SOME INTERPRETATIONS OF BANANA STATISTICS RELATING TO THE E.E.C. MARKETS AND THE COMMONWEALTH CARIBBEAN INDUSTRY

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Introduction

The purpose of this paper is to provide an aid in the discussion on banana relations in the EEC and the relative position of Commonwealth Caribbean (CC) bananas within that Community. The approach is in the main statistical but with some comments on, and interpretation of the available data in relation to CC bananas. It is hoped that Workshop discussion will proceed along the lines of the tables -- production conditions, production structure and productive capacity; costs and cost competitiveness; and possible repercussions on the CC industry of factors such as market shares and market structure within the EEC, given an assumed relatively more open situation than that which prevails with the U.K. not yet formally within the Community. Within this framework, other questions concerning the improvement of the CC industry, the rationalisation of the industry, and other related topics, can be considered.

The paper does not deal with possible arrangements to ensure continuation of the current status quo of CC bananas to the U.K. market. Presumably, another paper will deal with this important aspect.

Certain caution is necessary. The data presented are in some cases *dated.* Much may have changed since say 1969, given the relatively short production cycle for bananas. There may have been shifts since 1971 (the latest year of the data) in the relative market shares, and market integration may certainly have hardened. Further, because of differing underlying conditions, the data are not always strictly comparable.

The data are therefore to be taken as indicative, and the conclusions as impressionistic. These factors must be borne in mind in discussing the situations indicated by the statistics.

The data cover mainly those countries which supply the EEC with bananas:

South America	- Ecuador, Columbia, Surinam
Central America	- Honduras, Costa Rica, Panama, Dominican Republic, Guatemala
French Territories	- Martinique, Guadeloupe
Commonwealth Caribbean	- Jamaica, Windward Islands (to the U.K.)
Africa	- Ivory Coast, Cameroon, Somalia, Congo (Kinshasa), Madagascar
West Asia	- Israel
Other Western Europe	- Spanish Canary Islands

Production Conditions, Organisation of Production, and Yields

The first point to note is the deprived situation in terms of the essential natural prerequisites for bananas growing in the CC, relative to the South and Central American countries cited. In the latter countries, soil and ecological conditions are generally more favourable to banana production than in the CC, although in some areas within countries, there are problems involving plant disease and windstorm damage.[1] In terms of natural conditions, CC countries are more nearly comparable with the French Territories, Ivory Coast and Somalia.

The second consideration is the organisation of production in the countries. Most of banana production in South and Central America are conducted on a company or plantation or associate producer basis, with average farm sizes about 40 hectares, with the bulk of production being concentrated in the larger farm sizes of over 100 hectares.[2] In these countries with large land masses, the tendency is to move to larger farm sizes in pure stands to capture economies of scale. Moreover, the availability of land provides scope for setting down large scale farm sizes.

This situation is in contrast to the countries with smaller land masses where small farming predominates, and the production pattern involves intercropping. Average farm sizes in Jamaica, Windwards, and Martinique-Guadeloupe are 0.98, 0.5 and 3.7 hectares respectively. The scope for expansion of land under bananas is severely limited by its unavailability in these countries. In Somalia, there has been an increasing tendency towards specialisation, with groupings being formed of medium and larger farms under single management.

While there are differences in the relative position of small and large farms among countries, the overall impression is the predominance of large scale production in all the countries except Jamaica, Windwards and Martinique-Guadeloupe. The pattern indicated is the concentration of production and acreage on the smaller number of farms above 40 hectares. Some form of assistance to the growers is given in all the countries, some the same, though at different levels.

It would be an interesting exercise if the data could be quantified, to estimate the relative contributions of conditions for growth, cultivation practices, average farm size, assistance to farmers, and variety, to yield and stand life. Under these major variables are a host of interacting sub-variables which would make such an exercise a tremendous one. Yield for example, varies by variety -- Gros Michel (GM) and Cavendish (C) with variations among its individual varieties: Lacatan (L), Robusta (R), Valery (V), Poya (P).

For our present purposes, an overall view can be taken in relating the interaction of conditions for growth, cultivation practices, average farm size, and assistance to producers, in contributing to yields and stand life. The figures indicate that yield and stand life are better in those countries in which ecological conditions are favourable, which operate for the most part under large scale structure, and which have (presumably) efficient cultivation practices or aids towards this. Thus, Latin American yields and stand life are far above those of the CC, the French territories, and the African countries. The CC has the poorest yield performance, and stand life three times less than those of Latin America.

