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

**Hayden Blades<sup>1/</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.

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<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 more 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	Montserrat	St. Kitts	St. Lucia	St. Vincent & Tobago	Total Imports	Total Intra Regional Imports	Total Extra Regional Imports
1970	13,104	49,196	17,052	7,413	10,997	37,295	165,822	1,948	6,382	10,375	7,511	103,361	40,501	389,955
1971	14,646	53,350	18,174	7,711	12,986	41,529	183,855	1,816	6,258	12,148	9,081	114,541	47,952	428,143
1972	16,420	63,002	20,690	9,316	13,284	38,092	216,581	2,583	7,532	13,179	10,205	132,923	543,807	480,804
1973	14,877	79,716	22,608	9,434	14,540	51,411	247,485	2,861	8,154	17,251	11,531	161,006	62,636	578,279
1974	21,853	94,220	33,763	12,538	15,084	66,712	394,231	3,870	10,854	22,265	15,448	250,267	104,879	836,224
1975	24,521	98,970	49,877	14,171	18,256	83,386	426,380	4,478	10,676	25,220	17,444	284,884	171,859	886,410 <sup>a</sup>
1976	20,891	127,732	50,233	16,622	21,505	115,876	477,616	5,191	13,332	30,165	19,792	343,785	169,707	1,073,033
1977	25,274	141,714	54,149	16,824	24,984	106,054	387,833	5,176	13,629	36,260	22,972	412,436	142,776	1,084,530
1978	31,911	165,666	69,547	22,335	29,026	98,923	459,666	6,237	16,039	46,116	31,887	497,489	185,832	1,289,010
1979	34,840 <sup>b</sup>	181,041	87,083	15,012	36,099	107,289	346,758	6,871	18,191	52,216	40,434	602,969	196,196	1,332,607
1980	38,037 <sup>b</sup>	212,110	72,826	25,695	39,178	86,166	534,645	9,324	20,176 <sup>e</sup>	59,905	51,306 <sup>e</sup>	796,285	270,892	1,674,711

Note: e = Estimated  
Source: Trade Reports.

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

E.C.\$ '000

Table 2

	Antigua	Barbados	Belize	Dominica	Grenada	Guyana	Jamaica	Montserrat	St. Kitts	St. Lucia	St. Vincent	Trinidad & Tobago	Total Imports	Total Intra Regional Imports	Total Extra Regional Imports
1970	396	42,877	25,250	9,396	10,976	111,243	141,042	-	6,258	5,746	5,381	81,523	440,088	43,030	483,118
1971	414	35,004	26,493	9,929	9,524	129,323	139,031	-	5,443	7,598	4,299	80,088	447,166	44,319	402,847
1972	442	36,545	-	10,627	10,021	132,610	150,302	-	7,623	9,077	4,913	92,387	454,547	58,543	396,004
1973	531	44,206	40,820	13,712	13,613	109,710	155,984	-	6,907	10,934	8,013	87,775	492,205	67,673	424,532
1974	417	73,479	63,119	17,623	17,493	326,410	248,125	-	13,041	22,706	12,874	158,792	954,079	102,073	852,006
1975	447	125,938	110,553	21,089	25,522	474,934	430,034	-	29,001	19,647	14,114	232,088	1,483,367	145,323	1,338,044
1976	865	86,136	74,484	22,686	32,460	360,776	273,117	493	28,132	24,333	22,455	203,566	1,128,503	189,980	938,523
1977	542	91,782	101,456	24,882	-	290,802	342,011	258	27,013	30,123	23,312	184,008	1,116,189	154,882	961,307
1978	861	90,633	137,942	32,267	-	375,244	324,100	283	32,953	38,794	39,368	155,236	1,227,681	190,402	1,037,279
1979	-	109,201	131,391	15,694	53,843	340,596	296,591	646	32,111	43,661	32,697	192,378	1,248,809	187,135	1,061,674
1980	-	184,576	169,046	10,494	42,251	389,019	289,787	221	-	35,763	-	199,046	1,294,203	227,648	1,066,555

Note: - = Not available

Source: Trade Reports

Table 3  
Food Trade Balance for CARICOM by Country - 1970-1980

E.C.\$'000

	Antigua	Barbados	Belize	Dominica	Grenada	Guyana	Jamaica	Montserrat	St. Kitts	St. Lucia	St. Vincent	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	-	1,311	-3,263	94,518	-66,279	-	91	-4,102	-5,292	-40,536	-65,987
1973	-14,346	-35,510	18,212	4,278	-927	58,299	-91,501	-	-1,247	-6,317	-3,518	-73,231	-145,808
1974	-21,436	-20,741	29,356	5,085	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	391,548	3,654	-	18,325	-5,573	-3,330	-52,796	429,582
1976	-20,026	-42,596	24,251	6,064	10,955	244,900	-204,499	-4,698	14,800	-5,832	2,663	-140,219	-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
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
1979	-	-71,840	44,308	682	17,744	233,307	-50,167	-6,225	13,920	-8,555	-7,737	-410,591	-245,154
1980	-	-27,534	96,220	-15,201	3,073	296,853	-264,858	-9,103	-	-24,142	-	-597,239	-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

SITC Division	1970	1974	1978	1970	1974	1978
	(E.C.\$'000)			(Percentage)		
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

Source: Trade Reports



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

Major Food Group	1973		1975		1978	
	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
<b>Total</b>	<b>474,742</b>	<b>99.9</b>	<b>1,466,058</b>	<b>99.9</b>	<b>1,179,287</b>	<b>99.8</b>

Source: Trade Reports

## 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 vegetables 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

