.90
CIDA	For Fish Marketing Facilities	-	-	-	-	-	41.20	1.00	-	-	-	42.20
CIDA	Small Fish Landing Development	-	-	-	-	-	-	-	-	-	-	0.00
OE/DFC	Prawn Farming	-	-	34.30	210.70	61.70	272.00	41.70	76.20	100.00	-	697.60
FAO	Fisheries Rehabilitation	-	-	-	-	-	28.00	-	-	-	-	28.00
FAO/GOCD	Strengthening Fisheries	-	-	-	-	-	-	-	35.00	11.10	-	46.10
GOCD	Fish Landing Facility Improvement	-	-	-	-	-	-	-	-	-	-	0.00
GOCD	Fisheries Surveillance	-	-	-	-	-	-	-	-	-	-	0.00
GOCD	Fisheries Training Centre	-	-	-	-	-	-	-	-	-	-	0.00
GOCD	Marine Mechanics	-	-	-	-	-	-	-	9.90	-	-	9.90
GOCD	Pipe Boat & Fish Tech Develop/it	-	-	-	-	-	-	-	-	-	-	0.00
GOCD	Prawn Farming	-	-	-	-	-	-	-	-	-	95.70	95.70
IPDC	Floating Fish project	-	-	-	-	-	-	17.30	11.40	-	-	28.70
ONS	Fish Statistics	-	-	-	34.50	20.00	-	-	-	-	-	54.50
OAS	Fisheries Statistics	-	-	-	34.50	-	-	-	-	-	-	34.50
OECS	Fisheries Training	-	-	-	-	-	-	-	-	-	-	0.00
DFC	Fish Dev Research Training	-	-	-	-	481.60	137.00	156.20	137.20	-	-	802.00
DFC	Fisheries Training Centre	-	-	-	-	-	-	-	-	162.00	-	162.00
DFC	Pipe Boat & Fish Tech Develop/it	-	-	-	-	-	-	-	-	-	-	0.00
DFP	Fish Landing facility improve/it	-	-	-	-	-	-	-	-	-	372.00	372.00
	Sub-total (Fisheries)	0.00	0.00	34.30	210.70	130.70	749.40	219.00	750.30	296.10	599.70	7,025.60

202

Table D-III-d (cont'd)-Dominica: Capital expenditure in Agriculture by Project

CODE	PROJECT	60/61	61/62	62/63	63/64	64/65	65/66	66/67	67/68	68/69	69/70	TOTAL
	Forest Stations	59.00		115.00	10.00							1,021.50
USAID	Forest Roads	252.00	177.50	275.00	100.00	175.20	7.00					657.00
USAID	Reforestation/Soil Conservation	41.00		60.00	202.00	40.20	111.00					457.20
USAID	Woodwork Training Centre	0.00	20.00	40.00								60.00
USAID	Forest Stations							853.10	1.10			854.20
USAID	National Resource Mgt. & Integration Rural Devel.											0.00
USAID	Implementation of F. Mgt		77.70	20.10								97.80
USAID	Fish Farming Aquaculture											0.00
USAID/ECOD	Wildlife Watershed Protect											0.00
SUB-TOTAL (Forestry)		711.00	721.70	626.30	370.00	260.60	245.40	759.20	112.10	47.40	250.00	2,169.00
NATIONAL PARKS & BOTANIC GARDENS												0.00
	Dev. of Interpretive Plant Nursery - Gardens			391.50	20.00	6.50						418.00
	Dev. of National Parks											0.00
	Botanic Gardens Improve/											0.00
	Dev. Exhibits Nat Park				350.00	400.00	323.00	751.00	411.00	204.00		2,239.00
	Dev. of National Parks											0.00
	Dev. Marine Trails Path											0.00
	Maint. of Touristic Sites			4.10	57.50							61.60
	Botanic Gardens						15.50	10.40	40.30	19.10		95.30
	Facilities/Boats, Lake				422.00							422.00
	Water Resource Mgt											0.00
	Environmental Comp. Hydro											0.00
SUB-TOTAL (Parks/Gardens)		0.00	0.00	395.60	870.50	412.50	320.50	767.40	471.00	405.10	0.00	2,219.00
GRAND TOTAL		711.00	721.70	1,021.90	1,240.50	673.10	565.90	1,526.60	583.10	452.50	250.00	4,388.00

*if not specif.

funding is from COCD sources.

