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# THE MARKETING AND DEMAND FOR MEAT IN THE COMMONWEALTH CARIBBEAN

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## Introduction

Meat production in the Commonwealth Caribbean is not only a very insignificant part of total agricultural production, but has over the past ten years shown little signs of its position improving. The high proportion of the agricultural land in permanent crops, the rather low livestock population and the high cost of imported animal feeds in most areas are some of the factors which restrict the production of meat in the Region. Against this background of limited meat production, there is an ever increasing demand for meat which has to be supplemented by imports. This paper examines the consumption of meats, discusses the current marketing structures, and suggests a likely demand pattern over the next decade.

## Meat Consumption in the Commonwealth Caribbean

The total consumption of meat and meat products in the Commonwealth Caribbean increased from 112 million pounds in 1956 to 208 million pounds in 1967, and the average consumption per head rose from 31 pounds to 47 pounds over the same period. Figure I shows the total and average per capita consumption of meat for the period 1956 to 1967. Figure II shows that during this period, domestic consumption increased from 59 million to 72 million pounds per year -- an average increase of just over one million pounds per year. Imports increased, on the other hand, from 51 million pounds to 140 million pounds -- an average increase of 7½ million pounds per year. Table 1 shows the average per capita consumption of meat and meat products for the years 1956 and 1967 for all countries of the Commonwealth Caribbean. The values presented include meat consumed by tourists. Table 2 gives a breakdown, by type of meat, of the values presented in Table 1.

An outstanding feature of these trends is the rising demand which has continued and, as yet, shows no sign of coming to an end. The increase in meat consumption has been appreciably higher than for food in general and reflects the well known tendency for the consumption of livestock products to rise quite strongly as living standards improve.

Table 3 shows the relative importance of different meats in the years 1956 and 1967. In 1956, beef and veal played the most prominent part, but by 1967 poultry meat had taken over from beef and veal as the major meat consumed, the most phenomenal expansion occurring in Trinidad and Tobago. In the Commonwealth Caribbean, poultry accounted for one-fourteenth of meat consumption in 1956, and one-third by 1967. Table 3, however, shows that in 1967 beef and veal was more significant than poultry meat only in Guyana, Jamaica and St. Vincent. In the case of Jamaica and Guyana, physical resources have always favoured the production of beef. As regards St. Vincent, a possible explanation is the lack of interest and stimulus in the development of a local poultry industry.

Pork and pork products has decreased in significance in every territory over the period 1956-1967; the average for the Commonwealth Caribbean declining from

25.4 per cent to 18.8 per cent despite considerable increases in the imports of ham and bacon. In Guyana, Jamaica and Trinidad and Tobago, local production of these products has been expanding.

Mutton and lamb is not of significance in the meat consumption pattern of the Commonwealth Caribbean and has shown a decrease from 6.2 per cent to 4.8 per cent. Meat (not elsewhere specified), on the other hand, has increased from 14.1 per cent to 16.3 per cent. Differences in culinary practices, to some extent, account for the variation in per capita consumption among the territories. Ethnic origin of the populations, as well as Religion, are determining factors in consumption patterns.

The general characteristics of meat consumption in the Commonwealth Caribbean may be summarised as follows:

1. Lower income groups tend to consume more poultry, mutton and offals, than other meats. Much of these meats is obtained in the fresh state at prices which are generally lower than those of other meats. The middle and higher income groups tend to consume more beef, poultry, meat preparations and pork.
2. Religion and ethnic origin often determine the type of meat consumed.
3. The type of meat which is most commonly produced locally has the highest consumption. Thus, more beef than any other meat is consumed in Guyana and Jamaica and similarly, more poultry meat in Trinidad.
4. Relatively small quantities of mutton and lamb are consumed and its importance is diminishing.
5. Overall beef consumption is on a moderate decline, but there is an increasing quantity of choice cuts being sold each year in the larger supermarkets.
6. Pork and pork products has shown a slight decline in consumption. There is a tendency for consumption to follow the cyclical pattern of local production.
7. There has been a steady increase in the consumption of processed meats.
8. There has been a large increase in poultry consumption throughout the Region. This demand is being met by increasing local production as well as increasing imports, much of which has been in the form of cheap parts.
9. In addition to income and prices, the degree of urbanisation, size and age distribution of the family, occupation and season of the year also affect the kinds of meat consumed and the per capita consumption of each kind.