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[1] FAO. *The World Banana Economy.* Commodity Bulletin Series 50, Rome, 1971.

[2] *Ibid.*

Table 1. Banana Exports as a Percentage of Total Exports (Value); 1960, 1968, 1970

Country	1960	1968	1970
		(per cent)	
South America:			
Columbia	.	4.0	
Ecuador	62.0	50.0	57.5
Central America:			
Costa Rica	24.0	25.0	29.6
Dominican Republic			
Guatemala	15.0	6.2	6.6
Honduras	46.0	44.5	43.0
Panama	67.0	57.5	57.5
Caribbean:			
Jamaica	9.0	7.6	4.7
Windwards	52.0	70.0	70.0*
Guadeloupe	35.0	35.0	28.0
Martinique	42.0	62.0	56.0
Africa:			
Ivory Coast	4.0	3.0	2.5
Cameroon	2.0	1.2	1.2
Somalia	45.0	28.2	28.0

Source: FAO, *The World Banana Economy*. Commodity Bulletin Series 50, Rome, 1971.

Note: * Figure not available. Assumed same as in 1968.

One item of production cost which stands out is that of materials. The relatively higher percentage for the CC countries and Martinique as against the lower percentages for the Latin American countries, may be a reflection of poorer natural conditions for the first group, and perhaps company transactions in the latter.

For the Windward Islands, it is well to note that cost of materials is higher than labour cost. Unfortunately, no further breakdown of any of these data was available.

The general impression from the table is that the smaller, low-yield, low stand-life countries are high cost producers -- which relegates them to the lower rung of the competitive scale. Martinique shows the highest cost of production, for the most part due to its large percentage of labour cost (which reflects mainland wages) and materials cost. It is to be recalled that conditions in Martinique are less than optimum, yields lower, and stand life shorter than in Latin America. Recurring natural hazards reduce exportable yield and grossly inflate replanting and other costs.

World Production and Exports and Relative Shares

The countries of concern were responsible for some one-third of the world's production of bananas. Area shares in 1971 were South America 13.6 per cent, Central America 13.4 per cent, the Caribbean 2.5 per cent and the African countries cited 2.4 per cent. [1] These shares in 1971 represented an increase in Central American shares, the others falling. Individual shares show Ecuador (10.6 per cent - 1971) way above the other individual producers.

Share of local production exported indicates the export orientation of the crop in the various countries. Several countries including the CC exported more than 60 per cent of local production. Ecuador appears as exporting only 45 per cent. This is due to the fact that wastage in that country is very high due to poor production and quality control measures. This wastage is estimated at 31 per cent of all production. [2]

Of the countries concerned, Ecuador nonetheless accounted for slightly over 20 per cent of world exports in 1971 [3] with Costa Rica and Honduras being responsible for 13.5 and 15.1 per cent respectively. The CC countries were responsible for only 3.9 per cent of world exports in 1971, reflecting both a relative and absolute fall over the period.

The importance of the industry in terms of percentage of total exports (value) is shown in Table 1. The industry is important to most of the countries cited -- to the smaller CC countries in particular. The industry is quite significant in the export earnings of Ecuador, and this fact has severe implications for other countries where the industry is important. If, for example, the very high level of wastage is reduced significantly and the quantities put on the market, the result is likely to have severe repercussions on prices and the export earnings of the other less endowed countries like the CC.

To sum up at this point: unlike the countries of South and Central America, the CC countries do not have the type of natural conditions suited to banana production. The structure of organisation based on small farms does not reap possible economies of scale, and there is limited scope for land expansion. Of the group of countries considered, their yield and stand life are about the lowest. Their share of world production and exports are declining, but the industry is quite important in terms of its proportionate value of total exports. This last is less true for Jamaica than it is for the Windward Islands.

Some Aspects of Reported Cost of Production

Table 2 shows some items of production cost. Any conclusions drawn from comparisons within and particularly among countries must be regarded as highly tenuous, since these data are estimated for the most part, and some items included in particular headings for some countries are excluded in others. In the case of Martinique, for example, the item labour includes allowance for management costs, so that the incidence of direct labour costs may be somewhat lower than the indicated 44.5 per cent of production cost.

