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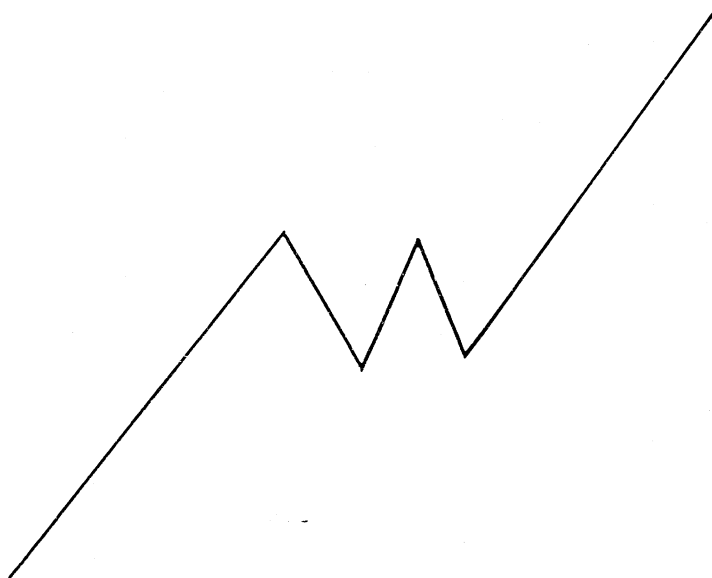
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# **Cost of Distribution of Vegetables and Fruit**

by

J.B. Bester,

Senior Professional Officer, Division of Agricultural Economic Research

## **INTRODUCTION**

In a country such as South Africa where farming enterprises are usually comparatively small, and where a large variety of products are being produced over a vast area, assembling points for products in the process of marketing become a necessity. Fresh-produce markets are the main assembling points of perishable products and are also the points of first sale. The market then is the place where supply and demand are concentrated and where, through the free play of these factors, a price (i.e. the market price or producers' price) is established for the first time in the process of marketing.

Out of the market price received by the producer for his products, he must, apart from cost of production, also cover certain marketing costs. For example, cash is required in order to sort, grade and pack products in suitable containers; and he bears the cost of transporting such products from his farm to the market. This naturally differs according to kind of product, distance from the market, as well as the kind of transport he uses.

The producer must also pay for the facilities and services which are put at his disposal by the local authorities and market agents. These market charges (i.e. market dues and agent's commission) amount to about 10 per cent of the price the producer receives for his product on the market. In the Transvaal, the producer must also pay, over and above the market fees referred to, one per cent of the selling price of his produce to the provincial authority in the form of an auction sales tax.

## **WHOLESALE DISTRIBUTION**

Direct transactions between producers and dealers are, for various reasons, at present taking place only on a limited scale. Consequently, the fresh-produce markets are still largely regulating the flow of produce into the distribution trade.

Although activities of wholesalers on our major fresh-produce markets differ substantially from market to market and also in respect of different products, the wholesaler is nevertheless an important factor in the distribution of these products.

According to a survey conducted by the Division of Commodity Services on the Johannesburg market in 1958, wholesalers purchased more than half of the supply in

respect of some of the most important products during the week of the survey. An exposition is given in Table 1.

TABLE 1. - Percentages of the total supply of certain products purchased by wholesalers and retailers on the Johannesburg market, 14th to 19th April, 1958

Product	Number of wholesalers	Percentage of the total supply taken up by wholesalers	Percentage of the total supply taken up by retailers
		%	%
Potatoes	4	86.0	14.0
Tomatoes	10	53.0	47.0
Cabbage	3	67.0	33.0
Green beans	4	65.5	34.5
Pumpkin	3	76.0	24.0
Oranges	10	60.0	40.0
Pawpaws	15	33.5	66.5

As wholesalers are taking up such large quantities of produce on some of the major fresh-produce markets, the following questions arise: To what extent do these dealers render a justifiable service in the distribution of fresh-produce? Do they actually contribute towards the distribution of produce or are their business activities focussed on speculative profits, based on the redistribution of produce between fresh-produce markets? Are their profits reasonable, taking into consideration the services they render? How does the wholesaler's price mark-up affect the cost structure of fruits and vegetables?

According to an investigation by the Division of Economics and Markets in 1947/48<sup>1)</sup>, it was found that wholesalers actually render an important distribution service, and that speculative redistribution of produce between fresh-produce markets plays a minor role in their business activities. An exposition of the major channels through which wholesalers in Pretoria, Johannesburg and Cape Town find outlets for their produce is given in Table 2.

In most instances the wholesalers not only supply retail dealers in the urban areas in which they operate, but also retailers in nearby towns and even further afield.

An important function of wholesalers is the granting of credit facilities to clients. Credit is normally granted on a weekly or monthly basis and in some instances also on current account. At the time of the 1947/48 survey it was found that credit sales by wholesalers in Pretoria, Johannesburg and Cape Town amounted to 54.6, 67.7 and 55.6 per cent respectively of their monthly turnover.