	Total Imports (E.C.\$'000)			Intra-Regional Imports (E.C.\$'000) 1978	Intra-Regional Imports as a Percentage of Total Imports (E.C.\$'000) 1978	Total Exports (E.C.\$'000)		
	1973	1975	1978			1973	1975	1978
Antigua	2,054	2,967	4,132	347	8.39	---	31	76
Barbados	10,920	12,920	25,642	9,359	36.50	1,103	1,672	1,803
Belize	1,883	4,850	5,719	-	-	5,713	7,960	10,402
Dominica	---	666	1,257	65	5.12	---	20,460	31,333
Grenada	1,223	1,092	---	---	---	2,283	7,013	---
Guyana	8,055	9,610	7,107	281	3.95	109	137	205
Jamaica	17,783	22,238	14,842	1,655	11.15	49,780	57,551	76,777
Montserrat	215	359	357	30	8.40	75	219	154
St. Lucia	1,694	1,794	4,512	505	11.19	10,327	18,386	34,063
St. Kitts/Nevis	855	1,010	---	---	---	7	43	---
St. Vincent	746	---	1,387	304	21.92	7,438	---	29,248
Trinidad & Tobago	26,402	33,505	96,793	15,366	15.88	4,835	7,281	9,627
Total	71,830	91,011	161,748	27,912	17.25	81,670	120,773	193,403

Note: --- = Not available

Source: Trade Reports

Table 7  
Imports of Selected Fruits and Vegetables for CARICOM Countries  
(E.C.\$'000)

	1970	1974	1978	1970	1974	1978
				(As a percentage of 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	46,062	77,716	161,748	43.87	50.62	44.82

Source: Trade Reports

High imports of preserved vegetables and pulses as inputs for agro-industries, 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.

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

	Antigua	Barbados	Belize	Dominica	Grenada	Guyana	Jamaica	Montserrat	St. Kitts	St. Lucia	St. Vincent	Trinidad & Tobago	Total CARICOM
Aubergines	500	100	1	4	-	-	25	41	60	10	220	3,184	4,145
Cucumber	880	1,759	55	1,629	180	1,000	5,647	46	110	370	165	1,869	13,710
Tomatoes	910	727	160	118	56	2,860	17,429	114	440	45	100	7,825	30,784
Okra	260	75	20	6	70	800	900	4	40	35	63	7,175	2,404
Pumpkins	900	284	182	356	368	2,500	29,362	31	40	350	120	7,598	42,064
Sweet pepper	210	150	50	3	140	100	1,597	139	150	7	50	154	2,562
Cabbages	200	818	140	950	57	910	12,890	116	350	140	136	6,225	22,755
Onions	140	745	4	7	-	-	6,186	116	350	-	5	-	7,553
Carrots	660	1,818	25	430	42	500	7,885	177	130	33	500	-	12,200
Egg Plant	290	100	---	---	---	---	---	---	60	10	220	3,184	3,864
<b>Total Vegetables</b>	<b>5,030</b>	<b>6,831</b>	<b>648</b>	<b>3,523</b>	<b>994</b>	<b>8,770</b>	<b>82,728</b>	<b>668</b>	<b>1,350</b>	<b>1,035</b>	<b>1,378</b>	<b>27,234</b>	<b>140,189</b>
Sweet potatoes	1,920	5,000	4,400	1,407	349	1,550	39,305	403	1,150	1,060	1,675	2,563	60,752
Yams	120	8,545	1,950	4,104	547	3,500	150,080	241	1,500	3,800	890	3,674	178,951
White potatoes	290	-	-	-	-	-	11,819	44	-	-	4,430	-	11,863
Eddoes	290	529	-	-	447	5,600	-	-	-	4,200	4,430	2,934	18,330
<b>Total Roots</b>	<b>2,350</b>	<b>14,074</b>	<b>6,350</b>	<b>5,511</b>	<b>1,343</b>	<b>10,500</b>	<b>201,204</b>	<b>688</b>	<b>2,650</b>	<b>9,060</b>	<b>6,995</b>	<b>9,171</b>	<b>269,896</b>
Peanuts	-	-	100	-	5	1,000	1,408	26	62	6	25	-	2,632
Red Kidney beans	-	-	1,000	-	-	10	3,975	7	-	-	-	102	5,094
Pigeon peas	-	-	-	-	945	10	2,212	7	10	45	402	2,277	5,908
<b>Total Pulses</b>	<b>-</b>	<b>-</b>	<b>1,100</b>	<b>-</b>	<b>950</b>	<b>1,020</b>	<b>7,595</b>	<b>40</b>	<b>72</b>	<b>51</b>	<b>427</b>	<b>2,379</b>	<b>13,634</b>
Avocados	-	750	-	184	1,376	-	-	-	16	380	120	105	2,931
Limes	160	150	*	4,976	550	-	3,422	100	120	110	3,592	3,765	16,945
Oranges	30	600	*	3,245	1,060	10,910	20,536	60	40	100	860	5,075	42,516
Grapefruit	50	250	55,576*	10,004	2,214	-	34,227	-	40	320	492	12,680	119,853
Mangoes	2,500	400	1,500	239	1,593	5,000	30,000	400	1,200	17,750	5,744	150	66,476
Plantains	-	400	1,000	2,759	656	9,375	29,788	-	20	445	4,297	4,870	53,670
<b>Total Fruits</b>	<b>2,740</b>	<b>2,550</b>	<b>58,076</b>	<b>21,407</b>	<b>7,449</b>	<b>25,285</b>	<b>117,973</b>	<b>560</b>	<b>1,436</b>	<b>19,105</b>	<b>15,105</b>	<b>26,645</b>	<b>298,331</b>

Notes:

\* included in grapefruit

--- not available

Source: National Production Estimates/Stevens and Kellard

- = 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 Grenada-- are oriented towards fruit production, with root production coming next.
- 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.
- 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 co-operating 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, non-conflicting 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 across 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-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.