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[1] FAO. *Production Yearbook,* Rome, 1971. and
USDA. *World Demand Prospects for Bananas in 1980 with emphasis on trade by less developed countries.* ERS Foreign Agric. Econ. Report, Washington, 1971.

[2] FAO, *Commodity Review and Outlook.* Rome, 1971.

[3] FAO, *Trade Yearbook,* Vol.25, Rome, 1971, and
USDA, *Op. cit.* 1971.

Table 2. Some Items of Production Cost before Harvesting: 1969

	Columbia	Ecuador		Costa Rica	Windward Is.	Martinique	Ivory Coast	Somalia	
		Gros Michel	Cavendish					Giuba	Afgoi
				(per cent of total production cost)					
Labour	17.8	30.0	31.2	24.5	38.9	44.5	24.1	5.3	6.2
Materials	33.1		16.0	24.2	44.3	35.5	9.2	14.0	16.7
Plant Protection	19.5	20.0	13.5	17.2	7.4		13.4	3.1	3.7
Irrigation			4.5				12.4	20.4	8.5
General Expenses	11.8	31.0	17.8	17.5		20.0*	23.6	31.0	35.1
Replanting		7.0	6.2	2.0			6.2	11.9	14.0
Interest/Amortization	17.8	12.0	10.8	14.6			11.1	14.3	15.8
Depreciation					9.4				
Reported Production Cost (US$ per ton)	28.1	16.9	25.8	31.1	37.1	66.9	57.5	35.0	41.7
Estimated Yield (tons/ha.)	20	12.5	32.5	35	9.5	25	25	25	18.5
Stand Life	10	10	10	10	3	3	3	3.5	3.5
Farm Size (Av.) ha.	50	100	100	100+		Medium to to large size plantation 20 tons/ha.	20	60	60
Wage Rates - field labour (US$)		1.9		3.3	**	5.0	1.0	1.0	

Source: FAO. *The World Banana Economy.* Commodity Bulletin Series No.50, Rome, 1971.

Notes: * includes management costs.

      ** not known but likely around 2.0.

Table 3.   Market Shares of E.C. Banana Imports: 1962-69

Exporters	1962-64 Volume ('ooo tons)	(%)	1965-67 Volume ('ooo tons)	(%)	1968 Volume ('ooo tons)	(%)	1969 Volume ('ooo tons)	(%)
Total	1,131	100	1,538	100	1,497	100	1,493	100
EC:	8	1	15	1	6	0	7	0
Span. Canary Is.	35	3	27	2	15	1	18	1
South America:	462	42	718	47	559	37	453	30
Ecuador	284	26	459	30	359	24	300	20
Columbia	175	16	247	16	166	11	125	8
Surinamq	3	0	13	1	34	2	28	2
Central America:	127	11	186	12	376	25	493	33
Honduras	13	1	128	8	270	18	244	17
Costa Rica	0	0	9	1	12	1	73	5
Panama	2	0	9	1	41	3	123	8
Dom. Republic	59	5	10	1	0	0	0	0
Guatemala	54	5	31	2	53	3	53	3
Caribbean:								
Fr. Antilles	197	18	265	17	179	19	270	18
Wds/Jamaica	0	0	10	1	7	1	3	0
Africa:	271	25	312	20	253	17	248	17
Ivory Coast	108	10	91	7	114	8	110	8
East Cameroon	62	6	91	5	44	3	47	3
Somalia	76	7	95	6	80	5	78	5
Other	24	2	31	2	15	1	13	1
West Asia:								
Israel	7	1	4	0	0	0	1	0

Source: USDA. *World Demand Prospects for Bananas in 1980 with emphasis on trade by Less Developed Countries.* ERS Foreign Agricultural Economic Report, Washington, 1971.

Note: Some of the figures were rounded off.

The similarity of conditions in CC countries causes one to question the reported production cost of US$37.1 per ton.

