



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**PROCEEDINGS  
OF THE  
CARIBBEAN FOOD CROPS SOCIETY**



**TENTH ANNUAL MEETING  
PUERTO RICO**

**1972**

**VOLUME X**

SOME FEATURES OF THE MARKET FOR ROOT CROPS PRODUCED IN THE COMMONWEALTH CARIBBEAN

Lloyd B. Rankine

Department of Agricultural Economics and Farm Management, UWI, St. Augustine, Trinidad

INTRODUCTION

The main objective of this paper is to highlight some of the features of the market for root crops produced in countries of the Commonwealth Caribbean.<sup>1</sup> In the first part of the paper, both the regional and extra regional trades are described. The channels through which these sales are conducted are discussed. Attention is also focussed on some of the problems involved and what measures may be adopted to minimize the effects of these problems.

The market for root crops produced in countries of the Commonwealth Caribbean can be divided into two basic components. Firstly there is an internal demand component, i.e. the demand for these commodities within the territory of production and secondly there is a regional demand component, i.e. the demand in non-producing territories. To these we can add a third component - the demand in extra-regional countries - such as the United Kingdom, United States of America, Canada and to a lesser extent, certain European countries. One of the greatest desires of economic planners, market administrators and other interested persons in the Region, would be to find some mechanism to evaluate precisely the magnitude of these demands. While theoretical formulations exist, the data needed to fill the cells of the formula lack the necessary detail and accuracy even on a country basis. It is against this background that organizations such as the Caribbean Free Trade Association (CARIFTA) Secretariat, located in Guyana, are operating.

Despite the failure to come up with accurate estimates of these various demands, a significant amount of trade occurs both externally and internally, in these commodities. In the remainder of this section an attempt will be made to trace the external flow of selected root crops from three countries, Barbados, St. Vincent and Jamaica, chosen as representative of the Commonwealth Caribbean. Together they constitute the largest producers and exporters of root crops in the Region.

EXPORTS OF ROOT CROPS FROM BARBADOS

Data provided in Table 1 show the trend in exports of total root crops from Barbados. Between 1963 and 1969, approximately 15.1 million pounds of root crops were exported from Barbados. This amount represents an average of over two million pounds each year. Using 1963 as the base year, it can be seen that the increases in the quantities of root crops exported varied between 91 and 289 per cent. Exports decreased slightly in 1967 and 1968 but began to rise again in 1969. However, exports had not by 1969, attained the 1966 levels.

The bulk of the exports from Barbados went to extra-regional markets. This information is shown in Table 1. With the exception of 1963, 1965 and 1969, more than 96 per

Table 1 Exports of Root Crops: Barbados, 1963-69

Year	Quantities Exported (lbs.)	Per Cent Increase	Extra-Regional exports as a percentage of Total Root Crop Exports
1963	812,411	0	88
1964	1,554,670	+ 91	96
1965	3,160,561	+ 289	91
1966	2,637,940	+ 225	96
1967	2,531,757	+ 212	99
1968	2,173,989	+ 168	97
1969	2,253,328	+ 177	88
Total	15,124,656	-	

cent of total root crop exports went to countries outside the Caribbean Region. Total quantities exported and their destinations are presented in Table 2. During the period under observation the major importer was the United Kingdom with an annual average of 1.5

<sup>1</sup> Commonwealth Caribbean refers to the English speaking countries in the West Indies that are members of the British Commonwealth

Table 2 Exports of Root Crops in Pounds to Extra-Regional Destinations:  
Barbados, 1963-69

Year	Extra-Regional Destinations			Total
	U.K.	U.S.A.	Canada	
1963	600,713	114,200	--	714,913
1964	1,300,216	149,060	38,500	1,487,776
1965	2,101,845	791,000	--	2,892,845
1966	2,331,615	252,645	8	2,584,268
1967	2,076,588	435,000	2,050	2,513,638
1968	1,060,759	1,092,400	300	2,153,459
1969	664,650	1,223,181	2,750	1,890,581
Total	10,136,386	4,057,486	43,608	14,237,480

Source: Overseas Trade Reports, Barbados

million pounds per year, while the U.S.A. averaged 0.5 million pounds per year. On the other hand, Canada only provided a small and irregular export market for Barbados.

