Fruit - Marketing

WYE COLLEGE, Dept. of Marketing
(University of London)

The Distribution of Fresh Fruit and Vegetables from Markets to Shops

by

P. G. ELLIS, C. S. HUNTER and J. H. KIRK

WYE COLLEGE MARKETING SERIES: No. 3
JULY 1967

MARKETING SERIES:

REPORT NO. 3

The Distribution of Fresh Fruit and Vegetables from Markets to Shops

A study of alternative methods and systems, the principal ones being procurement by retailers through their attendance at markets, and deliveries to rounds of them by distributing wholesalers.

by

P. G. ELLIS, C. S. HUNTER and J. H. KIRK

Copies of this Report may be obtained, price 7s. 6d. post free from the Secretary, Marketing Department, Wye College, near Ashford, Kent

July, 1967

FOREWORD

This Study is concerned with the two main alternative methods by which home-grown and imported fresh fruit and vegetables find their way from market to shop. Rather more than a quarter of the total by-passes markets altogether, and of this the greater part is handled by the so-called distributing (or travelling) wholesaler. Of the remainder (nearly three-quarters of the total), delivery by the distributing wholesaler from the market, and direct procurement by the retailer at the market account for roughly equal shares.

At first sight the relative efficiencies of these two latter systems may appear to concern only those who operate them. Both distributing wholesaler and retailer earn their livings by buying, handling and selling produce, and inefficiencies or redundancies in either system will show up in losses and bankruptcies. There are, however, wider interests involved in the large sum of at least £200 millions a year which is spent on the movement and selling of this produce from market onwards. In the first place, any reduction in this cost by structural improvements in the trade should be well worth considering. The same applies to any improvements in the freshness of produce offered to consumers and to reductions in traffic flow around markets in congested cities—though as we shall see these two may be conflicting objectives.

Throughout, the authors' concern has been primarily with the consumer and the British grower, between whom there is, in this case, no conflict of interest. The grower is concerned to see that his produce reaches the shops as cheaply and in as fresh a condition as possible, so as to produce the maximum volume of sales and highest possible price ex farm, and counteract the static or in some sectors declining trend in consumption per head. He will also have a secondary interest in the efficient distribution of fresh fruit and vegetables in contrast with their canned and frozen competitors.

This Study has been financed by a grant from the Agricultural Marketing Development Executive Committee, made in the first instance to the Horticultural Marketing Research Association and passed on to Wye College, for which the College are most grateful. Most studies financed by A.M.D.E.C. are expected to result in definite recommendations or, at all events, clear-cut findings in favour or against some particular development. This Study has not by its nature been capable of yielding much in the way of definite conclusions or recommendations. We will, however, be disappointed if its discussions do not lead many wholesalers and retailers to re-examine their methods and systems for both their own and the public good.

J.H.K.

CONTENTS

Chapter I

STRUCTURE OF THE TRADES IN FRESH FRUIT AND VEGETABLES

The procurement of supplies for or by the retailer of fresh fruit and vegetables must be studied against the structure and organization of his trade. The numbers of retailers and the extent to which the trade is in the hands of specialists (greengrocers, etc.) are factors inevitably influencing the means by which supplies reach the shops. There are marked differences between several of the highly developed countries, for example between the U.S.A. and both Britain and France, and between the latter two and Germany.

In order not to delay consideration of the main material and argument of this Study, most of this background information has been relegated to an Appendix (Appendix A). The following are the salient points:

The Retail Trade

Table 1 shows the relative importance of the various sectors at the last enumeration in 1961:

Table 1

Establishments Retailing Fresh Fruit and Vegetables

	Number	Percentage of value of turnover
Greengrocers and fruiterers (including those selling fish and also including stallholders)	42,000	72·9
Grocers and provision dealers	100,000	19·6
Other food retailers	5,000	1·5
Non-food shops	6,000	6·0
	153,000	100·0

Of the 42,000 specialists, 72·3 per cent. were one-shop or one-stall establishments. Measured in any way most of these are very small businesses.