The EEC Market - Import Regime Shares, Price Formation and Structure of Distribution

1. Import Regimes and Market Shares

In 1966, EEC countries (including theU.K. and Ireland) constituted first markets for 12 of the supplying countries' exports, and second markets for 13 of these countries.[1] While since 1966, the percentage of individual total exports may have changed somewhat in terms of individual importing countries, it is unlikely that there has been any significant changes in the degree of dependence on the EEC market as a whole, i.e. shifts to markets outside the EEC.

Table 3 shows market shares of the supplying countries in the EEC market as a whole. Over the period 1962-64 to 1969, market shares of the South American region have experienced some decline, while those of the Central American region have increased. There has been some decrease in the market shares of African countries, though the position of 1968 was maintained in 1969.

2. Individual Importing Countries

(a) Belgium-Luxembourg and The Netherlands - There are no quantitative restrictions on imports into the Benelux countries. Imports from associated and member countries enter duty free, but those from third countries constituting more than 98 per cent of total imports, are subject to the common external tariff of 20 per cent (1969). Imports are subject to an added value tax of 4 per cent in the Netherlands and Luxembourg, and a 14 per cent transfer tax at the import level in Belgium.[2]

Despite the tariff of 16.5 per cent (pre-1969) and 20 per cent (1969), the Latin Americans have increased their shares of these two markets, such that in 1969, this region virtually controlled the markets in the two countries (Tables 4 and 5). This performance must be placed against the duty free allowance for imports of bananas from the Congo (Kinsasha). In the Belgium-Luxembourg market, gains have been made by Columbia and Honduras at the expense of Ecuador, whose share declined from 54 per cent (1965-67) to 28 per cent (1969). In the Netherlands, Ecuador established gains over Columbia, though Columbia in 1969 still had over 50 per cent of that market.

(b) Italy - Primarily due to the dissolution of the Italian Banana Monopoly (1965) and its consequent restrictions, imports into Italy increased nearly 300 per cent between 1962-64 and 1965-67, and has remained around 300,000 tons in 1969. Under this monopoly, the Government had exercised complete control over the purchase, shipment, distribution, and prices of the product. Currently, there are four import groups, and a more liberalised overall global quota system (1969) has been converted to a

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[1]   USDA. *Op. cit.* 1971.

[2]   FAO. *The World Banana Economy.* Commodity Bulletin Series 50, Rome, 1971.

Table 4. Market Shares of Belgium-Luxembourg Imports: 1962-69

	1962-64		1965-67		1968		1969	
	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)
TOTAL	68	100	90.3	100	77	100	74	100
South America:	47	70	81	90	67	87	60	81
Ecuador	30	44	49	54	29	38	21	28
Columbia	17	26	32	35	38	49	39	53
Central America:	10	15	6	0.1	10	13	14	19
Honduras	0		2		6	8	9	2
Costa Rica	0		2		1	1	3	4
Panama	0	0			3	4	2	3
Dom. Republic	5q	7.5	0		0		0	
Guatemala	5	7.5	2		0		0	
Africa:								
Congo (Kinshasa)	7	10	2		0		0	

Source: Same as for Table 3.

Note: Some of the figures were "rounded off".

Table 5.   Market Shares of Netherlands Imports: 1962-69

	1962-64		1965-67		1968		1969	
	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)	Volume ('000 tons)	(%)
TOTAL	71	100	94	100	98	100	88	100
EC:	8	5	15	16	6	6	0	
Belgium-Luxembourg	7	9	11	12	0		0	
West Germany	1	1	4	4	6	6	0	
South America:	42	59	75	80	87	89	72	82
Columbia	28	39	59	63	60	61	51	58
Ecuador	13	18	15	16	27	28	21	24
Surinam	1	1	1	1	0		0	
Central America:	19	27	2	2	5	5	16	18
Dom. Republic	12	17	2	2	0		0	
Guatemala	5	7	0		0		0	
Panama	0		0		2	2	2	2
Honduras	2	3	0		0		12	14
Costa Rica	0		0		3	3	2	2

Source: Same as for Table 3.