The above data show that only relatively small quantities of root crops reached markets located within the Caribbean Region. Further, available evidence presented in the following section shows that yams constitute by far the largest per cent of total root crops exported from Barbados. The only other root crops worthy of note, in terms of exports, are sweet potatoes and to a lesser extent eddoes. This situation can be

Table 3 Exports of Yams by Destination: Barbados, 1967-69

Destination	Quantities Exported (lbs.)		
	1967	1968	1969
<u>Extra-Regional</u>			
U.K.	2,066,704	1,055,334	663,250
U.S.A.	435,000	1,092,400	1,223,181
Canada	900	300	1,950
Sub-total	2,502,604	2,148,034	1,888,381
<u>Regional</u>			
St. Lucia	200	1,300	--
Montserrat	1,545	500	--
Antigua	1,300	7,630	19,495
Trinidad	2,750	800	52,030
Bermuda	10,250	5,400	570
Guyana	150	--	--
Dominica	--	--	125,000
St. Vincent	--	--	50,000
Bahamas	--	--	9,200
Stores	24	600	--
Sub-total	16,219	16,230	256,295
Total	2,518,823	2,164,264	2,144,676

Source: Overseas Trade Reports, Barbados

clearly seen when the data presented in Tables 3, 4 and 5 for yams, sweet potatoes and eddoes, respectively, are compared with data presented in Table 1 for all root crops. It should be noted that the total figures in the table might not be similar due to errors in reporting.

Table 4 Exports of Sweet Potatoes by Destination: Barbados, 1967-69

Destination	Quantities Exported (lbs.)		
	1967	1968	1969
<u>Extra-Regional</u>			
U.K.	924	--	1,400
Canada	850	--	500
Puerto Rico	--	3,750	--
Sub-Total	1,774	3,750	1,900
<u>Regional</u>			
Antigua	--	250	46,430
St. Kitts	--	--	2,400
Trinidad	--	--	46,672
Bahamas	--	--	1,000
Stores	--	--	150
Subtotal	--	250	96,652
Total	1,774	4,000	98,552

Source: Overseas Trade Reports, Barbados

Table 5 Exports of Eddoes

Destination: Barbados, 1967-69

Destination	Quantities Exported (lbs.)		
	1967	1968	1969
<u>Extra-Regional</u>			
U.K.	8,960	5,425	--
Canada	300	--	100
Sub-Total	9,260	5,425	100
<u>Regional</u>			
Bermuda	--	300	7,500
Bahamas	--	--	1,000
Sub-total	--	300	8,500
Total	9,260	5,725	8,600

Source: Overseas Trade Reports, Barbados

EXPORTS OF ROOT CROPS FROM ST. VINCENT

Quantities of root crops exported from St. Vincent and their variation between 1958 and 1967 (years for which complete data are available) are presented in Table 6. During the period St. Vincent exported approximately 60.1 million pounds of root crops, an average of 6 million pounds for each of the years. (These include yams, sweet potatoes and tanniers). Despite this, exports varied significantly during the period, falling to an index of 70 with a 1954 base year in 1961 and rising by 1967 to an index of 134. However, if 1963 data is used as the basis for comparison then it will be seen that quantities exported increased continuously to an index of 165 per cent at the end of 1967.

Table 6 Exports of Root Crops: St. Vincent, 1958-67

Year	Quantities Exported (lbs.)	Percent Increase	
1958	6,249,642	0	
1959	6,776,550	+8.4	
1960	5,858,846	-6.3	
1961	4,375,779	-30.0	
1962	5,165,175	-17.4	
1963	5,065,465	-19.0	0
1964	5,152,182	-17.6	+1.7
1965	6,012,115	-4.0	+18.7
1966	7,852,251	+25.6	+55.0
1967	8,380,850	+34.1	+65.0
Total	60,888,855		

Source: Overseas Trade Reports, St. Vincent, 1958-1967

According to data presented in Table 7, sweet potatoes constituted by far the largest of the export items included in the table. Eddoes were next in importance followed by yams and then tanniers. Information on the distribution (percent) of these commodities with respect to total quantities exported, are also given for each of the years.