APPENDIX D - IV

OTHER PUBLIC SECTOR, REGIONAL AND INTERNATIONAL

INSTITUTIONS SERVING AGRICULTURE

OTHER PUBLIC SECTOR INSTITUTIONS SERVING AGRICULTURE

Other institutions provide services to agriculture in the fields of marketing, credit, physical infrastructure development, technical assistance, information, as well as management and project formulation in the areas of crop, livestock, fisheries and forestry production. Some of the more important institutions are:

a. MINISTRY OF COMMUNICATION AND WORKS constructs feeder and farm access roads, and provides drafting services for the construction of buildings.

b. PHYSICAL PLANNING UNIT is responsible for Town and Country Planning, which involves spatial allocation of housing development and settlement projects, tourism development, industrial and agricultural development.

c. THE COOPERATIVE DEVELOPMENT DIVISION is a part of the Ministry of Community Development, responsible for providing assistance and encouragement to agricultural and industrial cooperatives. The Division provides training, technical assistance, advice and material support to cooperatives.

d. THE MINISTRY OF EDUCATION provides technical and vocational education in agriculture to the nation's youth at primary, secondary and tertiary levels. It maintains a number of school gardens distributed around the island. Past efforts to establish agricultural schools have enjoyed mixed success.

e. DOMINICA BANANA MARKETING CORPORATION (DBMC) was established in 1984. The government-owned Corporation is the marketing arm of the banana industry, selling Dominica's bananas to Geest Industries. It also purchases inputs and administers various credit, input and producer services schemes on behalf of banana growers. The DBMC also provides technical and extension support to banana farmers, as well as training and information. The DBMC's primary goal is to promote the well-being of banana growers and to ensure the financial viability of the banana industry. Overall policy and direction of the DBMC is determined by a nine member Board of Directors. Three are elected by growers, five appointed by the Minister for Agriculture of which three are from the business community and two are from the Ministry of Agriculture. The executive secretary also is a Director.

The DBMC has a full and part-time staff of about 500. It owns twelve field buying depots located at various points, plus two main input warehouses -- one at Roseau and the other at Portsmouth.

Main activities of the DBMC are:

- training and on-site production demonstrations to banana growers by 17 district officers;

- education and information dissemination about the banana industry;
- support to banana research through provision of an annual grant to WINBAN;
- operation of a cess (check off) system which allows growers to buy inputs on a pre- and post-paid basis; and to have access to an aerial spraying service;
- undertaking all functions related to the purchase and sale of bananas to Geest Industries -- price negotiations, procurement, transport, storage and assembly, quality control, regulation of production, etc.

f. THE DOMINICA EXPORT AND IMPORT AGENCY (DEXIA) was established in 1986 through the merger of the Dominica Agricultural Marketing Board and the External Trade Bureau (ETB). DEXIA has an import monopoly for rice and sugar. It uses profits to support export development activities. The Board of Directors is appointed by the Minister of Trade and Industry. Operations are handled by a general manager and eight employees.

DEXIA operates in a newly renovated office complex which has facilities for rice and sugar storage, as well as space for trial export processing. A newly constructed warehouse at the Melville Hall airport is owned by DEXIA and provides space for processing and cool storage of fresh agricultural produce. Although DEXIA cannot participate in direct trading, it does test marketing. Main program activities are:

- market intelligence
- market research
- trial shipments
- training of exporters and producers of export commodities
- export infrastructure improvement
- administration of the Roseau Public Market.

g. AGRICULTURAL INDUSTRIAL DEVELOPMENT BANK (AIDB) is a state-owned bank. The Board of Directors is appointed by the Minister for Finance, and the general manager is appointed by the Board of Directors. The bank has a total staff of 20. Four of these work with agricultural credit: one senior farm improvement officer, and three farm improvement assistants. The bank has one office located in Roseau.

AIDB's main function is to provide capital investment credit for financing enterprises in agriculture and industry. It provides credit in fisheries, crops, livestock and agro-processing (including lumber production). It also provides seed equity capital for establishment of agricultural enterprises.

AIDB's lending policy is largely determined by the Caribbean Development Bank (CDB), its main source of funds. Generally, the bank does not finance land purchases or working capital. Of the total AIDB disbursement of EC\$11.6 million in 1989, EC\$4.6 (or 40%) was disbursed to agriculture.