Note: Some of the figures were "rounded off".

specific quota, divided approximately as follows: EEC and associates - 30 per cent, third countries - 70 per cent, Somalia is the traditional supplier. Imports from associated EEC members and Somalia enter duty free, non-associated members having to meet a duty of 20 per cent. To compensate for the loss of state revenue formerly accruing under the state monopoly, a consumer tax of US$96 per ton and $176 per ton is imposed on imports from Somalia and other sources respectively. A general turnover tax of 2.3 per cent is levied on the wholesale selling price.[1]

Despite the disadvantaged position in which Latin American suppliers have been put by the import regime, their market share has increased substantially over the period -- from 40 per cent (1965-67) to 69 per cent (1969).[2] This has been at the expense of the more favourably placed African countries whose share has decreased from 79 per cent (1962-64) to 28 per cent (1969) -- mainly due in the case of Somalia, to the closing of the Suez Canal. Honduras appears to have made the largest gains in this market -- from 9 per cent (1965-67) to 23 per cent (1969).

(c) Federal Republic of Germany - There are (to date) no import restrictions into the FRG. Imports from EEC associated and member countries are duty free. Imports from third countries which ordinarily would be subject to the common external tariff of 20 per cent, enter under the Banana Protocol of the Rome treaty. The provision allows for increases of duty free imports up to 50 times the difference between the previous year's imports and 1956 quantities. In practice the quota size has been increased and has been sufficient, along with member and associated imports, to cover *all* import requirements.[3] There has been substantial pressure by the French and African associated states to severely modify or even nullify this Protocol.[4] Along with the above import regime, a general tax of 5.5 per cent on the added value is levied at various marketing stages.[5]

Latin American suppliers have benefitted substantially from the Banana Protocol, such that imports have been drawn almost entirely from Latin America.[6] Although the Protocol includes a pledge by German importers to increase African associated member supplies, this trade is virtually nil, reflecting perhaps the poorer competitive position of African fruit in price and quality. It may well be that Latin American fruit may continue to dominate the market even with the 20 per cent tariff.

(d) The French Market - Bananas from Overseas Departments, countries within the frame zone, and EEC associates enter duty free, third countries bearing the full external tariff of 20 per cent.

The French market is essentially reversed for imports from the Overseas Departments (Martinique and Guadeloupe) and for African countries belonging to the franc zone (Cameroon, Ivory Coast and Madagascar) -- in a ratio 2:1. The allocation for the African countries is divided: Ivory Coast (75/140), Cameroon (53/140) and Madagascar (12/140). Minor quantities come from Spain (Canary Islands) under a bilateral trade agreement renewable yearly, and from EEC associates (Congo

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1   *Ibid.*

2   *Ibid.*

3   *Ibid.* and
     USDA, *op.cit.*

4   USDA, *Ibid.*

5   FAO, *op. cit.* 1971.

6   USDA, *Ibid.*

(Kinshasa), Somalia and Surinam).[1] The pattern of import quotas and licences virtually exclude Latin American supplies -- except for minor shipments when supplies from main sources are small. Market shares have remained relatively stable over the period.

(e) The U.K. Market - All bananas from Commonwealth countries enter duty free, while non-member countries are subject to a Ł17.7 duty, and quota allocations of 4,000 long tons from dollar area producers.

The market share of the CC countries have increased from 77 per cent (1962-64) to 98 per cent (1969). The Windwards have increased their market share over Jamaica over that period -- 35:42 (1962-64); 49:51 (1965-67); 56:42 (1969).[2]

The major potential threat to the CC hegemony over the U.K. market lies with the possibility that with the U.K. entry into the EEC, CC bananas would become subject to the 20 per cent common external tariff and a reduction in quotas from dollar areas. It has been argued elsewhere [3] that the major insulation to CC imports into the U.K. come not so much from the preference, as from the quota allocation on dollar imports.

If the status quo of CC bananas is not protected, this development would allow competition for the U.K. market from the relatively lower cost producers of Central and South America -- particularly Ecuador. Even in the case where the CC countries, as associated territories, are shielded from Latin American producers, they will still face competition from the African countries and the French Antilles.

In any event, Latin American producers can be expected to continue efforts to liberalise trade policies of national or bloc markets which have up to now operated to exclude their fruit.

To summarise the foregoing, of the 21 countries cited, more than 50 per cent of all bananas exported from 17 countries went to a single market, and 12 of the 17 countries shipped 80 per cent or more of their total exports to one market. The result of this degree of dependence is that any major changes affecting trade and consumption in a chief market will have severe repercussions on the export prospects of a country where dependence on that market is high. This point is of prime relevance to the CC countries, in view of the current uncertainty as to their position when Britain enters the Common Market.