**Table 7** Quantities of Root Crops Exported from St. Vincent by Crops, 1958-67

Year	Quantities Exported (lbs.)							
	Yams	(% of Total)	Sweet Potatoes	(% of Total)	Tannias	(% of Total)	Eddoes	(% of Total)
1958	85,907	(1.37)	5,936,472	(94.9)	36,300	(0.60)	190,963	(3.0)
1959	79,877	(1.17)	6,407,772	(94.5)	62,821	(0.92)	226,075	(3.3)
1960	119,289	(2.03)	5,298,816	(90.4)	18,601	(0.32)	422,140	(7.2)
1961	220,611	(5.04)	3,831,699	(87.5)	30,088	(0.68)	293,381	(6.7)
1962	400,307	(7.75)	4,467,898	(85.5)	101,738	(1.96)	195,232	(3.8)
1963	482,887	(9.53)	4,171,803	(82.4)	161,595	(3.19)	249,180	(4.92)
1964	378,547	(7.35)	4,420,621	(85.8)	105,690	(2.03)	247,324	(4.80)
1965	448,462	(7.46)	5,045,805	(83.9)	182,060	(3.03)	335,788	(5.58)
1966	468,111	(5.96)	6,321,066	(80.5)	348,390	(4.43)	714,684	(9.10)
1967	945,049	(11.28)	5,344,596	(63.8)	1,123,602	(13.40)	967,603	(11.54)
Total	3,629,047	-	51,246,548	-	2,170,885	-	3,842,370	-

**Table 8** Quantities of Yams Exported from St. Vincent by Destination, 1960-67

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1960	41,907	(35)	77,382	(65)	119,289
1961	147,769	(67)	72,842	(33)	220,611
1962	324,612	(81)	75,695	(29)	400,307
1963	318,653	(66)	164,234	(34)	482,887
1964	91,345	(24)	287,202	(76)	378,547
1965	155,575	(35)	292,887	(65)	448,462
1966	182,495	(39)	285,616	(61)	468,111
1967	786,032	(83)	159,017	(17)	945,049
Total	2,048,388	-	1,414,875	-	3,463,263

Source: Overseas Trade Reports, St. Vincent.

Detail breakdown of quantities of yams, sweet potatoes, eddoes and tanniers exported by destination are given in Tables 8 to 11. In general, the bulk of the yams exported from St. Vincent was evenly distributed between countries outside the Region and those within the Region.

Exports of sweet potatoes presented a very different pattern because the bulk of the quantities exported, remained within the Region. In fact the percentage remaining in the Caribbean varied between 88 and 99 per cent for the period under observation. This picture is clearly shown in Table 9.

Table 9 Quantities of Sweet Potatoes Exported From St. Vincent, by Destination, 1960-67

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of total)	Quantities (lbs.)	(% of Total)	
1960	178,625	(3)	5,120,191	(97)	5,298,816
1961	44,605	(1)	3,787,094	(99)	3,831,699
1962	27,525	(1)	4,440,369	(99)	4,467,894
1963	38,375	(1)	4,133,428	(99)	4,171,803
1964	156,710	(4)	4,263,911	(96)	4,420,621
1965	128,584	(3)	4,917,221	(97)	5,045,805
1966	730,923	(12)	5,590,143	(88)	6,321,066
1967	290,227	(6)	5,054,369	(94)	5,344,596
Total	1,595,574		37,306,726		38,902,300

Source: Overseas Trade Reports, St. Vincent

Most of the tannias exported from St. Vincent went to markets outside the Region. While these quantities were not as large as in the case of sweet potatoes, nevertheless, they represented between 48 and 89 per cent of total quantities exported during the period. This means that between 11 and 52 per cent went to markets within the Region (see Table 10). On the other hand the bulk of the eddoes exported from St. Vincent, went to markets located within the Region. These quantities varied between 60 and 96 percent of total exports (see Table 11).

As in the case of Barbados, the United Kingdom, the U.S.A. and to a lesser extent Canada were the chief export markets for root crops exported from St. Vincent. The two major regional markets were Trinidad and Tobago (chief market in the case of sweet potatoes, yams and eddoes), and Antigua (tanniers).