#### The Structure of Meat Marketing in the Commonwealth Caribbean

The analysis of meat consumption in the Commonwealth Caribbean shows that in 1957 the Region consumed 112 million pounds of meat of which 45 per cent was

imported. By 1967, total consumption had risen to 208 million pounds of which 65 per cent was imported. Over this period the average per capita consumption for the Region rose from 32 pounds to 47 pounds, an increase of 50 per cent. The increase can be mainly attributed to rising incomes. Rising incomes also accounted for the substantial increase in imported meats as domestic production was unable to satisfy the demand. We may, in fact, regard the marketing of meat as falling under two broad categories -- the marketing of domestic meat production, and the marketing of imported meats.

The marketing of domestic meat production has been generally unorganized. Only in Guyana and Jamaica has there been some attempt at organizing local markets for beef production, and this was perhaps necessary in these two countries since beef is produced mainly by large private companies -- on the bauxite companies' lands in Jamaica, or in Guyana on vast expanses of rangeland (the Rupununi Savannahs). With the recent establishment of a meat processing plant in British Honduras, attempts have been made there to market beef.

In Guyana, it was customary to lead the animals by trail from the Rupununi to the coastal markets via the Intermediate Savannahs where the animals were allowed to rest for short intervals. This resulted in the development of poor condition in the animals and the consequent poor quality of meat on slaughtering. Within the last two decades, the animals have been slaughtered in the Rupununi and the carcasses flown to the coast. This practice resulted in a tremendous improvement in the quality of meat in Guyana.

In Jamaica, much of the local beef has always been produced from the improved pastures, the natural grasslands and the rinate used as pasture. Within recent years there has been the development of beef feed lot operations, producing high quality beef. The Government of Jamaica has perhaps had a relatively more active role in beef production. The Trade Law of 1955 which eventually became the Livestock Control Order of 1960 represented a serious attempt to encourage the production of local quality beef.

Generally, small producers throughout the Region tend to regard their limited livestock as a reserve or bank in which they deposit, in many cases, minimal quantities of feed from time to time. At some later stage, the animal is sold and all or some of the input value is recovered. Obviously there are few management objectives and as such, this type of operation is often an uneconomic venture. In most cases, the small producer is also at the mercy of the local butcher who often obtains the animal at prices that are unremunerative to the producers. With the exception of specialised operations in Guyana and Jamaica, much of the marketing of domestic meat production in the Region had been carried out mainly by the small scale butcher. Because of a lack of facilities and knowledge, the small scale butcher offers his product in an unattractive, ungraded and often unhygienic form. Local meat production, particularly in the smaller territories, is often not subjected to grading and the producer and butcher do not capture the advantages of price differentials.

Since the standard of butchering has meant that very little could be done as regards the level and improvement of grading, it is common to find animals of all weights slaughtered and sold at the same price per pound irrespective of the cut. However, if we look at Jamaica where the beef industry is more advanced and where different prices exist for the various cuts of beef produced by feed lot as against beef imported or produced under normal grazing conditions, it is observed that the

wholesale and retail prices on feed lot beef are generally higher than on ordinary imported beef. For example, in 1967, prices at Cross Roads Market in Kingston, Jamaica ranged from \$J 1.00 (or \$EC 2.40) per pound for fillet steak to \$J 0.20 (or \$EC 0.48) per pound for leg-o-loin butts on feed lot beef. The controlled prices on imported beef for these two types of cuts were \$J 0.82 (or \$EC 1.98) and \$J 0.16 (or \$EC 0.38) per pound respectively.

From time to time there have been these price controls on various meats. The emphasis was always on cheap meat to the consumer. In Barbados, for example, there was price control on pork which ran concurrently with a feed subsidy to the producers. Shortly after both measures were removed simultaneously in 1966, the industry experienced a glut. Incentives and subsidies by governments have not worked well in the Caribbean because of a lack of knowledge at both the production and marketing ends. Maximum price controls have always had to be discarded to encourage local production and import controls could never be too rigidly adopted.

The inadequate attempts by governments to regulate the livestock industries in the Caribbean is a reflection of the characteristics of the industry and the inability of the governments to plan on issues of this nature. The governments' main instrument of price controls has led to stagnation in local production and the creation of artificial markets. Within recent years, the experience of price controls has led governments to be more concerned about the marketing of meat over and above the fresh meat demand. The establishment of meat processing plants has been strongly supported by government policy as a means of reducing any fresh meat market saturation, particularly pork.

