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## TRADE AND PRODUCTION OF FOOD COMMODITIES IN CARICOM COUNTRIES WITH SPECIAL REFERENCE TO FRUITS AND VEGETABLES

#### Hayden Blades<sup>4</sup>/

#### INTRODUCTION

This paper presents an overview of trade and production of food commodities, with special reference to fruits and vegetables, in the CARICOM member countries, namely Antigua, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts/Nevis, St. Lucia, St. Vincent and Trinidad and Tobago - during the decade of the seventies.

The paper draws on data developed in an economic study of the fruit and vegetable subsector, as well as a study currently being undertaken by the CARICOM Secretariat on trade and production of food commodities in the CARICOM region.

The paper is presented in four sections:

- Section 1 reviews the trade pattern for all food commodities in the seventies;
- Section 2 focuses specially on trade and production of fruit and vegetables;
- In Section 3, the major constraints to production and trade in fruit and vegetables are explored; and
- Section 4 describes, in brief, the proposals currently being undertaken to improve the prospects for production and trade in fruit and vegetables during the mid-eighties.

#### TRADE IN FOOD COMMODITIES DURING THE SEVENTIES

#### Value of Food Imports and Exports

Trade in food commodities in the Seventies was characterized by the rapid growth in the value of imports starting in the early Seventies, primarily due to the rapid increase in world food prices during this period, as well as wide fluctuations in the value of food exports as a result of fluctuating export prices on the world market and natural disasters affecting the banana producing countries of the Windwards in the late Seventies. Essentially, the movements in the values to imports and exports mirrored the changes in the world prices for food commodities.

<sup>1/</sup> Caribbean Community Secretariat.

On the import side (see Table 1), food imports increased in value from EC\$430 million to EC\$1,946 million between 1970 and 1980, representing a growth rate of 16 per cent per annum over the ten-year period. The annual growth rate, between 1970 and 1972, averaged some 12 per cent, and shot up to 25 per cent between 1972 and 1975, due to very steep food price increases in the international market, before returning to a mo-e normal rate of increase, 13 per cent, between 1975 and 1980.

The major food importing countries during the decade were Trinidad and Tobago (41 per cent of total imports in 1980), Jamaica (27 per cent) and Barbados (11 per cent). These three countries accounted for approximately 80 per cent of the total value of regional food imports in 1980.

The value of intra-regional food imports increased from EC\$41 million in 1970 to EC\$271 million in 1980. Intra-regional imports represented 9 per cent of total imports in 1970 and 14 per cent in 1980, and exhibited an annual average growth rate of 21 per cent over the decade. This growth rate was some 5 per cent higher than the rate at which total imports grew, signifying the slowly increasing importance of intra-regional trade in the total food trade.

On the export side, the value of food exports increased from EC\$440 million in 1970 to EC\$1,294 million in 1980 (see Table 2), representing an annual average growth rate of 11 per cent over the decade. Between 1970 and 1972, the value of exports grew by 9 per cent per annum, whereas between 1972 and 1975, because of increases in the price of the major export crops — sugar and bananas.

The growth rate fell back to 3 per cent per annum due to rapidly falling export prices for sugar and bananas on the export markets as well as falling production of these export crops. This very low growth rate is expected to continue during the early Eighties since world prices for primary commodities are not expected to increase significantly during this period.

The proportion of extra-regional exports in total exports increased from 10 to 18 per cent over the decade. The growth rate over the period was 18 per cent, some 7 per cent higher than the growth of total exports.

#### Food Trade Balance

Over the decade, the differential growth (annual average) rates experienced between extra-regional imports (16 per cent) and extra-regional exports (8 per cent) led to a situation where the balance of trade in food commodities moved from a surplus of EC\$12 million in 1970 to a deficit of EC\$592 million in 1980 (see Table 3).