The tables of market shares have indicated the dominance of the Latin American producers in all the markets except France and the U.K. This entrenchment, of course, poses a potential barrier to the entry of CC bananas into other markets besides the U.K.

It is unlikely also that U.K. purchasers would want to be stuck with high cost producers, if they can get cheaper supplies from countries which may be competitive even with a tariff of 20 per cent. In late December, 1972 -- early January, 1973, the price of bananas in the U.K. slumped from Ł102 to Ł72 per ton apparently due to excessive supplies being brought in from non-Commonwealth sources. This

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[1]   FAO, *The World Banana Economy.* 1971.

[2]   USDA, *op.cit.,* 1971.

[3]   Phillips, W.J. *The Major Export Crops of Grenada -- Market Factors and their Implications for Production.* Special publication of the Department of Agricultural Economics & Farm Management, U.W.I., St. Augustine, Trinidad, 1967.

seriously threatened the economy of St. Lucia where *production costs were not even met*. A quote from the W.I. Chronicle is relevant:

Geest Industries . . . have warned that if cheaper bananas from Africa and South America continue to glut the U.K. market they will have to re-examine their relationships with the Windwards.[1]

3. Structure of Distribution

Commercial trading arrangements in bananas in the EEC have tended to become institutionalised and to develop into historical trade patterns. Trading links between exporters and importers is generally through one or more private or Government agencies or both. The importing firm in the importing country may therefore be the same as the exporting firm in the exporting country. Trade patterns on this basis become regulated and fixed. The extent of regulation is often extended directly or indirectly to the control of supplies and price.

To get some idea of the degree of integration in bananas, one must look at the major components -- producer, export marketer, shipper, and ripener in the importing markets. For example, from Costa Rica in 1969, United Fruit Company produced 16 per cent and marketed 40 per cent of total exportable production, utilising its own shipping facilities.[2] UFC also has its own carton plant and owns the railway which delivers fruit from packing sheds to port at its own wharf facilities. While the UFC does not produce bananas in Columbia, it operates in associate producer scheme. The company, however, owns the canal system and barges which transport bananas to its ocean going vessels. The company also has its own boxing plant in Columbia.

UFC imports its Columbian and Central American exports on the Netherlands and FRG markets through UF Continental NV in the first case, and through independent importers buying exclusively from UFC in the second. The company's imports into the Belgium-Luxembourg is through its associated firms: Spiers and Bananacopera. Of the 40 ripening establishments in Belgium, two are directly linked with UF Continental; twelve are independent but buy exclusively from UF importers; about ten are linked to the Belhoba group; and the rest are independents buying from both import groups. In the Belgium-Luxembourg market, 30 per cent of all ripeners are directly linked to UF, 25 per cent to Belhoba.

In the Netherlands market, there are 100 ripening establishments, some 75 of which are directly linked to UF Continental. The independent German, Dutch, and Belgian Groups of importers have also developed integrated marketing organisations, usually with their own shipping facilities, and have recently engaged in production. They sell fruit mainly in their own countries.[3]

The above type of integration has further implications for market entrenchment. For example, the advantage of complete control over its supply source allowed UF to be the first to move into the brand market in the FRG. Its competitors were faced not only with high costs of introducing a brand, but also with the problem of insufficient supplies of uniform quality.

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[1] West India Committee, *West India Chronicle*. Vol. LXXXVIII, No.1951, Feb.1972.

[2] FAO, *op.cit.*, 1971.

[3] FAO, *Ibid.*, 1971.

Similar situations exist for other exporters -- producer/exporter, though on a lower level. Geest Industries produces bananas in the Windwards, transports in its own ships all quantities exported from the Windwards, and ripens some 87 per cent of its imports.

The important consideration here is that concentration on country data (exports/imports) sometimes loses sight of the fact that such exports and imports are made by individual or group *companies*. Unlike the country whose import capacity will be determined in the limit by its consumption, companies are highly aware and sensitive about market shares, profits, control of stages, and the like. The result is sometimes, as was the case with bananas in the U.K. in the 1960's, price and quantity welfare which is more to the detriment of the exporting country or countries involved.