In proportion to the population there is the greatest density of greengrocers and fruiterers in Yorkshire and Lancashire, but the establishments here are smaller than average. Many are in fact stallholders. Highest turnovers per shop are registered in Greater London, and the South-Eastern, Southern and Midland Regions. Scotland has the smallest number of greengrocers per 100,000 of the population.

The very many grocers and provision merchants selling fruit and vegetables have only 3·2 per cent. of their turnover in these commodities. But as a class they perform an important function in securing the widespread distribution of fruit and vegetables, enabling the produce to reach the remoter areas of the country (and even parts of towns) that would not sustain a specialist. They also enable sales to be made to consumers, who for one reason or another or at a particular time, would not be willing to make a special visit to a greengrocer merely to buy one or two kinds of fruit or vegetables.

The Wholesale Trade

The number of businesses recorded by the Board of Trade in 1961 was 2,153, but this is certainly a substantial undercount.

There are three main functions of wholesaling—the assembly of supplies, their distribution, and the determination of prices. To some extent the assembly of supplies is carried out in the production areas by country merchants (who are often large growers) or by associations of growers in co-operatives. But in Britain the assembly of supplies in the production areas, while by no means unimportant, is less developed than in other countries such as France and the U.S.A., where much of the production is carried on in areas remote from the main centres of population. In this country the production areas are for the most part within relatively easy reach of the main markets so that the growers can consign their produce direct to merchants there. To this extent therefore, the wholesalers in the town markets are carrying out assembly as first handlers from the growers. For this reason they are often designated as primary wholesalers to differentiate them from other wholesalers who are to a greater extent engaged in distribution. The latter are called secondary wholesalers, and the more important section of these can be more appropriately described as distributing wholesalers. There are not however clear cut distinctions between any of the classes as many wholesalers perform functions both of assembly and distribution.

The Ministry of Agriculture has recorded a total of 3,982 wholesalers in England and Wales grouped as follows:

Primary wholesalers	1,132[1]
Secondary wholesalers	2,057[2]
Grower wholesalers	793[3]
	3,982

For Scotland the Department of Agriculture has made a slightly different classification more in accordance with conditions there:

A.	Wholesalers (including grower wholesalers) selling in the main market areas	204
B.	Wholesalers (including potato merchants and grower wholesalers) outside the main market areas	690
C.	Provision merchants selling fruit and vegetables and growers selling to local shops[4]	451
	Total	1,345

Markets

The total number of wholesale markets in Britain is not much greater than 30, all of which are to be found in the thickly populated areas. Of these, a few of the smaller ones only barely justify being designated as markets in the real sense. There are several other towns where a few wholesalers are congregated together but which cannot be considered as coming within the definition of a market.

The main function of a market is the determination of price, and without doubt the larger the market the better this function is performed. The Runciman Committee put it in the following way:

> "When he is buying, a distributor—whether secondary wholesaler or retailer—wants to know that the prices he is paying are not out of line with those that his competitors are paying, otherwise they may be able to undercut him, and either he will lose business as a result, or be forced to reduce his own prices to levels which give him no profit. If there is no general price recognized as determining the general level at which individual purchases are made, many distributors may be tempted to buy only those quantities of produce that they know their customers

[1] Four hundred and fifty-seven are in London, 406 are in the eleven largest provincial markets and the remaining 257 in the smaller markets and elsewhere.

[2] One hundred and ninety-two are in London, 280 are in the eleven main provincial markets and the remaining 1,585 are partly in the smaller markets but mainly scattered between 700 and 1,000 separate distribution points thoughout the country.

[3] Mainly outside the large markets, but 245 within them. Some of these, and perhaps also some secondary wholesalers, will be "country merchants".

[4] Central depots of large retail firms are also included in C.

will take almost regardless of price. If, on the other hand, a general price be established, distributors will be able to assess what their own selling price and that of their competitors must be, and will then be able to buy with confidence as much produce as they can expect to find a sale for at that price, knowing that they cannot be substantially undercut. Produce will therefore be distributed more freely if a general price level is established. Because horticultural produce is so subject to changes in supply and demand the importance of establishing a market price is particularly great.