206

Lending rates range from 5.5% for soft funds received from the International Fund for Agricultural Development (IFAD), to 12% for funds received from the Caribbean Development Bank (CDB).

h. THE NATIONAL DEVELOPMENT CORPORATION (NDC) is a public institution created to promote commercial and industrial investment. This also includes efforts to encourage private capital inflows to agricultural production, especially focusing on agro-processing, floriculture, timber exploitation and off-season vegetable production, mainly for winter markets in the U.S., Canada and the United Kingdom.

i. THE NATIONAL DEVELOPMENT FOUNDATION OF DOMINICA (NDFD) is a private foundation that promotes small business development. It provides loans to small businesses and to small farmers for starting crop, livestock and fishing enterprises. In 1989, NDFD provided credit for EC\$71,000, as compared to EC\$33,000 in 1988.

j. REGIONAL INSTITUTIONS SERVING AGRICULTURE include:

- i) CARIBBEAN COMMON MARKET ORGANIZATION (CARICOM). The Standing Committee of Ministers for Agriculture (SCMA) has responsibility for agricultural affairs. A recent output of this Committee is the Regional Agricultural Sector Plan (FASP). CARICOM's various trade regimes such as the Oils and Fats Agreement, the New Marketing Arrangement (NMA), and the Common External Tariff (CET), help to facilitate trade in agricultural commodities within CARICOM.
- ii) WINDWARD ISLANDS BANANA ASSOCIATION (WINBAN) is the coordinating body for the four Windward Island banana associations. WINBAN undertakes marketing related activities such as price negotiation, as well as research on banana production, such as disease and pest control, fertilizer requirements and placement, etc.
- iii) WINDWARD ISLANDS CROP INSURANCE (WINGROP) is a crop insurance scheme established to compensate farmers for wind damage to banana cultivations in the Windward Islands. The scheme currently provides coverage for bananas only. Consideration is being given to expanding its activities to other risks and other crops.
- iv) CARIBBEAN TRADING COMPANY (CATCO) is a subsidiary of the Caribbean Food Corporation (CFC) which provides financing and technical support for the implementation of projects in the agricultural sectors of the region. CATCO is currently working with the South East Plantain Producers Association in Dominica. It provides a marketing contract to the association and arranges, through a local marketing manager, for the procurement, transport, packaging, and export shipment of plantain from Dominica.

- v) OECS Agricultural Diversification Coordinating Unit (ADCU) was established with USAID funding and provides technical and material support to diversification efforts within the OECS countries, as well as fosters joint marketing of agricultural products from the sub-region. ADCU also is responsible for managing the Tropical Produce Support Project (TROPRO), a USAID-sponsored project, designed to provide technical and financial support for production, post harvest handling, transportation, and marketing activities related to selected tropical products. The head office of ADCU is in Dominica.
- Related to ADCU is a CARICOM Export Development Project (CEDP) that seeks to assist the private and public sectors in CARICOM member states to expand regional trade and extra-regional exports. The project promotes trade and operates a Caribbean Trade Information System (CARTIS).
- vi) ORGANIZATION OF EASTERN CARIBBEAN STATES (OECS) seeks to promote cooperation and economic integration of the English-speaking countries of the Eastern Caribbean. The OECS is currently taking steps towards a free market in which all internal tariff and non-tariff barriers to trade are to be eliminated. Steps are also being considered for some form of political unity.
- vii) UNIVERSITY OF THE WEST INDIES (UWI) provides education and training opportunities for students of agriculture. Through the Caribbean Agricultural Extension Project (CAEP), UWI has been able to undertake activities to improve the effectiveness of agricultural extension. UWI's Department of Agricultural Extension produces a newsletter which provides farming and extension information to farmers and agricultural practitioners in CARICOM countries.
- viii) CARIBBEAN AGRICULTURAL DEVELOPMENT AND RESEARCH INSTITUTE (CARDI) is a regional research institution catering to the technology generation needs of the Caribbean. CARDI's activities in Dominica have centered around research involving forage, small livestock, cut and carry system for small cattle production units, and, more recently, orchard management and tissue culture involving floriculture. The CARIBBEAN RURAL DEVELOPMENT AND TRAINING SERVICES (CARDATS) is the extension arm of the CARDI technology generation effort.