Local poultry meat is marketed through many different channels. Where the poultry industries are not highly developed, the chickens are mainly of the common "backyard" type and used mainly for home consumption. The birds from any commercial type production are marketed either in the "live" or "plucked" forms. In other territories where the industry is highly developed, processing plants have been established and poultry meat is marketed exclusively through supermarkets where cold storage facilities are available. In Trinidad, for example, some 20 per cent of the total production is marketed through this means. Another marketing channel is through vendors who purchase birds and sell them live in a series of "pluck shops". In this system, the consumer selects the live bird and pays a small charge for plucking and dressing. Many of the larger producers often carry out their own processing and sell through their own depots and other supermarkets.

In territories where the poultry industry is not highly developed and where imports account for well over half of the consumption, much of this consumption is in the form of chicken parts. In territories where the poultry industry has become highly developed, a feature of the marketing of broilers is the "live bird" market which accounts for as much as 80 per cent of total production. Not only are the live birds cheaper, but they are available through many outlets.

The market for imported meat is more organised and performed through specialised meat importing houses. Quite a variety of meat cuts are imported ranging from "special cuts" of beef for the tourist/hotel industry to cheap poultry parts for the local consumers. Supply and quality characteristics are more uniform and there is much emphasis on grading. Within recent years, meat preparations have been forming an increasing part of imports and fresh, chilled and frozen carcasses have been declining proportionately.

## Considerations for the Future

The development of the livestock industry in the Caribbean must be supplemented by an improvement of slaughtering and meat marketing methods. There is considerable room for production expansion especially in beef and pork. For these commodities, the demand is increasing faster than the supply, and the present poultry consumption is not only a question of consumer preference but rather the result of inadequate supplies of beef and pork.

The most dramatic example of integration is the broiler industry in Trinidad and Tobago where the greater proportion of production is produced under some form of contract. Conditions have become favourable for production on a large scale and there is good technical knowledge on genetics, nutrition and disease control. The industry has the advantage of quick production possibilities, a quick turnover and, until recently, a fairly quick realisation of profits. Over the past ten years the industry prospered as it was filling a demand vacuum. The marginal producers are now falling out of competition, production quotas have been imposed and more and more severe competition is indicated for the future. The broiler industry is learning the lesson that though resources might be available to step up output, the market is not automatically expanded merely by making a large supply of meat available. If for example we compare data from Trinidad and Tobago with data from the U.S.A., we observe that in 1969, the per capita consumption of poultry meat in Trinidad and Tobago was approximately 27 pounds compared with 38 pounds for the U.S.A. However, poultry meat accounted for as little as 15 per cent of all meat consumed in the U.S.A. and as much as 50 per cent for Trinidad and Tobago. The inference is that in Trinidad and Tobago not only is the poultry market saturated, but the market is wide open for other meats, particularly beef.

There is no evidence of consumer objection to meat grading and a differential price system and these would seem necessary in order to develop a market especially for beef. A standardised grading system improves pricing efficiency and is essential to an efficient system of reporting market prices, available supplies and factors affecting demand. If the product varies in quality over a wide range, the market prices will be meaningful only when quoted in terms of specific grades. Accurate market price reports will permit more accurate pricing of the product traded.

Little work has been done on the analysis of demand for meat. However, the points that follow are suggested by the preliminary results of a current study:

1. The various meats compete with each other for the consumer dollar.
2. Chicken is the most serious competitor until it reaches 25-30 pounds per head per year.
3. With continuing changes in the quality of various meats, competitive relationships could change sharply.
4. Improvements in the economic performance of the broiler industry within recent years is an example of the adjustments that could be made in the production of other meats. Lower prices were made possible by lower production and marketing costs and permitted broilers to make significant inroads into the demand.

5. The existing beef and pork industries will have to look for means of improving efficiency in production and marketing and continue to seek improvements in quality, uniformity and product acceptability. The development of new products and the further development of existing markets will be required.
6. There has been a small decline in the demand for pork, perhaps due to the small influence of income together with the shift of preferences towards beef.
7. The demand for lamb is probably affected by availability.

In calculating future meat consumption, at least four factors must be taken into consideration, namely

- (a) population growth (as well as increases in tourism);
- (b) income growth;
- (c) changes in prices of meats;
- (d) changes in prices of competitive products.

If it is assumed that income will increase by 3 per cent per annum, it can be estimated that by 1980 the Region will be consuming about 350 million pounds of meat -- an average of 60 pounds per head per year. It is expected that beef will be the major item of demand, followed by pork and meat preparations. The demand is expected to be more elastic in the long run than in the short run.