The major markets for horticultural produce have developed naturally at places where imported and home-grown supplies can be assembled easily and then distributed to many outlets. These markets—the primary markets—having grown up at centres of communications serving large populations, are convenient buying points for local retailers and for secondary wholesalers. There is thus at the markets a concentration of buyers and sellers dealing in a wide range of commodities and conscious of movements in supply and demand. It is the interplay between them that enables a general market price to be established."

Almost as important as its price setting function is the ability of a market to clear large and fluctuating arrivals of produce, and once again the larger the market the better is this function carried out. Although there are a number of circumstances in which direct trading links between producers and buyers are possible and competitive, and indeed 28 per cent. of the total of fresh fruit and vegetables (including imported) by-passes markets altogether, we feel that there are compelling reasons why markets can be expected to hold nearly three-quarters of the trade, or at all events two-thirds, for as long as can reasonably be foreseen. These reasons should really be the subject of a separate study, but our view can be summed up by saying that there is nothing to compare with a large market as a satisfactory sponge to mop up the inevitable, large and frequent fluctuations in supply and demand.

Chapter II

THE RETAILER'S MEANS OF PROCUREMENT

The Problem

Of the total quantity of fresh fruit and vegetables consumed in the United Kingdom rather more than two-fifths of the fruit and four-fifths of the vegetables are home grown. By value one-third of the fruit and two-thirds of the vegetables are home-grown. Of the imported fruit at least 75 per cent. comprises kinds not grown in this country, largely citrus and bananas, while the remainder consists almost entirely of apples and pears entering for the most part in the off-season from the southern hemisphere. The imported vegetables to the extent of almost four-fifths are composed of two items, tomatoes and dry bulb onions. The former are largely a winter import from Spain and the Canaries, although about one-fifth of the summer supplies are imported from outside the British Isles, almost entirely from Holland.[1] Apart from onions, which need dry conditions for ripening, the climate of Britain is favourable for the growth of a wide range of vegetables, and while the winter restricts the season for the more delicate crops, it is seldom so severe as to interfere with the growth and marketing of the hardier vegetables. It follows from the above that supplies of fresh fruit and vegetables are readily available throughout the year.

The normal greengrocery establishment handles from 40 to 50 kinds of fresh fruit and vegetables during the year. Including different varieties the items can number as many as 150. Grocers and other non-specialists usually handle far fewer, and seem as a rule to make their selection from the following list: oranges, bananas, apples, carrots, cauliflowers, cabbages and potatoes. They are of course concerned mainly with offering staple lines of fresh fruit and vegetables to customers who frequent them mainly for grocery purchases, though in country districts which are too sparsely populated to support specialist greengrocers, the grocer (or general purpose store) may extend his lines to include most fruits and vegetables in season. Both greengrocers and grocers may also maintain refrigerated cabinets from which they sell frozen vegetables, especially peas, along with frozen fish and other foods, while grocers

[1] From the point of view of the U.K. grower, Channel Island tomatoes are also an import, but they are not now so treated in the Trade and Navigation Accounts.

(but to a much less extent greengrocers) also carry many lines of canned fruit and vegetables.

For both classes of trader, and particularly for the greengrocer, whose living depends on being able to satisfy his customers with the variety, condition and price of his fresh fruit and vegetables, efficiency in procurement must rank equal with efficiency in selling. Indeed, owing to the rapid turnover the two are so closely connected as to be almost one and the same. This is in contrast to some other classes of business where the presence of large stocks, acting as a buffer between purchases and sales, and the widely different sizes of average purchase and sale, create such a divorce between them that they are handled by different classes of staff, and any inefficiency of the one class may in some cases be capable of being corrected by the other. The typical fruit and vegetable retailer, however, is bound to sell what he himself has bought no more than one or two days earlier; he can as a seller correct his mistakes as a buyer only by the limited means of juggling with his labels and price tickets; and he has only himself to blame if he has bought what he cannot sell, or cannot sell what his customers want because he has failed to buy it.