- ix) THE EASTERN CARIBBEAN STATES EXPORT DEVELOPMENT AGENCY (ECSEDA) was established with European Development Trust (EDT) funding with the objectives of helping the OECS identify, penetrate and develop export markets.
- x) THE CARIBBEAN DEVELOPMENT BANK (CDB) provides financial and technical assistance to agricultural development within the region. CDB is the main source of funding for AIDB.

k. INTERNATIONAL INSTITUTIONS SERVING AGRICULTURE There are some 15 bilateral and multilateral agencies involved in one form or another with agricultural development in Dominica. The greater part of Dominica's public sector capital investment in agriculture originates from these sources. Some of these agencies provide mainly financial assistance, some provide technical assistance, while others provide both. Financial assistance may take the form of loans or grants.

The European Development Fund (EDF) provides funding mainly for agricultural infrastructure such as feeder roads; the Canadian International Development Agency (CIDA) focus is on natural resources, land reform and agro-processing; the British Development Division (BDD) emphasizes tree crops development and the United States Agency for International Development (USAID) concentrates on institutional strengthening and related infrastructure. The Food and Agriculture Organization (FAO) provides mainly technical assistance for planning, natural resource development and marketing. The French technical cooperation (FTC) and the Republic of China (ROC) have resident missions. The former is building and operationalizing a farmer training center and the latter is carrying out research and extension activities in vegetable production.

The United States, Britain and Canada administer special trade agreements favouring Caribbean countries. These trade agreements include the U.S. Caribbean Basin Initiative (CBI), the Caribbean Canadian Trade Agreement (CARIBCAN), the British Banana Protocol, and the E.E.C. Trade and Aid Agreement (LOME Convention). These agreements provide duty-free entry of agricultural commodities from beneficiary countries into the respective markets. Non-tariff barriers, however, such as plant protection regulations, have restrained Dominica's ability to fully exploit many of the opportunities.

APPENDIX D-V-1

TABLE a - USAID PROJECTS ASSISTING AGRICULTURE IN DOMINICA

TABLE b - SELECTED OTHER EXTERNALLY FUNDED PROJECTS

ASSISTING AGRICULTURE IN DOMINICA

TABLE D-V-1

TABLE D-V-a: USAID FUNDED PROJECTS IN DOMINICA, 1991 *

<u>STATUS</u>	<u>PROJECT TITLE</u>	<u>TYPE OF FINANCING</u>	<u>TOTAL ESTIMATED COST</u>	
COMPLETED	Belles School	GRANT	300,000	
	Rellevue Chopin School	GRANT	300,000	
	CDCC Irrigation and Fencing	GRANT	10,000	
	Dev. of Interp. Facil. - Boers/F. Water Lakes	GRANT	96,590	
	Dominica Com. Infr. Dev.	GRANT	70,000	
	Equip/serv (admin. of justice)	GRANT	135,540	
	Extension Soufriere School	GRANT	330,000	
	Fencing of Government Headquarters	GRANT	78,131	
	Fruit fly control	GRANT	248,987	
	Hurricane Hugo Relief	GRANT	135,000	
	Hurricane Hugo Relief	GRANT	405,000	
	Hurricane Hugo Relief - Non-Banana	GRANT	810,000	
	Hurricane Hugo Relief -Banana	GRANT	3,915,000	
	Massacre Clinic	GRANT	168,215	
	Morne Jaune Infant Sch.	GRANT	130,000	
	Petite Savanne Primary School	GRANT	702,011	
	Physical Improvement of High Court/Registry	GRANT	418,460	
	Riviere Cyrique Clinic	GRANT	168,220	
	Roseau/Layout/P/Casse/Matton Grdn.Rd.	GRANT	42,396,696	
	Rural Elec. Proj. East Coast	GRANT	10,647,875	
	School garden project	GRANT	15,000	
	Scotts Head School Construc. PH.II	GRANT	276,000	
	Trafalgar School	GRANT	300,000	
		Totals:		62,276,723
	NEW	Belles School	GRANT	360,000
		Co-operative Development	GRANT	1,621,510
		Cocoa Development Project	GRANT	496,591
Concorde Primary School		GRANT	360,000	
Extension- Soufriere Primary School		GRANT	360,000	
Warner Primary School		GRANT	360,000	
	Totals:		3,558,101	
ONGOING	Construction of Parliament Bldg.	GRANT	1,620,000	
	Laudat School	GRANT	300,000	
	Law Library (Repairs/Equip)	GRANT	245,360	
	Marigot Junior School	GRANT	199,000	
	Printing of Revised Laws	GRANT	725,000	
	Project Supervisor	GRANT	246,000	
	Repairs to Magistrate's Court	GRANT	1,220,000	
	Sineku School	GRANT	360,000	
Youth Skills Training Programme	GRANT	709,092		
	Totals:		5,624,652	

D-V-2

USAID FUNDED PROJECTS (Continued)

<u>STATUS</u>	<u>PROJECT TITLE</u>	<u>FINANCING ESTIMATED TOTAL COST</u>

		Total 71,459,478

*In addition, USAID provides assistance to Dominica through regional projects as follows:

- Agricultural Research and Extension Project (AREP)
- Tropical Produce Support (TROPRO) project
- High Impact Agricultural Marketing project (HIAMP) and Agriculture Venture Trust (AVT).