The major deficit countries in 1980 were Trinidad and Tobago (EC\$597 million), Jamaica (EC\$264 million), Barbados (EC\$28 million)

Table 1

Total Imports of Food Commodities into CARICOM by country - 1970-1980 E.C.\$,000

	Antigua	Barbados	Belize	Dominica	Grenada	Guyana	Jamaica	Antigua Barbados Belize Dominica Grenada Guyana Jamaica Montserrat St.Kitts St.Lucia St.Vincent & Tohago Imports	St.Kitts	St.Lucia	St.Vincent	Trinidad & Tobago		Total Intra Regional Imports	Total Intra Total Extra Regional Regional Imports Imports
1970	13,104	49,196	17,062	7,413	10,997 37,295 165,822	37,295	165,822	1,948	286,3	10,375	115,7	103,361	430,456	40,501	389,955
1971	14,646	53,350	18,174	1,711	12,986	12,986 41,529 183,855	183,855	1,816	6,258	12,148	180,6	114,541	476,095	47,952	428,143
1972	16,420	63,002	20,690	9,316	13,284	13,284 38,092 216,581	216,581	2,583	7,532	13,179	10,205	132,923	543,807	63,003	480,804
1973	14,877	79,716	22,608	9,434	14,540	14,540 51,411 247,485	247,485	2,861	8,154	17,251	11,531	161,006	640,875	62,636	578,239
1974	21,863	94,220	33,763	12,538	15,084	15,084 66,712 394,231	394,231	3,870	10,854	22,265	15,448	250,267	941,103	104,879	836,224
												•			
1975	24,521	98,970	98,970 49,877	14,17	18,256	18,256 83,386 426,380	426,380	4,478	10,676	25,220	17,444	284,884	284,884 1,058,263	171,869	886,404
9261	20,891	127,732	50,233	16,622	21,505	21,505 115,876 477,616	477,616	161,3	13,332	30,165	19,792	343,785	343,785 1,242,740	169,707	1,073,033
1977	25,274	141,714	54,149	16,824	24,984	24,984 106,054 367,833	367,833	5,176	13,629	36,260	22,972	412,436	412,436 1,227,306	142,776	1,084,530
1978	116,18		69,547	22,335	29,026	29,026 98,923 459,666	459,666	6,237	16,039	46,116	31,887	497,489	497,489 1,474,842	185,832	1,289,010
1979	34,840	181,041	87,083	15,012	36,099	36,099 107,289 346,758	346,758	1.28,9	18,191	52,216	40,434	696,209	602,969 1,528,803	196,196	1,332,607
9	- 9		Ş	3	;	3		8	9	3	9				
1980	38,037	7	72,620	660,62	371.6	39,1/8 80,100 334,043	334,645	9,324	20,1/0	c06*6c	anc • 1 c		790,283 1,945,053	269,072	1,014,74,1

Note: e = Estimated Source: Trade Reports.

Table 2

Total Exports of Food Commodities from CARICOM by Country - 1970-1980

E.C.\$'000

1980	1979	1978	1977	1 1976	1975	1974	1973	1972	1971	1970	
•	•	85	542	865	447	417	531	442	414	396	Anti gua
184,576 169,046 10,494	109,201	90,633	91,782	85,136	125,938	73,479	44,206	36,545	35,004	42,877	Barbados
169,046	109,201 131,391 15,694	137,942	101,456	74,484	110,553 21,089	63,119	40,820		26,493	25,250	Belize
10,494	15,694	32,267	24,882	22,686	21,089	63,119 17,623	40,820 13,712	10,627	9,929	9,396	Dominica
42,251 383,019 269,787	53,843			32,460	25,522	17,493	13,613	10,021	9,524	10,976	Grenada
383,019	53,843 340,596 296,591	375,244 324,100	- 290,802 342,011	32,460 360,776 273,117	25,522 474,934 430,034	17,493 326,410 248,125	13,613 109,710 155,984	10,021   132,610   150,302	9,524 129,323 139,031	10,976 111,243 141,042	Guyana
269,787	296,591	324,100	342,011	273,117	430,034	248,125	155,984	150,302	139,031	141,042	Jamaica
221	646	283	258	493		•	•	•			Montserrat
	32,111	32,953	27,013	28,132	29,001	13,041	6,907	7,623	5,443	6,258	St.Kitts
35,763	43,661	38,794	30,123	24,333	19,647	22,706	10,934	9,077	7,598	5,746	St.Lucia
•	32,697	39,368	23,312	22,455	14,114	12,874	8,013	4,913	4,299	5,381	Antigua Barbados Belize Dominica Grenada Guyana Jamaica Montserrat St.Kitts St.Lucia St.Vincent & Tobago Imports
199,046	192,378 1,248	155,236 1,227	184,008	203,566	232,088	158,792	87,775	92,387	80,088	81,523	Trinidad & Tobago
1,294,203	1,248,809	1,227,681	1,116,189	1,128,503	1,483,367	95,4,079	492,205	454,547	447,166	440,088	Total Imports
227,648	187,135	190,402	154,882	189,980	145,323		67,673	58,543	44,319	43,030	Total Intra Total Extra Regional Regional Imports Imports
1,066,555	1,061,674	1,037,279	961,307	938,523	1,338,044	852 , (n)G	424,532	396,004	402,847	483,118	Regional Imports