In the present context, the same company objectives are likely to work to preclude CC bananas from the wider EC market. No doubt too, given the Elders and Fyffes/Geest price war of the 1960's, UFC will be casting hungry eyes on the CC market share of the U.K. for its (lower cost) Latin American exports.

4. Price Formation

Table 6 shows data on prices at various marketing stages. The data must be taken as illustrative only, though they do represent general order of magnitude.

A wide variation in import unit prices exists among countries due to factors such as producer costs and f.o.b. prices, proximity to markets, type and quality of fruit, and freight and insurance costs.

The reported cost of production varies considerably from US$17 (GM) in Ecuador to $66.99, in Martinique. The high costs for Martinique are partly explained by natural conditions, low yields, windstorms and so on. Similar conditions in the Windwards put a question mark to the reported cost of $37.1.

Reported cost of production does not represent a return to the producer. The price paid to the grower differs under varying marketing patterns. Fixed prices are paid to the grower in Columbia, Ecuador and Somalia, while in other cases, it is a deduced price working-back from selling point in the importing country. In most integrated selling operations, the first real market price is the f.o.b. price, and profits can often be decuced at that stage only. Where bananas are consigned, the grower receives the net proceeds after deductions for freight, expenses and commissions.

From the table, the lower f.o.b. costs of the Latin American countries stand out. Margins between f.o.b. -- Retail is relatively wide for the CC countries, which has implications for retail prices and consumption. Importers gross margins are relatively lower for CC bananas, but ripeners' gross margins are highest for the Windwards.

What the retail prices suggest is that the high cost producers, the CC, French territories, Somalia, would not be competitive in free European markets, and would lose some of their market share to the more competitive Latin American countries.

Table 6.   Banana Price Formation: From Production Cost to Retail Price: 1969

	Ecuador to Belgium	Ecuador to West Germany		To Italy		Martinique to France	to U.K.		Ecuador to Netherlands	Central America to U.S.A.
		Cavendish	Gros Michel	Somalia	Central America		Jamaica	Windward Is.		
				(US$ per metric ton)						
Reported Production Cost before Harvesting	25.8	25.8	16.9	35.0		66.9		37.1		
Harvesting and Transport to Packing Plant	5.0	5.0	5.0	4.9		7.0		4.1		
Packing	7.7	7.7	7.7	2.0		9.3	34.8	2.2		
Cost of Cartons	16.8	16.8	16.8	34.7		24.4				
Transport to Port	5.0	5.0	5.0	5.3		3.9				
Loading/Stevedoring	6.6	6.6	6.6	8.1			10.2	11.0		
Export Taxes	6.2	6.2	6.2			13.1		2.7		
Exporters Overheads and Margin	9.9	9.9	9.9	8.2			19.1	16.6		
Paid to Grower	9.0	9.0	11.4	8.1		26.5	40.0	11.7		
FOB Cost	92.0	92.0	85.5	106.3	90.0	151.1	104.1	85.4	92.0	90.0
Freight/Insurance	45.0	45.0	45.0	56.0	50.0	45.3	52.9	44.5	45.0	25.0
CIF Cost	137.0	137.0	130.5	162.3	140.0	196.4	157.0	129.9	137.0	115.0
Landing/Handling	13.0	13.0	13.0	15.0	15.0	21.5	13.0	27.6	13.0	13.0
Duty/Other Taxes	40.0			96.0	173.0	3.9			25.0	
Importers Margin or Commission	15.0	5.0	-8.0	10.0	22.0	17.2	5.0	4.0	15.0	32.0
For Selling Price	205.0	155.0	135.0	283.3	350.0	239.0	175.9	161.5	190.0	160.0
Ripener's Gross Margin	80.0	35.0	35.0	69.0	76.0	81.0	61.0	83.4	50.0	75.0
Ripener's Selling Price	285.0	190.0	170.0	352.3	426.0	320.0	236.0	244.9	240.0	235.0
Retail Gross Margin	160.0	90.0	90.0	160.0	176.0	109.0	134.0	126.0	85.0	115.0
Retail Price	445.0	280	260	512.3	602.0	429	370.0	370.0	325.0	350.0

Source: Same as for Table 1.