#### EXPORTS OF ROOT CROPS FROM JAMAICA

Total quantities of yams, sweet potatoes, dasheen and Irish potatoes exported from Jamaica between 1964 and 1970 (data for each crop vary) are presented in Tables 12 to 15.

Data given in Table 12 relate to yams. Between 1964 and 1970 a total of 6 million pounds of yams were exported from Jamaica. Of this amount, more than 85 percent went to

markets outside the Region. In fact, in the first two years all the yams exported from Jamaica went to markets outside the Region.

Table 10 Exports of Tanniers by Destination: St. Vincent, 1960-67

Year	Extra Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1960	12,149	(65)	6,452	(35)	18,601
1961	19,985	(67)	10,103	(33)	30,088
1962	82,762	(81)	18,976	(19)	101,738
1963	138,995	(86)	22,600	(14)	161,595
1964	51,300	(48)	54,390	(52)	105,690
1965	121,052	(66)	61,008	(34)	182,060
1966	242,820	(69)	105,570	(31)	348,390
1967	1,009,915	(89)	113,687	(11)	1,123,602
<b>Total</b>	<b>1,678,978</b>	<b>-</b>	<b>392,786</b>	<b>-</b>	<b>2,071,764</b>

Source: Overseas Trade Reports, St. Vincent

Table 11 Exports of Eddoes by Destination: St. Vincent, 1960-67

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1960	148,255	(40)	273,885	(60)	422,140
1961	44,414	(22)	248,967	88	293,381
1962	35,021	(18)	160,211	82	195,232
1963	23,690	(10)	225,490	90	249,180
1964	16,880	( 4)	230,444	96	247,324
1965	5,010	( 4)	330,778	96	335,788
1966	54,578	( 8)	660,106	92	714,684
1967	349,723	(36)	617,880	64	967,603
<b>Total</b>	<b>677,571</b>	<b>-</b>	<b>2,747,761</b>	<b>-</b>	<b>3,425,332</b>

Source: Overseas Trade Reports, St. Vincent

Table 12 Quantities of Yams Exported by Destination: Jamaica, 1964-70

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1964-65	281,625	100	--	--	281,625
1965-66	164,903	100	--	--	164,903
1966-67	1,257,048	99.2	9,151	0.8	1,266,199
1967-68	876,895	96.7	29,344	3.3	905,439
1968-69	1,317,152	97.0	41,482	3.0	1,358,634
1969	557,008	85.7	92,890	14.3	649,898
1970	1,664,496	97.4	43,936	2.6	1,708,432
<b>Total</b>	<b>6,118,327</b>	<b>-</b>	<b>216,803</b>	<b>--</b>	<b>6,335,130</b>

Source: Overseas Trade Reports, Jamaica

Table 13 Quantities of Sweet Potatoes Exported by Destination: Jamaica, 1968-70

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1968	37,779	(91)	3,564	(9)	41,343
1969	42,702	59	29,540	41	72,242
1970	2,362	68	1,120	32	3,482
<b>Total</b>	<b>82,843</b>	<b>-</b>	<b>34,224</b>	<b>-</b>	<b>117,067</b>

Source: Overseas Trade Reports, Jamaica.



Data available for 1968-70 show that even though sweet potatoes exported from Jamaica were in relatively small quantities, the bulk of these went to extra-regional markets (between 59 and 91 per cent). Exports decreased significantly between 1969 and 1970.

Table 14 Quantities of Dasheen Exported by Destination: Jamaica, 1968-70

Year	Extra-Regional Exports		Regional Exports		Total
	Quantities (lbs.)	(% of Total)	Quantities (lbs.)	(% of Total)	
1968	1,750	100	--	--	1,750
1969	253,073	100	--	--	253,073
1970	339,480	100	--	--	339,480
<b>Total</b>	<b>594,303</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>594,303</b>

Source: Overseas Trade Reports, Jamaica

Table 15 Quantities of Irish Potatoes Exported to Countries within the Region: Jamaica, 1966-70

Year	Quantities Exported (Regional) (lbs.)
1966-67	264,500
1967-68	3,222,995
1968-69	27,300
1969-70	93,400
<b>Total</b>	<b>3,608,195</b>

Source: Overseas Trade Reports, Jamaica.