Note: - = Not available Source: Trade Reports

Table 3

Food Trade Balance for CARICOM by Country - 1970-1980

## E.C.\$ 000

	Antigua	Barbados	Be 11 ze	Belize Dominica Grenada	Grenada	Guyana	1	Jamaica Montserrat St.Kitts	St. Kitts	St.Lucia	St.Lucia St.Vincent a Tobago	Trinidad & Tobago	Total CARICOM
1970	-12,708	-6,319	8,198	1,983	-21	73,948	-24,780		-124	-4,629	-2,130	-21,838	11,580
1971	-14,232	-18,346	8,319	2,218	-3,462	87,794	-44,804	•	-815	-4,550	-4,782	-34,453	-27,113
1972	-15,978	-26,457	٠	1,311	-3,263	94,518	-66,279	•	16	-4,102	-5,292	-40,536 -65,987	-65,987
1973	-14,346	-35,510	18,212	4,278	-927	58,299	-91,501	•	-1,247	-6,317	-3,518	-73,231	-73,231 -145,808
1974	-21,436	-20,741	29,356	5,085	2,409	2,409 259,698	-146,106	•	2,187	441	-2,574	-91,475	16,844
1975	-24.074	26.968	60,676	6.918	7,266	7,266 391,548	3,654	•	18,325	-5,573	-3,330	-52,796 429,582	429,582
9/61	-20,026	-42,596	24,251	6,064	10,955	10,955 244,900	-204,499	-4,698	14,800	-5,832	2,663	-140,219 -114,237	114,237
1977	-24,732	-49,932	47,307	8,058	,	- 184,748	-25,822	-4,918	13,384	-6,137	340	-228,428 -86,132	-86,132
1978	-31,050	-75,033	68,395	9,932	•	- 276,321	-135,566	-5,954	16,914	-7,322	7,481	-342,253 -218,135	.218,135
1979		-71,840	44,308	682	17,744	17,744 233,307	-50,167	-6,225	13,920	-8,555	-7,737	-410,591 -245,154	-245,154
0861	•	-27,534 96,220 -15,201	96,220	-15,201	3,073	296,853	3,073 296,853 -264,858	-9,103	•	-24,142	•	-597,239 -591,665	-591,665

Note: - - Not available Source: Trade Reports

and St. Lucia (EC\$24 million). In 1980, Dominica and St. Vincent also recorded deficits, but these were primarily due to the effects of natural disasters on their agricultural exports.

The main surplus countries in 1980 were Guyana (EC\$297 million), Belize (EC\$96 million) and Grenada, whose surplus had declined to EC\$3 million due to the effects of hurricane David in 1979.

Over the decade of the Seventies, the region moved from a net exporter of food, to a net importer, with the negative food trade balance increasing by EC\$603 million between 1970 and 1980, or an annual average increase of some 48 per cent. Only in 1974 and 1975 were surpluses recorded, due to the favourable sugar prices in the world markets.