Procurement, then, falls into four categories of service and requirement—amount, variety, quality and condition, and price. The retailer has to attend to all four as a simultaneous operation, and where they are not compatible (e.g. low price and high quality) he has to perform a balancing act. As already indicated, this Study is concerned chiefly with alternative *sources and means* of procurement (e.g. should the retailer organize his own procurement or rely on others), but whichever choice he makes, he has to relate it to his requirements under all four of the headings given, and a method which may be by far the most satisfactory for one, may score less well for the others.

So far as we have been able to estimate, the systems of procurement which have in practice been evolved can be summarized in the following Table, which subdivides among them the total of retail sales by value of fresh fruit and vegetables, including potatoes.

This Table shows that retailers of all kinds rely for 38 per cent. of their produce on direct deliveries from market (usually though not always produce selected by themselves in person and conveyed from market in their own vehicles), and for 54 per cent. on distributing wholesalers (including both what these latter distribute from markets and what they obtain direct from farm or port). As indicated the Table includes potatoes, and since distributing wholesalers handle the bulk of these, it is possible that their omission would to some extent increase the figure of 38 per cent. (and depress

TABLE 2

Summary of the Relative Importance of Sources of Supplies for the Retail Trade

To Retailers		Per cent.
1. Direct from growers		8
5. From growers (and importers) and thence direct through distributing wholesalers		20
3. Through market		
(a) Direct to retailers	38	
(b) Through distributing wholesalers	34	
	—	72
		—
All sources		100

both components of the 54 per cent.). However that may be, it is clear from the Table that both the main systems of procurement we are concerned with are substantial, almost certainly competitive and viable, and capable of giving service and satisfaction to retailers of some classes according to the nature and circumstances of their individual trades. The above is, however, only a very broad statistical generalization, and we must now probe a little deeper.

THE METHODS OF THIS STUDY

By means of a questionnaire and by visits to retailers we have aimed to discover in detail the means by which retailers obtain their supply of fresh fruit and vegetables and to learn the reasons for their individual choices.

Information was obtained as follows:

(a) By visits to the wholesale fruit and vegetable markets;

(b) By inquiries by letter to market authorities and market wholesalers;

(c) Visits to distributing wholesalers;

(d) By visits to some 250 retailers;

(e) By a postal questionnaire to retailers not covered by personal visits.

Some fifty wholesalers engaged in distribution were interviewed mainly in the Eastern, South-Eastern, Southern and South-Western Divisions. About 250 retailers were interviewed in the following regions:

London and South-Eastern Eastern Southern South-Western	These retailers are located mainly in districts easily accessible from Wye College

A questionnaire was sent to 600 retailers in 137 towns in Great Britain, whose names and addresses were supplied by the Secretary of the Retail Fruit Trades Federation Ltd. In the main these retailers were greengrocers and fruiterers, although some were grocers with significant sales of fresh fruit and vegetables.

As has already been indicated in general terms, the following methods of procuring are available:

(a) Produce may be purchased and collected from a grower;

(b) Supplies may be delivered by the grower to the retailer;

(c) Distributing wholesalers may bring produce to the retailer;

(d) The retailer may attend a market for the purpose of purchasing supplies and bringing the produce back to the shop in his own vehicle;

(e) Having attended a market for the purpose of purchasing supplies a retailer may either:

(i) have all the produce delivered to him by the wholesaler, or

(ii) take in his own van the more perishable items and leave the heavier and less perishable produce to be delivered by the wholesaler;

(f) The retailer may order produce from one or more commision buyers in the main markets (especially in London) who arrange the carriage of the produce to him.

All of these methods were found to be used, but (c) and (d) predominated. Mixtures of (c) and (d), with some preference for (d) for the more perishable produce, were also important.