All of the dasheen exported from Jamaica between 1968 and 1970 went to markets outside the Caribbean Region and these exports showed an increasing trend over the period. This picture is clearly shown in Table 14.

Table 15 shows data on Irish potatoes exported from Jamaica between 1966 and 1970. In contrast to the other root crops exported from Jamaica as well as Barbados and St. Vincent, (the markets lie mainly outside the Region), the market for Jamaica Irish potatoes is primarily a regional one. Exports have, however, fallen drastically since 1967-68.

It is clear from the above data that a considerable export trade in selected root crops has been built up between these Caribbean countries and the United Kingdom, the United States of America and to some extent Canada as well as among the Caribbean countries themselves. But while the extra-regional trade showed some relatively minor fluctuations this was not the case with the regional trade except in a few circumstances. Intra-regional exports of these products tend to be sporadic mainly because most of these countries produce similar crops and only import when there is an apparent decline in production or when demand exceeds supply. The only exceptions to this are Irish potato trade between Jamaica and other Caribbean countries (Jamaica is the leading producer of this commodity within the Commonwealth Caribbean) and until recently the sweet potato trade between St. Vincent and Trinidad and Tobago.

One of the reasons for the build-up of a steady export trade with the U.K., the U.S.A. and to a lesser extent Canada has been the increase of Caribbean and African populations resident in these countries. (This rapid build-up began in the mid-fifties and is continuing at a deliberately slower pace). One apparent exception is the flow of Puerto Ricans in and out of the U.S. mainland. Another reason has been the recognition by Caribbean policy-makers that traditional export crops such as bananas and sugarcane stand to lose their preferential market treatment because of present trade agreements between the U.K. and the other members of the European Economic Community. Because of this, there has been definite attempts to diversify the export trade.

In pursuing these lines of action positive measures have been taken to stimulate development of the export trade in these countries through the creation of a number of trading institutions. As will be seen later the rapid increase in quantities of these commodities exported are largely the result of the functions of these institutions.

### MARKET INSTITUTIONS - PUBLIC AND PRIVATE

Within the last ten years or more, there has been a rapid increase in the number of institutions catering to both the regional and extra-regional trade in root crops. This increase has occurred both in the public and private sectors. Our primary interest here is in the institutions created by the public sector because, as will be shown later, it is they who have been largely responsible for the stimulation and development of the export trade in these crops.

Marketing of root crops through public agencies is not a new phenomenon nor is it unique to the Caribbean Region because this idea has been used effectively in many developing countries. What are now known as marketing corporations (Jamaica and Barbados) or marketing boards (St. Vincent) were once small branches of government departments almost performing similar functions. Support for their reorganization and modernization came from many quarters. The feeling that only government could afford the basic infrastructure necessary to promote orderly marketing of these commodities was widespread. Historically, marketing of root crops lacked the benefits of well organized programmes similar to those existing for the traditional export crops. Therefore, if root crops are to earn some foreign exchange on the export market such mechanisms are necessary.

A brief visit to any of the public agencies will show that in many respects they are structurally similar. Operating procedures are also similar but the same cannot be said of their overall efficiency. Basically, these agencies are semi-government institutions and have a common objective--the development of a proper and efficient marketing system and the promotion of efficient production of food crops. By law they are the sole exporters of root crops. However, they have the power to grant licences to individuals or companies that wish to engage in the export trade. Most of these agencies operate from a central unit generally located in the capital cities, but in some cases (Jamaica) branch stations are established in close proximity to the production areas. In countries where no such arrangements exist these agencies find great disfavour among farmers who often experience difficulty in transporting their produce to the central units.

More often than not these agencies handle several crops e.g. the Barbados Marketing Corporation handles approximately 54 commodities including yams, sweet potatoes and Irish potatoes.

In most cases, both wholesale and retail outlets are operated jointly with the export trade. Depending on the country, the retail outlets are generally fashioned after the supermarket format. The presence of the retail outlet is explained by the fact that in many cases these agencies are supposed to become self-supporting, and this is highly unlikely if operations are based purely on wholesale transactions.