The widening of the negative food trade balance is expected to continue in the 1980's, unless drastic measures are taken to arrest it, since the data suggests that the value of imports will grow between 10 to 15 per cent per annum, while exports will only grow by three to five per cent or even less because of the declining world prices for primary commodities.

This situation will put severe pressures on the balance of payments of the CARICOM countries and may even reduce their ability to import basic food commodities needed to maintain the nutritional status of the population.

#### The Structure of the Food Trade

The food groups which dominate the import trade are:

- Livestock commodities, which represented 32 per cent of food imports in 1980;
- Cereal and cereal preparations 32 per cent, and
- Fruit and vegetables 11 per cent (see Table 4).

The major commodities imported are as follows:

- Livestock commodities beef, poultry parts, corned beef, milk, cheese and butter.
- Cereals wheat and maize from extra-regional sources. Rice from regional and extra-regional sources.
- Fruits and vegetables white potatoes, onions, preserved vegetables, dried fruit, carrots, tomato products and fruit juices, which are supplied primarily from regional raw materials.

Examination of Table 4 shows that the percentage distribution of the various food groups has remained relatively constant during the 1970's,

Table 4

Total Imports of Food Commodities into CARICOM by SITC Division

for Selected Years

	1970	1974	1978	1970	1974	1978
SITC Division		(E.C.\$'00	0)	(P	ercentag	je )
Live animals (for food)	2,140	2,637	9,031	0.51	0.28	0.61
Meat and meat preparations	72,713	116,984	238,113	17.32	12,69	, 16,04
Dairy products and eggs	69,973	147,507	238,611	16.67	16.00	16,07
Fish and fish preparations	34,431	59,826	89,348	8.20	6.49	6.02
Cereal and cereal preparations	120,422	381,472	473,490	28.69	41.37	31.89
Fruit and vegetables	46,062	77,716	161,748	10.97	8.43	10.89
Sugar/sugar preparations/ honey	14,716	28,783	50,246	3.51	3.12	3.38
Coffee/tea/spices and manufactures thereof	14,954	.24,682	58,147	3.56	2.68	3.92
Feeding stuffs for animals	26,362	43,499	97,931	6.28	4.72	6.60
Miscellaneous food preparations	17,929	38,911	68,051	4.27	4.22	4.58
	419,702	922,017	1,484,716	99.98	100.00	100.00

indicating that the structure of food imports has remained very stable over the period. Given the high proportion of food imports in regional consumption, the inference is one of a relatively stable regional food consumption pattern.

In 1978, the food groups which were the main contributors to exports were:

- Cereals (11 per cent),
- Fruit and vegetables (16 per cent), and
- Sugar and sugar preparations (57 per cent). (See Table 5).

These three food groups account for 84 per cent of domestic exports. It should also be noted that the structure of food exports remained stable over the period except for the mid-70's when the favourable price for sugar increased the proportion of the sugar group in total domestic exports.

The main commodities exported are:

- · Cereals rice to the regional market,
- Fruit and vegetables citrus, fresh and concentrated, to the regional and extra-regional market; bananas for the extra-regional market,
- Sugar sugar and molasses for the extra-regional market.

#### Summary

Trade in food commodities in the 1970's has been characterized by:

- A high growth rate in the value of imports which is expected to continue during the 1980's.
- A much lower growth rate in the value of exports and therefore an acceleration of the food trade deficit which grew by an outstanding 48 per cent per annum during the 1970's.
- Slowly increasing importance of regional trade in the total food trade.
- Stability in the composition of imports and exports with livestock products, cereals, fruit and vegetables dominating the import trade; and rice, sugar, bananas and citrus the main contributors to exports.