232

TABLE D-V-b: SELECTED EXTERNALLY FUNDED AGRICULTURAL DEVELOPMENT
PROJECTS IN DOMINICA (EXCLUDING USAID-FUNDED PROJECTS), 1991

(i) Coffee Development Project Phase II

Status: on-going, started in 1987/88

Source of Funding: British Development Division (BDD)

Type of payment: Loan

Project Objectives: to provide an additional 200 acres of
high quality Arabica coffee to expand
the export base;

to increase farmer incomes;

to create additional employment.

2553b

212

opportunities.

Expected outcome: 1. self sufficiency;
2. regional export of processed coffee.

Expected completion/duration: 4 years (1991/92)

(ii) Option Arosa Project

Status: on-going, to be complete in 1989/90

Source of Funding: British Development Division (BDD)

Type of payment: Loan

Project Objectives: to improve access to presently lightly cultivated agricultural land with a view to establishing cultivation of coffee and to further encourage the development of other tree crops in the area; includes access road construction & coffee development component.

Expected outcome: 1. self sufficiency;
2. regional export of processed coffee;
3. encourage diversification with a coffee base.

Expected completion/duration; 5 years (1993/94)

(iii) Tropical Fruit & Spices Project

Status: on-going 1987/88

Source of Funding: British Development Division (BDD)

Type of payment: Loan

Project Objectives: To establish 450 acres of tropical fruit & spices on farmers' lands around the island; acreage establishment over years 1 & 2

(to 1988 - 90) with after care until trees come into bearing; for enhancement of agricultural production and export.

Expected outcome:

1. effectively penetrate markets - fresh and processed;
2. spread seasons to optimise markets;
3. enhanced development of agroprocessing.

Expected completion/duration: 1991

(iv) Integrated Rural Development Project (IRDP)

Status: on-going, 1986

Source of Funding: IFAD; Govt of Dominica.

Type of payment: Loan; STABEX Loan.

Project Objectives: to increase the net cultivated area & improve output of the sector by developing & assisting newly settled farmers under the GOCD Land Reform Programme to increase their productivity and income.

Expected outcome:

1. Increase in agricultural production;
2. land ownership and more effective land utilisation;
3. increased well being of rural populations;
4. infrastructure to facilitate production.

Expected completion/duration: five years

(v) Integrated Research & Micro Project (TREDU)

Status: on-going, 1980/81

Source of Funding: Government of Dominica

Project Objectives: to increase the importance of integrated research/development activities,

agricultural and livestock production to reinforce farmers' organisation initiative to solve their own problems.

Expected outcome: demonstrated potential of a microproject development approach.

Expected completion/duration: to be ongoing.

(vi) Agricultural Training Centre

Status: on-going, constructed in 1986, opened in 1988.

Source of Funding: Government of Dominica (operational expenses) FTC (initial construction of building)

Type of payment: FTC grant.

Project Objectives: to build a centre for training extension officers, farmers and students and for carrying out research on production systems through an Integrated Micro Research Project.

Expected outcome: an established and efficiently operating training centre and office

Expected completion/duration: to be on-going.

(vii) Pilot Vegetable & Rice Farm

Status: on-going, 1988/89

Source of Funding: Government of Dominica/
ROC Technical Mission

Type of payment:

Project Objectives: to set up a model farm for research on and the introduction of new vegetable crops and

new varieties of vegetables, demonstrating the potential of vegetable production on small sized farms, and studying diverse cropping system;
to study possible areas for technical assistance in flower production;

Expected outcome:

1. Increased productivity on small farms,
2. provision of technological packages for transfer.

Expected completion/duration: to be on-going.

viii) Coconut Development Project Phase II

Status: on-going 1987/88

Source of Funding: CIDA (funded the project up till August 1990
Government of Dominica

Type of payment: Grant

Project Objectives: to rehabilitate the large expanses of coconut acreages islandwide in order to revitalise the Coconut Industry; to research new varieties and implement coconut disease control programmes.