Frequently, the system is adopted whereby farmers can register with the agencies and in this way they are guaranteed a market for their produce. However, discussions held with administrators of these agencies indicate that farmers generally wait until their crops are almost ready for harvest before contracts are made. Very often these agencies are unable to handle some of the produce because of previous over-commitments.

The magnitude of the task undertaken by these agencies often necessitate high capital outlay in buildings, transportation and established staff in order to carry out the responsibility of catering to both the domestic and export trade.

Side by side with these agencies are several well established and efficiently organized private traders who in many cases, have found it convenient to cooperate with the public agencies particularly in the extra-regional trade. These private traders vary from subsidiaries of what we call "mini-multi-national cooperations" with huge complexes similar in capacity to those found in the public agencies, to sole individuals operating from their backyards, but nevertheless, doing similar amount of business as their larger counterparts.

### MARKETING OF ROOT CROPS

In this section an attempt will be made to trace very briefly, the general marketing of root crops. In order to present a clear picture, selling on the domestic market is separated from selling on the foreign markets even though there may be some degree of relationship between them. In view of this, discussions will first centre around the domestic market.

It is sometimes difficult to define precisely where the marketing function begins. But for our purposes this point will start when harvest has been completed. In general, there are no distinctions between root crops intended for the export trade and those

destined for the local trade. However, in some cases (Barbados) the position is slightly different where special arrangements exist between a marketing firm involved in the export trade and a number of producers. A significantly large percent of root crops produced in the Caribbean enters the local trade either through direct sales by the farmer or through the marketing boards, corporations or marketing agencies. The produce is either collected by these agencies and then channelled through their wholesale and retail outlets after some minimum amount of processing, or is handled through the higgler system known by varying names in the respective countries e.g. the hawker/huckster system (in Barbados). Male or female hawkers/hucksters go into the field harvest the crop (optional) and dispose of the produce in whatever way seems appropriate. Producers depending on these arrangements, especially when they try to reduce production costs by a transfer of the harvest function, sometimes end up on the losing end due to high spoilage rates. Producers frequently resort to this system mainly because of shortage of labour to harvest the crop.

Produce handled by the hawkers or higglers enters the market through traditional open markets or other public facilities provided by the government (not to be confused with the marketing boards depots or corporations). In these instances the produce is sold without any selection or grading and is generally offered to the public in convenient (arbitrary) units (heaps, baskets, bags, etc.) Strong bargaining generally surrounds these transactions.

Root crops destined for the domestic market or export trade pass through a number of stages once they reach the marketing boards, corporations or depots, or the private trader engaged in the export of these commodities. In general they receive the same pre-export treatment. Further those for extra-regional export often go through additional processing in order to withstand the stress of long ocean transport.

Even though the primary interest in this paper is the features of the total market, it is felt that special emphasis should be given to some problems with export market in view of the trend in the discussions so far.

Despite the fact that the export market is only a small percent of the total market for root crops produced in the countries included in the study, nevertheless, it is an important aspect of trade. Preliminary data obtained from marketing agencies indicate that they export between 10 and 80 per cent of total root crops that are channelled through their organizations.

#### PROBLEMS WITH MARKETING ROOT CROPS EXTERNALLY

Because enough is not known about the export market for root crops, it is difficult to assess which is most efficient, the export or domestic marketing arrangements.

Market administrators involved in the export of root crops are in general agreement that the problem is a difficult one under present conditions. In addition to the general complaint of irregularity in supply one of the biggest problems is the lack of a cheap, frequent and efficient transport system. This is mainly applicable to extra-regional export. A significant proportion of regional trade in root crops is handled by schooners which frequently ply between the islands. However, even then the freight rates charged are reportedly excessively high. In cases where imports and exports are controlled by the marketing board, these rates can be monitored very effectively. Another complaint with the schooner system is that they lack adequate facilities to handle large quantities of these commodities efficiently.