The estimate of 350 million pounds of meat consumption by 1980 assumes continued increases in consumer real income available for expenditure. Continued increases in the relative importance of meat, poultry and fish are anticipated. Changing consumption patterns and rising income will be reflected in increasingly discriminating attitudes by consumers in their tastes and preferences for meat. The demand for quality and uniformity in retail cuts may be expected to rise.

In view of these expectations, it will be desirable to have more uniformity and stricter enforcement of meat inspection and animal health requirements. Considerable progress will have to be made in the development of adequate grades and standards and in grading methods and procedures. Success will have to depend largely on research in discovering reliable indicators of quality and in developing objective measures that can be employed.

Unless the beef industry of the Region can expand production and be encouraged by proper marketing methods and policies, the proportion of imported meat will increase well beyond the current 65 per cent level. The recent proposals and developments of the beef industry in Guyana are encouraging, but only a small beginning. On the other hand, the marketing problems associated with foot and mouth disease are also to be appreciated.

For the livestock industry of the Region to make an impact, it must be guided by proper marketing policies which can only be achieved by market research. This is a most urgent need and should be initiated by an organisation such as the CARIFTA Secretariat. What is needed regionally is research relating to

- (a) the consumption, buying habits and preferences of consumers;

- (b) market supply and demand -- collecting, analysing and dissemination of market information;
- (c) product quality, standards, grading and packing;
- (d) market organisation and functions; transport, processing and marketing facilities;
- (e) prices, marketing margins and costs.

Any steps to rationalise agriculture in the Caribbean must make provision for collecting and utilizing this type of data. It is because of the lack of such information that governments and planners have had to resort to *ad hoc* and "play by air" techniques such as price controls, import quotas and even production restrictions.

Table 1      Commonwealth Caribbean: Estimated Per Capita Meat Consumption, 1956 and 1967

Country	1956	1967
	(. . . . . pounds . . . . .)	
Antigua . . . . .	34.7	48.7
Barbados . . . . .	51.2	80.0
British Honduras . . . . .	29.0	46.0
Dominica . . . . .	13.7	30.3
Grenada . . . . .	21.7	33.5
Guyana . . . . .	24.9	34.6
Jamaica . . . . .	37.8	50.7
Montserrat . . . . .	23.3	53.8
St. Kitts/Nevis/Anguilla .	26.7	42.9
St. Lucia . . . . .	17.1	35.7
St. Vincent . . . . .	n.a.	26.5
Trinidad and Tobago . . . .	31.2	45.6
Weighted Average for Commonwealth Caribbean	32.3	47.3

Source: J. Mayers with the assistance of H. Blades, Meat Production and Consumption Statistics of the Commonwealth Caribbean, Department of Agricultural Economics and Farm Management, U.W.I., 1970



Table 2

Commonwealth Caribbean: Estimated Per Capita Consumption of Meats by Type,  
1956 and 1967

Country	Beef & Veal		Pork & Pork Products		Mutton & Lamb		Poultry Meat		Meat (n.e.s.)	
	1956	1967	1956	1967	1956	1967	1956	1967	1956	1967
	(..... pounds .....) )									
Antigua .....	12.4	9.4	6.3	9.1	1.1	1.3	4.5	17.9	10.1	10.9
Barbados .....	14.6	18.1	26.5	25.0	1.1	2.6	2.0	21.6	7.0	12.7
British Honduras ...	13.2	9.9	8.5	10.6	0.1	0.06	-	15.9	7.2	9.5
Dominica .....	2.4	5.5	4.7	5.7	0.1	0.6	3.5	14.3	3.0	5.2
Grenada .....	8.2	10.7	3.9	5.1	0.5	0.8	5.6	10.4	3.3	5.6
Guyana .....	15.0	15.2	4.5	5.0	0.3	0.4	1.0	8.5	4.2	5.5
Jamaica .....	21.1	17.1	6.8	6.4	3.3	3.7	1.6	14.5	6.0	9.1
Montserrat .....	10.4	14.3	5.2	7.7	3.4	1.1	3.1	18.6	4.4	12.2
St.Kitts/Nevis/Anguilla	7.2	5.6	11.2	9.5	2.5	2.8	3.8	16.8	5.7	8.3
St.Lucia .....	7.2	11.0	3.8	4.2	0.8	1.0	2.5	14.1	16.1	15.0
St.Vincent* .....	5.7	10.4	2.6	3.9	0.5	0.6	4.4	7.3	3.1	4.3
Trinidad and Tobago .	13.0	8.9	8.8	9.8	1.6	1.2	5.7	22.6	2.1	3.2
Average for Commonwealth Caribbean	14.8	12.2	9.2	8.4	0.8	2.0	2.4	15.2	5.1	9.5