Table 5

Domestic Exports of Major Food Groups
For CARICOM Countries 1973, 1975, 1978

	1973		1975		1978	
Major Food Group	E.C.\$'000	% of Total	E.C.\$'000	% of Total	E.C.\$'000	% of Total
Cereals and grain, legumes	31,387	6.6	95,517	6.5	134,148	11.4
Meat and dairy products	5,591	1.2	`4,992	0.3	25,271	2.1
Oils and fats	8,722	1.8	13,636	0.9	18,173	1.5
Fruits and vegetables	81,670	17.2	120,773	8.2	193,803	16.4
Fish and fish products	21,078	4.4	15,641	1.1	25,392	2.2
Sugar, sugar preparations and honey	271,023	57.1	1,128,420	77.0	670,411	56.8
Coffee, tea, cocoa, spices and manufactures thereof	43,616	9.2	70,693	4.8	99,195	8.4
Live animals (for food)	1,075	0.2	732	-	1,749	0.1
Miscellaneous food preparations	10,580	2.2	15,654	1.1	11,145	0.9
Total	474,742	99.9	1,466,058	99.9	1,179,287	99.8

#### TRADE AND PRODUCTION OF FRUITS AND VEGETABLES

#### Trade

The imports of fruit and vegetables valued some EC\$162 million in 1981 (see Table 6). The major commodities imported were:

- Fruit juices: 16 per cent
- White potatoes: 12 per cent
- Preserved vegetables: 5 per cent

- Onions: 5 per cent

- Carrots: 3 per cent
- Dried fruit: 3 per cent

These commodities account for some 45 per cent of the imports of fruit and vegetables (See Table 7).

The main importing countries are Barbados and Trinidad and Tobago, which account for 85 per cent of imports. The Barbados and Trinidad and Tobago markets also showed the highest annual average growth rates in the 1970's viz. 19 per cent in Barbados and 30 per cent in Trinidad and Tobago.

The other two main importers, Jamaica and Guyana, exhibited declining growth trends, minus 2 per cent in Guyana and minus 4 per cent in Jamaica. These declining growth trends are as a result of the import supply management policies pursued by these governments in the 1970's.

The region imports some 18,000 tonnes of processed fruit and vegatables annually. Over 50 per cent are purchased from regional sources. The main component of regional trade is the export of bulk citrus concentrates from Belize to the regional market. The major imported processed products are fruit juices, preserved fruits, jams and jellies and tomato products, which are used mainly as inputs in agro-industries.

In 1978, regional trade accounted for only 17 per cent of total imports. The main markets for regional trade were the Barbados and Trinidad and Tobago markets, which absorbed 89 per cent of regional trade.

The reasons for the low proportion of regional trade are:

- A high proportion of white potatoes to imports. White potatoes represent 12 per cent by value and 65 per cent by weight of total imports. Onions are the other main import of fresh fruit and vegetables, accounting for 5 per cent of the value and 20 per cent of the weight of total imports. These two commodities are only grown to a limited extent in the region and are produced at very high costs due to a range of production and marketing problems that are experienced, as well as the lack of suitability of commercial varieties vis a vis the region's ecological environment.

Table 6

Trade in Fruit and Vegetables in CARICOM Countries for Selected Years

	δ	Total Imports	55	Intra-Regional Imports	Intra-Regional Imports as a Percentage of	F	Total Exports	ts
	ت	(E.C.\$'000)		(E.C.\$'000)	(E.C.\$'000)		(E.C.\$'000)	=
	1973	1975	1978	1978	1978	1973	1975	1978
Antiqua	2,054	2,967	4,132	347	8,39	i	31	7,6
Barbados	10,920	12,920	25,642	9,359	36.50	1,103	1,672	
Be 1 f ze	1,883	4,850	5,719		•	5,713	036,7	10,407
Dowlnica	i	999	1,257	92	5.12	i	20,460	31,35.3
Grenada	1,223	1,092	i	•	ļ	2,283	1,013	i
Guyana	8,055	019.6	7,107	281	3.95	109	137	20%
Jamaica	17,783	22,238	14,842	1,655	11,15	49,780	135,78	76.797
Montserrat	215	359	357	30	8.40	75	219	551
St. Lucia	1,694	1,794	4,512	505	91.11	10,327	18,3%	34,06.3
St. Kitts/Nevis	885	010,1	ŀ	:	1	7	43	-
St. Vincent	746	:	1,387	304	21,92	7,438	:	29,24R
Trinidad & Tobago	26,402	33,505	96,793	15,366	15.88	4,835	7,281	6,627
Total	71,830	110,16	161,748	27,912	17.26	81,670	120,773	193,603