Table 7. Trends in Banana Consumption

	1957-59	1964-66	1971	1975*
	(Kg. per capita)			
EC:	*5.3*	*7:7*		
Belgium-Luxembourg	5.9	8.4	8.3	8.5
France	7.4	8.3	8.8	9.5
Germany	7.2	9.5	10.0	10.0
Italy	1.1	4.7	6.0	5.9
Netherlands	4.6	6.8	7.7	8.5
Denmark	6.0	7.3	7.9	8.0
U.K.	6.2	6.7	5.7	6.2
Ireland	2.0	6.4	7.1	8.1
U.S.A.	9.3	9.4	8.2	8.2
Canada	8.7	9.6	9.5	9.7
Japan	0.4	3.8	9.5	10.3

Note: *FAO forecast

Sources: Same as for Table 3, and

FAO. *Monthly Bulletin of Agricultural Economics & Statistics.* Vol.31, Rome, Aug. 1971.

Demand and Consumption Prospects

The demand for bananas is affected by several interrelated factors among them income, prices, consumer tastes, trade policies, and competition with other fruit. For example, the level of income may be a major factor affecting inter-country consumption levels, but retail prices, themselves influenced by trade policies may influence the actual level of consumption.

The foregoing tables have indicated some of the effects of trade policies. With no trade restrictions, countries would import from the cheapest sources. Internal taxes, high markups and importer-ripener relationships result in either increasing retail prices or reducing consumption levels, or both.

Attempts to estimate the effects of the several factors above on banana consumption have met with several statistical difficulties, mainly intercorrelation.[1] Some of the findings, however, indicate the following:

(a) At per capita GNP levels less than US$1,500, per capita consumption tends to increase rapidly with income. Between $1,500 - $2,000, consumption tends to increase more slowly; at per capita incomes greater than $2,000, per capita consumption tends to level-off at an apparent saturation level of 10 kilograms per capita.

(b) In the developed countries, income elasticity of damand is much greater than one at the lower income end, decreases to one at the middle range, and decreases to less than one in the upper end of the income spectrum.

These patterns were confirmed when consumer expenditures rather than per capita income was regressed on per capital consumption.

(c) Price competition between bananas, apples and oranges appear very limited.[2]

With these considerations (suggestive) in mind, Table 7 presents data on per capita consumption in the countries of concern, with an FAO forecast of 1975. The figures do not generally promise significant increases in per capita consumption at current and assumed prices and income levels.

Export earnings from bananas will depend on how fast demand will increase and whether supplies will be geared in such a way as to maintain present price levels. The indications are for small, if any, increases in export earnings for EEC suppliers, with the threat of longer-run extinction of the higher cost producers placed on a similar basis with Latin American fruit.

Table 8 indicates an FAO 1975 estimate of supplies available from the supplying countries of concern, placed against their 1971 exports.

The difficulty in projecting either banana production or export availabilities must be appreciated. The shortness of the production cycle allows for substantial increase over the short period to meet

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[1] USDA, *Op.cit.*

[2] *Ibid.*

changes in demand levels. In Latin America, large suitable acreage exists for expanding supplies, an endowment unavailable to CC countries. Moreover, the planting of high yielding Cavendish varieties adds to the possibilities. The Study Group on Bananas[1] unanimously agreed that actual quantities of exportable fruit from Ecuador could be in excess of 2 m. tons. The 1.5 m. given in Table 8 is an estimate of what it is expected to be able to market.[2]

Table 8. Bananas: Estimate of Quantities Likely
to be Available for Export in 1975

Country	1971 Actual	1975 Estimated
	('000 tons)	
South America:		
Columbia	235	350
Ecuador	1,351	1,500
Surinam	35	50
Central America:		
Costa Rica	865	1,000
Dom. Republic	5	55
Guatemala	218	250
Honduras	971	1,080
Panama	590	650
Caribbean:		
Commonwealth Caribbean	255	380
Fr. Antilles	259	340
Africa:		
Ivory Coast	141	150
Cameroon	50	80
Madagascar	5	10
Somalia	113	180

Source: FAO. *Monthly Bulletin of Agricultural Economics & Statistics.* Vol.31, Rome, Aug. 1972.

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[1]   FAO, *Monthly Bulletin of Agric. Economics & Statistics.* Vol.31, Rome, Aug. 1972.

[2]   *Ibid.*