Expected outcome:

1. provision of copra for processing needs,
2. provision of necessary infrastructure to facilitate production and drying,
3. increased productivity and diversification
4. income generation from coconut production.

Expected completion/duration: to be on-going

(ix) Melville Hall Estate Development

Status: on-going 1989/90

Source of Funding: Caribbean Development Bank (CDB)

Type of payment: Loan

Project Objectives: to facilitate Govt's Land Reform Programme by assisting the development of newly settled lands for agricultural operations.

Expected outcome:

1. Increase in agricultural production
2. land ownership and more effective land utilisation...settlement of approx. 100 farmers on 650 acres,
3. Increased well being of rural populations
4. Infrastructure to facilitate production.

Expected completion/duration: five years.

(x) Sub-Regional Video Centre

Status: on-going, 1990/91

Source of Funding:

1. FAO (for building construction, equipment, and Consultants)
2. Government of Dominica (operational expenses).

Type of payment: Grant

Project Objectives: to co-ordinate and strengthen the work of the Extension Division to improve communication linkages between extension and rural areas; training for local and regional development communicators in the production and application of VIDEO in rural development.

Expected outcome:

1. enhanced performance of extension

- workers;
2. better trained farmers in proper crop and animal husbandry.

Expected completion/duration: on-going.

(xi) Plant Propagation and Distribution

Status: on-going

Source of Funding: Government

Type of Payment:

Project Objectives: to improve facilities for the propagation of planting material; to provide farmers with adequate quality planting material; and to assist in the distribution of planting material to farmers;

Expected outcomes: 1. distribution and cultivation of a range of crops;
2. increased production of selected crops

Expected completion/duration: to be on-going.

(xii) Orchard Pest Management

Status: on-going

Source of Funding: British Development Division (BDD)

Type of payment: Loan

Project Objectives: research programme aimed at improving the yields of Jalle mangoes;
to identify and monitor important pests;
to determine suitable methods for reducing major pest problems.

Expected outcome: 1. reduction in losses in mango yields from

APPENDIX E
BIBLIOGRAPHY

APPENDIX E - BIBLIOGRAPHY

1. Annual Economic Report 1989, Commonwealth of Dominica
by Caribbean Development Bank, Economics and Programming
Department
2. Dominica Updating Economic Note, Latin American & Caribbean
Region
February 9, 1990 Document of the World Bank: Report No.8269-Dom
3. Dominica - Recent Economic Developments
International Monetary Fund Paper, December 4, 1989
Prepared by staff mission consisting of Suheil Kavar (Head,
Wayne Lewis, John Thornton and Jaime Zeas (all WHD)
4. Draft Environment and Coastal Resources Project Paper No.
538-0171
by USAID Regional Development Office/Caribbean, February 1991.
5. A Programme for Agricultural Diversification in the OECs:
Identification and Promotion of Non-traditional Export Crops
with Potential for Joint Export Marketing, November 1988.
6. Annual Action Plan FY 92-93
USAID Regional Development Office/Caribbean, January 1991
7. Common External Tariff of the Caribbean Common Market: An
Explanation of its Purpose, Scope and Mode of Application
8. 4th ACP-EEC Convention of LOME National Indicative Programme -
Dominica
9. Annex 1A, 1B and 1C
10. Dominica - Staff Report for the 1988 Article IV Consultation,
Review of Second Annual Arrangement, and Request for Third
Annual Arrangement under Structural Adjustment Facility
Prepared by the International Monetary Fund
11. An Overview of the Eastern Caribbean Agricultural Sector
Prepared by Albert L. (Scaff) Brown, James A. Chapman and
Arthur Coutu, Chemonics International Consulting Division,
November 15, 1988
12. USAID RDO/C Agricultural Sector Strategy 1990-1993
Prepared May 1, 1989 at Bridgetown, Barbados
13. Feasibility Study - Broiler Production and Processing for
Dominica
Prepared by CASSE Consultants Ltd., September 1990

14. Section IV. - A Brief Forestry Overview
15. Dominica - Staff Report for the 1990 Article IV Consultation Prepared by International Monetary Fund Staff Representatives, January 4, 1991
16. Banana Business Operations - Activities & Programmes for the year 1990
17. Overview of Forestry in Barbados, Trinidad and the Eastern Caribbean Islands
18. Agricultural Diversification in the Caribbean
27 November - 1 December 1989 - Barbados
Prepared 10/90 by CARDI, Trinidad: Editor D. Walmsley
19. Organization of the Eastern Caribbean States (OECS) Country Agriculture Profiles
20. Draft "Agriculture - Toward the Year 2000",
Assessment of the Agricultural Sector of The Commonwealth of Dominica 1980 - 1990 (written by Raymond Austrie), Ministry of Agriculture, Dominica, 1991

22

ANNEX B

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to the eligibility of countries to receive the following categories of assistance: (A) both Development Assistance and Economic Support Funds; (B) Development Assistance funds only; or (C) Economic Support Funds only.