Note: --- = Not available

Table 7

Imports of Selected Fruits and Vegetables for CARICOM Countries

(E.C.\$'000)

	1970	1974	1978	1970 (As a perc	1974 entage o	1978 f total)
Potatoes, not sweet	6,519	12,077	20,019	14.15	15.54	12.38
Onions	3,442	9,713	7,342	7.47	12.50	4.54
Carrots	704	1,521	4,963	1.53	1.96	3.07
Preserved vegetables	3,063	5,722	8,178	6.65	7.36	5.06
Fruit juices	3,722	6,881	25,947	8.08	8.85	16.04
Dried fruits	2,759	3,428	6,030	5.99	4.41	3.73
Total fruits and vegetables	s: 46 <b>,</b> 062	77,716	161,748	43.87	50.62	44.82

High imports of preserved vegetables and pulses as inputs for agroindustries, as well as final commodities for direct sale.

- Imports of tomato products, including paste, juice and ketchup.
   Tomato paste is imported primarily as an input into the manufacture of tomato ketchup.
- Imports of preserved fruits, including deciduous fruits, jams and jellies.

In order to increase the proportion of regionally produced products in the consumption of fruit and vegetables, it would be necessary to:

- Initiate the production of tomatoes to be used in the processing industries;
- Extend the growing season for carrots;
- Increase the production and storage life of regionally produced onions;
- Increase the production and manufacturing of local fruits;
- Re-orient the consumption patterns towards greater utilization of locally produced root crops and away from the consumption of white potatoes.

#### Production of Fresh Fruit and Vegetables

The estimated production of fresh fruit and vegetables in 1978 was approximately 722,000 tonnes (See Table 8). This total production comprised:

- 298,000 tonnes of fruit: 42 per cent
- 267,000 tonnes of roots: 37 per cent
- 140,000 tonnes of vegetables: 19 per cent
- 14,000 tonnes of pulses: 2 per cent

The main producing countries were:

- Jamaica 410,000 tonnes 57 per cent
- Belize 65,000 tonnes 9 per cent
- Trinidad and Tobago 65,000 tonnes 9 per cent
- Guyana 46,000 tonnes 6 per cent

Barbados was an important producer of vegetables, and roots in particular. These major producers, with the exception of Belize, also represent the main consumption centres.

The data also shows preferences for the production of some commodity groups at the national level.

Estimated Production of Selected Fresh Fruits, Vegetables and Root Crops - 1978 (Tonnes) Table 8