\* Values given for 1962 instead of 1956

Source: J. Mayers with the assistance of H. Blades, Meat Production and Consumption Statistics of the Commonwealth Caribbean, Department of Agricultural Economics and Farm Management, U.W.I., 1970

Table 3

Commonwealth Caribbean: Relative Significance of Different Meats Consumed,  
1956 and 1967

Country	Beef & Veal		Pork & Pork Products		Mutton & Lamb		Poultry Meat		Meat (n.e.s.)	
	1956	1967	1956	1967	1956	1967	1956	1967	1956	1967
	(..... per cent .....) )									
Antigua .....	43.2	19.2	21.5	18.7	3.7	2.7	15.4	36.8	17.2	22.5
Barbados .....	28.6	22.7	51.8	31.3	2.1	3.2	3.8	26.9	13.7	15.9
British Honduras ...	41.4	21.6	26.6	23.2	0.3	0.1	-	34.5	31.7	20.6
Dominica .....	18.0	15.1	35.9	18.1	0.4	2.0	26.7	47.1	19.0	17.1
Grenada .....	37.8	32.0	18.2	14.8	2.6	2.0	26.0	35.4	15.4	15.8
Guyana .....	60.1	44.1	18.1	14.4	1.0	1.1	4.0	24.7	16.8	15.7
Jamaica .....	49.3	33.6	19.4	12.6	9.5	7.2	4.6	28.6	17.2	18.0
Montserrat .....	39.3	26.5	19.6	14.2	12.9	2.1	11.7	34.6	16.5	22.6
St.Kitts/Nevis/Anguilla	23.8	13.1	36.7	22.0	8.4	6.6	12.5	39.0	18.6	19.3
St.Lucia .....	42.2	30.9	22.5	11.8	4.4	2.9	14.5	39.4	16.1	15.0
St.Vincent* .....	35.1	39.2	15.0	14.7	3.2	2.3	76.6	27.4	20.0	16.4
Trinidad and Tobago	41.6	19.4	28.3	21.5	5.1	2.5	18.1	49.5	6.9	7.1
Average for Commonwealth Caribbean	47.3	28.0	25.4	18.8	6.2	4.8	7.0	32.1	14.1	16.3

\* Values given for 1962 instead of 1956

Source: J. Mayers with the assistance of H. Blades, Meat Production and Consumption Statistics of the Commonwealth Caribbean, Department of Agricultural Economics and Farm Management, U.W.I., 1970

Figure 1

Commonwealth Caribbean: Total and Average Per Capita Consumption of Meat, 1956-1967