A. COUNTRY ELIGIBILITY CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUND ASSISTANCE

1. Narcotics

a. Negative certification (FY 1991 Appropriations Act Sec. 559(b)): Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? No.

b. Positive certification (FAA Sec. 481(h)). (This provision applies to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct N/A

223

source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government):

(1) does the country have in place a bilateral narcotics agreement with the United States, or a multilateral narcotics agreement?

(2) has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (a) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (b) the vital national interests of the United States require the provision of such assistance?

c. Government Policy (1986 Anti-Drug Abuse Act of 1986 Sec. 2013(b)). (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to Congress

N/A

listing such country as one: (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

2. **Indebtedness to U.S. citizens** (FAA Sec. 620(c): If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity?

No

3. **Seizure of U.S. Property** (FAA Sec. 620(e)(1)): If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No

4. **Communist countries** (FAA Secs. 620(a), 620(f), 620D; FY 1991 Appropriations Act Secs. 512, 545): Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by

No

223

the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

5. Mob Action (FAA Sec. 620(j)): No
Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property?

6. OPIC Investment Guaranty (FAA Sec. 620(l)): No
Has the country failed to enter into an investment guaranty agreement with OPIC?

7. Seizure of U.S. Fishing Vessels (FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5): No
(a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made?

8. Loan Default (FAA Sec. 620(q); FY 1991 Appropriations Act Sec. 518 (Brooke Amendment)): No
(a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriations Act appropriates funds?

26

9. **Military Equipment (FAA Sec. 620(s)):** If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

Yes. See "Taking into Consideration" memo.

10. **Diplomatic Relations with U.S. (FAA Sec. 620(t)):** Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No

11. **U.N. Obligations (FAA Sec. 620(u)):** What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.)

Current, See "Taking into Consideration" memo.

12. **International Terrorism**

a. **Sanctuary and support (FY 1991 Appropriations Act Sec. 556; FAA Sec. 620A):** Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons?

No

221

b. **Airport Security (ISDCA of 1985 Sec. 552(b)).** Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

No

13. **Discrimination (FAA Sec. 666(b)).** Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No

14. **Nuclear Technology (FAA Secs. 669, 670).** Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

No

15. **Algiers Meeting (ISDCA of 1981, Sec. 720).** Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.)

See "Taking into Consideration" memo.

210

16. **Military Coup (FY 1991 Appropriations Act Sec. 513):** Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?

No

17. **Refugee Cooperation (FY 1991 Appropriations Act Sec. 539):** Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?

Yes, to the extent applicable.

18. **Exploitation of Children (FY 1991 Appropriations Act Sec. 599D, amending FAA Sec. 116):** Does the recipient government fail to take appropriate and adequate measures, within its means, to protect children from exploitation, abuse or forced conscription into military or paramilitary services?

No

COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO DEVELOPMENT ASSISTANCE ("DA")

N/A. This is an ESF program.

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

2. **Abortions (FY 1991 Appropriations Act Sec. 535):** Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary

2/11

sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO ECONOMIC SUPPORT FUNDS ("ESF")

Human Rights Violations (FAA Sec. 502B): Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

No

220

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. Host Country Development Efforts (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to:
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

This program, which is intended to help expand and diversify Dominica's agricultural production and sales, will encourage (a), (b), (d) and (e).

2. U.S. Private Trade and Investment (FAA Sec. 601(b)): Information and conclusions on how assistance 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).

The grant dollars will be used to purchase U.S. commodities. Also, the program may create new opportunities in the agricultural sector.

3. Congressional Notification

a. General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)?

A CN was cleared without objection on December 11, 1991.

b. Notice of new account obligation (FY 1991 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

N/A

c. Cash transfers and nonproject sector assistance (FY 1991 Appropriations Act Sec. 575(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

Yes.