	- BOS 1304	Barbados	Be 11 ze	Dominica	Grenada	Guyana	Jamaica	Montserrat	St.Kitts	St.Lucia	St.Vincent	Trinidad & Tobago	CARICOM
Aubergines	200	2	-	4		ľ	25	£	9	2	220	3,184	4,145
Cucumber	88	1,759	22	1,629	8	90,	5,647	46	<u>ور</u>	370	165	1,869	13,710
Tomatoes	910	727	99	£	92	2,860	17,429	114	440	45	8	7,825	30,784
Okra	560	2	20	ω	2	908	006	•	•	8	63	?	5,104
Pumpkins	8	284	28	356	368	2,500	29,362	₹ ;	9	350	120	7,598	42,064
Sweet pepper	210	150	20	m	40	8	1,597	<u>ج</u>	2		20	154	2,562
Cabbages	8	818	140	920	57	9	12,890	139	150	140	136	6,225	22,755
Ontons	5	745	4	•	_	•	981.9	116	320	• ;	2	,	7,553
Carrots	99	1,818	52	430	42	8	7,885	177	130	8	200	:	12,200
Egg Plant	530	9	:	:	- [	:	:	i	8	2	220	3,184	3,864
Total Vecetables 5	030	(B.8)	648	3,523	994	8,770	82,728	899	1,350	1,035	1,378	27,234	140,189
***************************************	020	9	4 600	1 407	072	1 550	305 205	403	1.150	090	1.675	2.563	60.752
CARGO POCATORS	200	3 4				200	000	35	2		000	2 6 7 4	178 051
TARKS TARABLE	3	0,00	0064	5	÷ 0	200	000,000	44	3 '	996	2		1861
Cadore poracoes	. 6	200	•	_	447	200		; ·	•	4 200	4.430	2.934	18 330
	2	;	-	)	 }	3							
Total Roots 2	350	14,074	9 320	5,511	1,343	95.50	201,204	688	2,650	9,060	6,995	171,9	569,896
Peanuts	,	.•	100	•	ĸ	1,000	1.408	56	62	9	52	•	2,632
Red Kidney beans		•	000	•	•	2	3,975	7	,	•	•	102	5,094
Pigeon peas	•	٠	•	•	945	2	2,212	7	2	45	405	2,277	5,908
Total Pulses	,	•	1,100	•	950	1,020	7,595	40	72	53	427	2,379	13,634
a soft so out		75.0	•	184	1 376	•		•	92	380	120	305	2.931
	160	150	*	4.976	550	·	3,422	90.	120	110	3,592	3,765	16,945
	8	009	*	3,245	1,060	10,910	20,536	9	9	9	860	5,075	42,516
	20	250	\$5 °576*	10,004	2,214	•	34,227	•	<b>4</b>	320	492	12,680	115,853
Mangoes 2	200	8	200	239	1,593	900	30,00	400	2,200	17,750	5,744	150	66,476
Plantains	•	g g	9	66/12	000	4,3/3	00/167	•	2	C +	1670	0/0	23,000
Total Fruits 2	2,740	2,550	58,076	21,407	7,449	25,285	117,973	099	1,436	301.61	35,105	26,645	298,331

<sup>\*</sup> included in grapefruit --- A prot available Sources: National Production Estimates/Stevenson and Kellogg Notes: \* included in grapefruit

<sup>- -</sup> marginal production

- Antigua is oriented towards the production of vegetables.
- Barbados is strongly inclined towards roots and vegetables with a minimal production of fruit.
- Belize's production is concentrated on citrus production.
- The Windward Islands -- Dominica, St. Vincent, St. Lucia and Grenadaare oriented towards fruit production, with root production coming
- Guyana is also oriented towards fruit production with an equal concentration on vegetables and roots.
- Trinidad and Tobago is oriented towards fruit and vegetable production.
- Jamaica produces large quantities of all these commodities.

These national production patterns are a result of:

- Production systems the growing of roots and vegetables on cane lands in Barbados.
- Topographical features the hilly terrain in the Windwards suggest fruit production.
- A variety of national ecological conditions the variety of ecological conditions in Jamaica allows for the production of a variety of crops.
- Investments by commercial interests the production of fruits in Belize and vegetables in Trinidad and Tobago.

### T THE MAJOR CONSTRAINTS TO REGIONAL PRODUCTION IN AND TRADE IN FRUITS AND VEGETABLES

During the '60's and '70's, much attention was paid to increasing the production of these commodities. These efforts to date have only been partially successful because of the continued existence of a number of constraints as follows:

- The limitations of the small farmer production systems:
  - These small farmer systems are characterized by non-existent production planning; traditional production, harvesting and handling methods; and rainfed production leading to low yields, poor quality and high production costs; these limitations are of crucial importance since the small farmer produces the major proportion of food commodities.

- An inefficient marketing system for regionally produced food commodities:
  - The marketing system for domestically produced foods has historically been very weak. It manifests phenomena such as high post harvest losses, weak collection and distribution systems, poor intra-regional transport facilities, limited physical facilities, a shortage of financial and managerial resources.
- O Unanticipated effects of the regional trading agreements (AMP/GMS agreements:
  - The operation of the Agricultural Marketing Protocol has in practice led to a number of unanticipated effects, such as the channelling of AMP trade through inefficient Marketing Boards; a system of fixing trading volumes and prices which causes inflexibility in dealing with the merchandising of commodities which are perishable in nature; and the lack of development of current trade information on which trade could be developed.
- Slow rate of technological development:
  - No coherent and sustained research and development programme has been devised to improve the technology required for the production and marketing of these commodities. As a result, there is a lack of suitable varieties, harvesting equipment (particularly for the aroids), storage techniques, soil and water management techniques, and tillage equipment for small farmers.
- A number of negative socio-political factors:
  - These range from high levels of praedial larceny to poor attitudes to farming, as a result of the low income levels characteristic of the small farmer communities, and consumption patterns which do not reflect regional production capabilities.