Problems with extra-regional transport are similar to those with regional transportation system. In many cases shipments of root crops to the U.K. in particular, await the arrival and convenience of the banana boats which generally operate on a two-week basis. Shipments to U.S.A. and Canada are generally done by air freight because of the potentially higher prices in these markets. Proper transportation is crucial to the entire success of the export trade because time of arrival as well as condition of arrival is a very important aspect of marketing. Caribbean root crop exports face tremendous competition from similar supplies originating from African countries which reportedly are able to ship their produce to the U.K. in less time than shipments from the Commonwealth Caribbean. Competition is less intense in U.S.A. and Canada but seems to exist among Caribbean suppliers themselves in both markets.

Besides transportation difficulties, exporters are never sure whether they will get adequate compensation from their agents. Since sales are usually done on a consignment basis, without adequate representation at the other end, it is clear that they operate at a disadvantage unless consignees act in good faith. Caribbean exporters confess to a lack of knowledge of the markets for their produce. It is virtually impossible to get an accurate assessment of market from 3,000 and 4,000 miles away.

### SUMMARY AND CONCLUSIONS

This paper has attempted to highlight some of the features of the market for root crops produced in selected countries of the Commonwealth Caribbean. In doing so the flow of certain root crops -- yams, sweet potatoes, tanniers, dasheen, eddoes and Irish potatoes, between Barbados, St. Vincent and Jamaica and regional and extra-regional markets was described. It was shown that over the years there has been a steady build-up of trade in some of these commodities and that this was largely due to the creation of state-operated marketing boards, marketing depots and marketing corporations supported by similar efforts in the private sector. These state-operated agencies were established in response to pressures from producers of non-traditional export crops and also because of the need to fully diversify the export trade at the official level.

Brief reference was made to the channels through which root crops were sold. It was indicated that the marketing system failed to function efficiently particularly in the export trade because of lack of adequate transportation, especially for extra-regional exports, high freight rates (especially ocean freight) and irregular supply of produce. In addition, there was also the lack of complete knowledge of the market.

Of all the problems listed, it would appear that the problem of transportation seems the most crucial. It seems unlikely that the prices of root crops will remain high enough to encourage air freight because the rates do not appear to be decreasing at the present time. What this means is that serious consideration should be given to changing the form in which these products are marketed. Modest attempts are presently being made to manufacture sweet potato flour and yam flakes. However, it is recognized that a fair amount of these commodities will still be demanded in the fresh form.

But in addition to the transportation problem, one can identify certain weaknesses as in the present market mechanism, which in some respects control the export trade. There seems to be a definite need to strengthen the export function of the state-operated bodies. This can be done by separating the export arm from other sections since this is, in itself, a formidable undertaking which requires highly competent and technical staff. In addition some attention should be given to a reduction in the number of crops handled. However, if the export function is strengthened this need not happen. Admittedly, there exists in some of these countries, import-export firms which are government-supported; but it is not clear what type of liaison is maintained with either the marketing corporations or the private export traders. It is also recognized that the Caribbean Free Trade Association is attempting to coordinate the flow of trade between member countries but it is not clear if this Association (CARIFTA) is giving any attention to extra-regional exports.

There seems to be the need for more coordination among the export arms of the various state-operated marketing agencies, especially those engaged in selling these commodities on the extra-regional markets. Further some common representations in the U.K. market seem desirable. But this representation should be one that is fully integrated with local organizations. Such representation would be able to conduct continuous assessment of the market, distribute the produce and take measures to increase the demand for these commodities.

### REFERENCES

- Annual Overseas Trade Reports, Barbados, 1963-59.  
Annual Overseas Trade Reports, Jamaica, 1964-70.  
Annual Overseas Trade Reports, St. Vincent, 1958-67.  
Rankine, Lloyd B., "Comparative Economics of Root Crop Production in Selected Countries of the Commonwealth Caribbean." (Research in progress)  
University of the West Indies, Proceedings of the Sixth West Indies Agricultural Economics Conference, held in Georgetown, Guyana, Dept. of Agric. Economics & Farm Management, U.W.I., St. Augustine, Trinidad, W.I., 1971.

### ACKNOWLEDGEMENTS

The author wishes to record his sincere appreciation to Osbourne Nurse, Department of Agricultural Economics and Farm Management, for his comments on an earlier draft of this paper.