4. Engineering and Financial Plans (FAA Sec. 611(a)): Prior to an obligation in excess of \$500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

N/A

5. Legislative Action (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action

N/A

232

will be completed in time to permit orderly accomplishment of the purpose of the assistance?

6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

N/A

7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

Yes

8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

N/A

9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

See A.1 above

235

10. **U.S. Private Trade (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).

See A.2 above

11. **Local Currencies**

a. **Recipient Contributions (FAA Secs. 612(b), 636(h)):** Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

The program is intended to encourage Dominica to use its own resources to take various policy actions. No U.S. owned foreign currencies will be utilized.

b. **U.S.-Owned Currency (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?

N/A

c. **Separate Account (FY 1991 Appropriations Act Sec. 575).** If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

Yes to (a), (b) & (c)

textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

13. **Tropical Forests (FY 1991 Appropriations Act Sec. 533(c)(3)):** Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

N/A

14. **PVO Assistance**

a. **Auditing and registration (FY 1991 Appropriations Act Sec. 537):** If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. **Funding sources (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"):** If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

N/A

15. **Project Agreement Documentation (State Authorization Sec. 139 (as interpreted by conference report)):** Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

These actions will be taken, to the extent applicable

16. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

N/A

17. **Women in Development** (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

N/A

18. **Regional and Multilateral Assistance** (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

No. This is a direct grant to Dominica for sector reform.

226

19. Abortions (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

N/A

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

b. Will any funds be used to lobby for abortion?

20. Cooperatives (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

N/A

21. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

N/A

b. Release of currencies (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?

22. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

N/A

b. U.S. procurement (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?

Grant dollars will be used for U.S. procurement.

c. **Marine insurance (FAA Sec. 604(d)):** If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

N/A

d. **Non-U.S. agricultural procurement (FAA Sec. 604(e)):** If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

N/A

e. **Construction or engineering services (FAA Sec. 604(g)):** Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

No

f. **Cargo preference shipping (FAA Sec. 603):** Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

N/A. This is a non-project cash transfer grant. See FY 1991 Appropriations Act, Sec. 575(b)(2).

g. **Technical assistance (FAA Sec. 621(a)):** If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the

N/A

238

facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

h. U.S. air carriers

(International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

N/A

i. Termination for convenience of U.S. Government (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

N/A

j. Consulting services

(FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

N/A

k. Metric conversion

(Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest

N/A

documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

N/A

1. **Competitive Selection Procedures** (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

23. **Construction**

a. **Capital project** (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

N/A

b. **Construction contract** (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

N/A

c. **Large projects, Congressional approval** (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress?

N/A

24. **U.S. Audit Rights** (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

N/A

25. **Communist Assistance** (FAA Sec. 620(h)). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes

26. Narcotics

a. **Cash reimbursements (FAA Sec. 483):** Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? N/A

b. **Assistance to narcotics traffickers (FAA Sec. 487):** Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance? N/A

27. Expropriation and Land Reform (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes

28. Police and Prisons (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

29. CIA Activities (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Yes

30. Motor Vehicles (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

31. **Military Personnel (FY 1991 Appropriations Act Sec. 503):** Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

32. **Payment of U.N. Assessments (FY 1991 Appropriations Act Sec. 505):** Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes

33. **Multilateral Organization Lending (FY 1991 Appropriations Act Sec. 506):** Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

34. **Export of Nuclear Resources (FY 1991 Appropriations Act Sec. 510):** Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes

35. **Repression of Population (FY 1991 Appropriations Act Sec. 511):** Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes

36. **Publicity or Propoganda (FY 1991 Appropriations Act Sec. 516):** Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? No

37. **Marine Insurance (FY 1991 Appropriations Act Sec. 563):** Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate?

N/A

38. **Exchange for Prohibited Act (FY 1991 Appropriations Act Sec. 569):** Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

No

CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

N/A. This is an ESF program

(pp. 15-25 of Assistance Checklist is omitted)

1. **Agricultural Exports (Bumpers Amendment) (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment):** If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

Yes.

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

No.

3. **Commodity Grants/Separate Accounts** (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? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).)

N/A

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1991, this provision is superseded by the separate account requirements of FY 1991 Appropriations Act Sec. 575(a), see Sec. 575(a)(5).)

N/A. This is an FY 1992 Obligation.

5. **Cash Transfer Requirements** (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)). If assistance is in the form of a cash transfer:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

Yes. (This is a non-project cash transfer grant).

24

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

Yes

c. U.S. Government use of local currencies: Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

Yes

d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

Yes

245