## PROPOSALS FOR THE DEVELOPMENT OF PRODUCTION AND TRADE IN THE MID-EIGHTIES

During the decade of the Eighties, a number of initiatives need to be urgently undertaken if the widening food trade deficit is to be arrested, small farmer production and income increased and rural communities lifted out of their present conditions of poverty. A number of the required initiatives are currently being undertaken. These are briefly described below.

 Increasing Small Farmer Production.
 National, regional and international agencies are currently cooperating in a number of projects seeking to improve the production and incomes of small farmers. The concept being utilized in these projects is to provide the small farmer with a comprehensive package of services from production planning through to marketing. Examples of these initiatives are the CARDATS project in the Windwards and Leewards, and the Rural Development Project in Barbados. Although these projects aim to provide the small farmer with comprehensive services, they do not include the provision of land. As such, national governments will have to address the issue of land reform policies and ensure that small farmers have access to farm units of an economic size with security of tenure and adequate infra-structure.

Another important back-up service to these projects is the provision of technology to increase the productivity of the small farmer systems. This technology development is being undertaken by CARDI as a component of its small farmer systems project.

Increasing the Efficiency of the Marketing System.
 Marketing has been identified as the critical constraint, at the moment, to the generation of increased production and trade. A number of studies have been undertaken to identify the problem areas in the marketing system, and to specify the interventions required.

Projects currently at various stages of implementation, are being undertaken to:

- (a) Improve the operations of the public marketing agencies in the areas of increased physical facilities, staff training and development, improved operational systems and more precise, nonconflicting policy objectives.
- (b) The provision of better services and training for the private traders.
- (c) The creation of Caribbean Agricultural Trading Company, which is intended to assist in the movement of both inputs and outputs regionally and extra-regionally.
- (d) Improvement in inter-island transportation facilities with the objective of providing a weekly refrigerated service to all the countries. This is being tackled through the provision of two additional vessels for WISCO for use particularly in the Windwards and Leewards, the use of a selected number of small vessels to provide a scheduled service to back-up the WISCO services and the development of mini-refrigerated containers for use on the small vessels.
- (e) The setting up of a regional Market Information Service. This service is being developed on the basis of the creation of individual national market information services linked to a central regional system to allow for the movement of market information acrosss national boundaries. An export promotion project currently under implementation will provide for the provision of market information on third country markets.

- (f) Improved regional trading mechanisms. The revision of the AMP/GMS schemes are currently in train. The Council of Ministers has approved new policy guidelines for these agreements as follows:
  - (i) Increased involvement of private traders,
  - (ii) Allowing the market mechanism to determine trading prices,
  - (iii) Trade volumes and merchandising arrangements will be agreed upon directly between the buyers and sellers in the market,
    - (iv) The use of the national licencing systems to provide protection for regionally produced commodities,
    - (v) Wider utilization of regionally agreed  $\leftarrow$  to Grades and Standards.
- (g) Improved production planning.

To underpin the efforts described above, it will be necessary to improve production planning within CARICOM in relation to its market requirements. This initiative is being undertaken through the development of a subsector development programme for fruits and vegetables and other important subsectors. These subsector programmes have been approved earlier this year, by the Ministers of Agriculture for implementation. A programming mission has been mounted to identify specific projects for implementation, as well as the phasing of these projects. These activities are intended to provide for increased regional collaboration in the planning of national production activities.

These wide ranging projects/activities have been undertaken so as to concentrate resources on the removal of the critical constraints in the production and marketing of food commodities. Speedy implementation and monitoring of the projects in relation to the set objectives will be necessary in order to ensure that all the links in the production/marketing chain are effectively and efficiently strengthened.