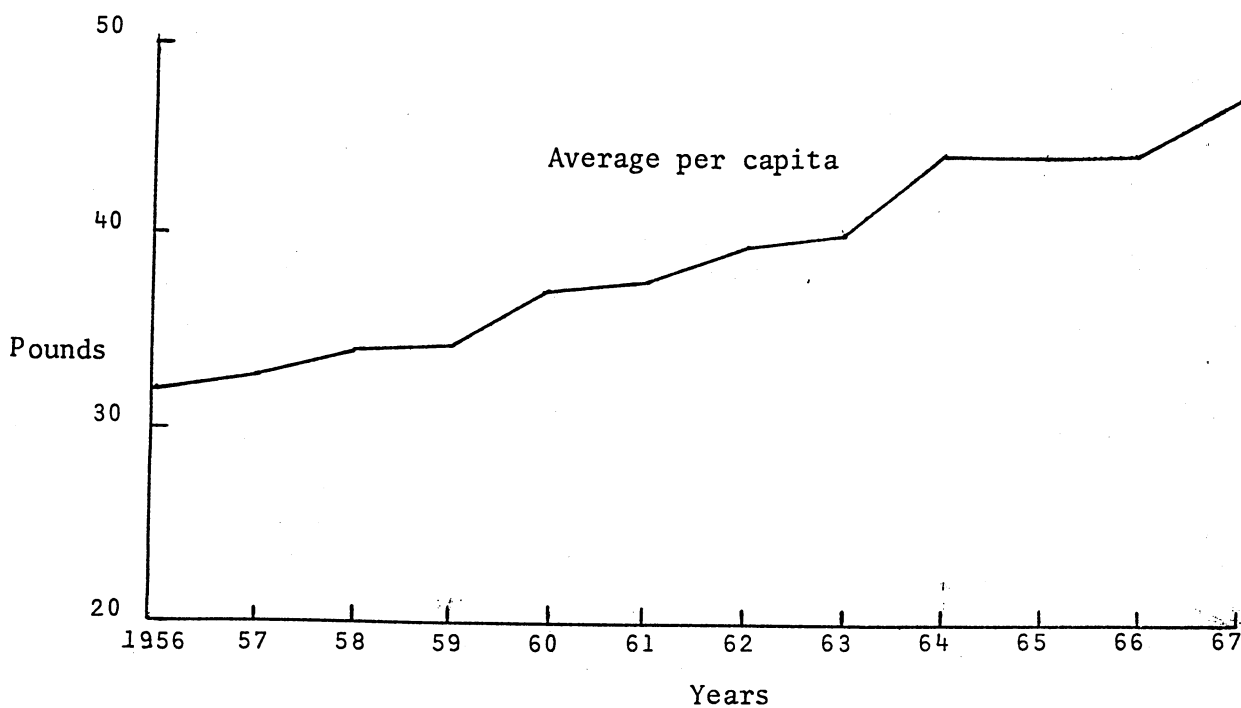
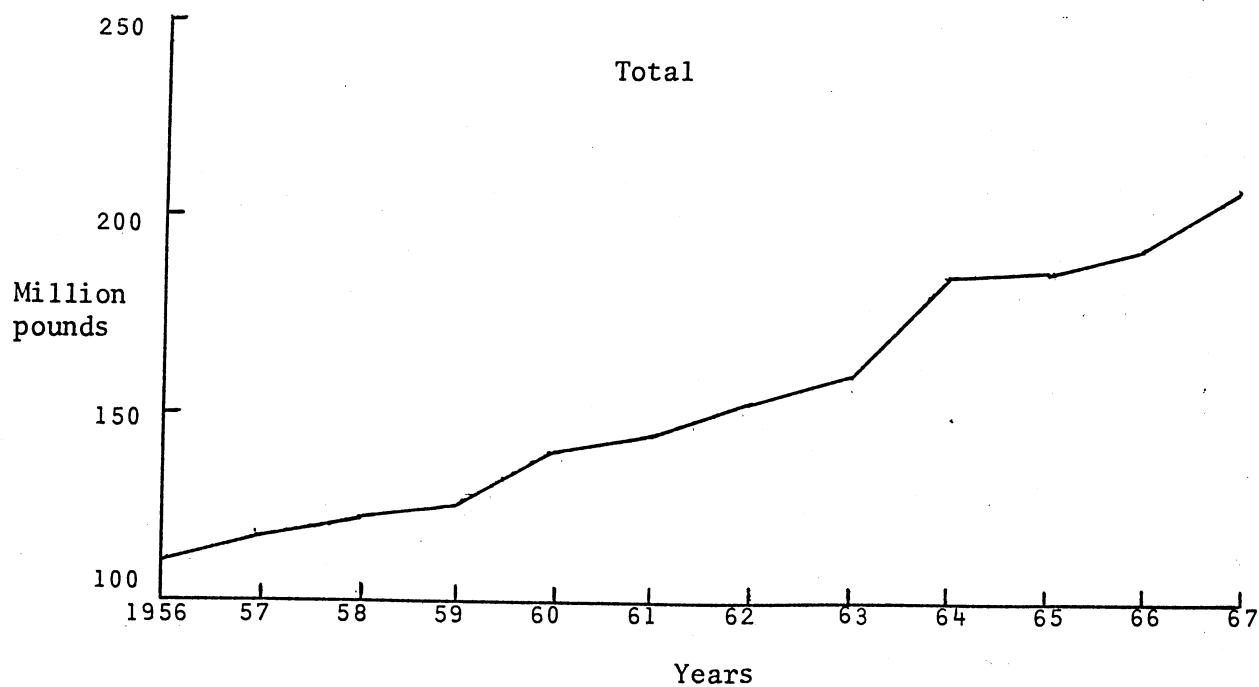


Figure 2

Commonwealth Caribbean: Domestic and Imported Meat Consumption, 1956-1967