The Specialist Greengrocer and Fruiterer

Local Supplies. Apart from its great variety, the main characteristic of the produce the specialist handles is that most of it is highly perishable. It begins to lose value from the moment that it is harvested, and for some produce the rate of loss is very rapid (e.g. lettuce, watercress and radishes). Therefore the retailer has a very strong incentive to buy the more perishable kinds as soon as possible after the produce has been harvested. For this reason local produce is at a premium (other things being equal) over that which comes from a distance, except for those items which are less perishable, e.g. apples. Because of the additional value gained by buying local grown produce, most greengrocers make an effort to secure local supplies so far as these are available. The retail inquiry revealed that 75 per cent. of those answering obtained from between 1 per cent. and 40 per cent. of their fresh fruit and vegetables direct from local growers. For the most part the produce so obtained tends to be the more perishable kinds, especially the salad items such as lettuce and tomatoes. Compared with produce bought in the markets the conservation of value arising from the time saved is considerable. The latter can hardly be much less than 24 hours and is probably more for some items.

Information about the price levels at which this direct trade between grower and retailer takes place is scanty. The usual practice seems to be that both parties use the market prices as a guide and where the grower is in a strong position in relation to buyers, he can usually extract a premium over the market price from the retailer, though even if the price the grower receives is a little less than this, his net return may be higher on account of the saving in transport costs, wholesalers' commision, and other market charges. Another advantage to both parties arises from the fact that there is less damage from handling and no losses from pilfering. In addition the cost of containers is reduced because returnable types can be used and they can be retrieved more cheaply than from a market.

On the basis of the information given by the retailers we can estimate that in value terms not less than 16–18 per cent. of home grown produce (including potatoes) is obtained direct from growers. If the intensive market garden crops were considered separately, the proportion sold direct by growers to retailers would be considerably greater. This comes about partly because of the exclusion of potatoes as non-intensive and partly because the market gardening areas tend to be near the towns, whereas the field scale crops (e.g. carrots, peas, cabbages) are mostly grown in the main arable areas which lie on the eastern side of the country.

Some of the remarks made by greengrocers about locally grown produce are given in Table 3 overleaf.

Supplies from Markets. Different greengrocers have different classes of trade, especially in respect of grade, quality and condition of produce, and must be able to cater for them to a large extent separately. The distributing wholesaler cannot easily set out to meet the requirements of retailers with widely varying needs. For this reason the retailer situated too far from a market to be able to buy his supplies by personal inspection is limited in the width of his choice. To a degree he may be able to overcome this by ordering from a commission buyer in a market, but even this does not provide him with as much choice as he can get by visiting the market himself.

Also important is the opportunity which one's presence in the market provides for making decisions on the quantities of different kinds of produce to be bought according to relative prices and

TABLE 3

Situation of Retailer	Proportion of total supplies obtained from local growers		Retailer's Remarks
	Collected by Retailer	Delivered by Grower	
	%	%	
Weston-Super-Mare	5	25	"Value of a local grower is immense if only for the fact of freshness—the main part in my opinion for any greengrocer."
Bridgewater	—	35	"Always more reliable and fresh. My local growers supply me with 75 per cent. of my lettuce, tomatoes, spring onions, broad beans and soft fruit. One of the main advantages of local growers is continuous supply, they deliver not only early morning, but during the day."
Carlisle	17½	2½	"Age of produce is known to be only a matter of 24 hours. Produce from further afield can be days old".
Northampton	—	50	"Because it is fresher, not pilfered or damaged. If we have to buy from our local wholesalers produce which has come from the markets, we find a vast difference in quality (stale looking and damaged)."
Chester	—	35	"Direct contact with the grower allows advice to be given on long term requirements. Local produce is much fresher and much better graded".

volumes of supplies. Thus, if cauliflowers suddenly become plentiful (as they often do following changes in the weather), the consequent sharp fall in market prices make them an attractive prospect compared with, say, brussels sprouts. The retailer visiting the market can quickly increase his purchases of the one vegetable relative to the other. But if he depends on a distributing wholesaler to bring produce to him he partly forgoes these opportunities because the distributor cannot foresee with sufficient precision how his retailer customers will react to different price situations. Naturally the distributing wholesaler is alive to changes in the supply situation and adapts his purchases accordingly, but all the same a retailer's buying decisions are less capable of adjustment when he is dependent on someone else then when he is able to go and see what is