From Table 2 it appears that wholesalers sell to a fairly large extent direct to consumers. The main reason for this uncommon practice is that they trade in highly

<sup>1)</sup> An economic analysis of the supply and distribution of fruit and vegetables at four terminal markets in the Union of South Africa, 1947/48 - S.H. Fischer.

TABLE 2. - Estimated percentages of produce sold by a representative group of wholesalers through different trade channels in Pretoria, Johannesburg and Cape Town, 1947/48

Trade Channel	Pretoria		Johannesburg		Cape Town	
	Fruit	Vegetables	Fruit	Vegetables	Fruit	Vegetables
	Percentage of sales according to quantity					
Retail dealers	48.3	27.9	69.6	65.6	45.0	26.6
Hawkers	22.6	18.7	11.0	5.3	1.0	0.0
Direct to consumers	21.9	44.0	10.4	15.5	32.0	26.0
Other wholesalers	1.2	2.6	6.8	10.4	0.0	0.0
Ships' Stores	0.0	0.0	1.1	1.6	0.4	0.4
Other fresh-produce wholesalers	0.0	0.0	0.6	0.8	0.0	0.0
Other institutions <sup>1)</sup>	4.6	5.3	0.5	0.8	13.6	25.0
Contracts <sup>2)</sup>	1.4	1.5	0.0	0.0	8.0	22.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

1) Hotels, boarding houses, restaurants.

2) Hospitals, military institutions, work-colonies, hotels.

perishable produce, requiring quick sales. Furthermore, all products are not standardised and graded; consequently the wholesaler is compelled to make selections from his own purchases to suit the requirements of his clients. The often unpredictable sales possibilities and injudicious purchases by wholesalers also call for alternative outlets in their case.

#### WHOLESALE DISTRIBUTION COST

Based on information contained in the Fischer report, the average annual turnover, gross profit, costs and net profit of a representative group of wholesalers in Johannesburg were as follows in 1947/48:

	<u>Value</u>	<u>Percentage on turnover</u>
	R	%
Average annual turnover	137,171	100.0
Average cost of goods sold	125,948	91.8
Average gross profit	11,223	8.2
Price mark-up on cost of goods sold	-	8.9

## ADMINISTRATIVE AND DISTRIBUTION COST

Cost item	Average cost per enterprise	Cost as percentage of gross profit	Cost as percentage of turnover
	R	%	%
Wages and salaries (hired labour)	3,271	29.15	2.39
Rent (premises and buildings)	1,063	9.47	0.78
Transport and railage	454	4.04	0.33
Storage	384	3.42	0.28
Packing material	225	2.01	0.16
Travelling cost	45	0.40	0.03
Communication	309	2.75	0.22
Depreciation	269	2.40	0.20
Bad debts	132	1.17	0.10
Licence fees	41	0.37	0.03
Insurance	107	0.95	0.08
Bank charges and interest	111	0.99	0.08
Other	304	2.71	0.22
Auditors' fees	55	0.49	0.04
Total cost	6,770	60.32	4.94
Net profit <sup>1)</sup>	4,453	39.68	3.25
Gross profit	11,223	100.00	8.19

<sup>1)</sup>Includes interest on capital.

Although the average price mark-up on the cost of goods purchased by wholesalers in Johannesburg was 8.9 per cent, costs amounted to 4.9 per cent of their turnover and their net profit was accordingly about 3.3 per cent on turnover. In Pretoria the price mark-up was the same as in Johannesburg, but dealers' costs were slightly higher - and they made a net profit of only 3.1 per cent on turnover. In Cape Town the percentage mark-up was appreciably higher than in Johannesburg, namely 14.8 per cent on the cost of goods purchased. Dealers' costs in Cape Town were, however, also substantially higher, namely 10.7 per cent on turnover; and they consequently made a somewhat lower net profit on turnover, namely 2.2 per cent.

## RETAIL DISTRIBUTION

The retail distribution of vegetables and fruit in the Republic is in the hands of a large number of relatively small enterprises.

According to the latest Census of Distribution and Service Establishments there were, over and above hawkers, no less than 5,246 service institutions which handled

vegetables and fruits in 1952. These businesses include green-grocers, cafes, restaurants and fish shops. The three last-mentioned types of dealers, however, handle vegetables and fruit on a limited scale only; in 1952 their income from the sale of vegetables and fruit comprised only 9.1, 2.5 and 1.9 per cent respectively of their total income.

Green-grocers, of which there were about 1,277 in 1952, are the most important retail distributors of vegetables and fruit. In that year they had (according to the Census of Distribution and Service Establishments) a total gross income of R17.8 million or 87.8 per cent was derived from the sale of vegetables and fruit.

As mentioned previously, the various types of retail dealers in general handle a comparatively small tonnage of produce; in other words, the business units are relatively small. According to a survey made in Pretoria in 1961, it was found that establishments such as cafes, restaurants and tea-rooms handle on an average only about 3 tons of vegetables and fruit per month. The average green-grocer handles about 20 tons of produce per month.

The main reason for the unique composition of the retail trade in vegetables and fruit is to be found in the perishable nature of the products handled, as well as in consumers' habits as regards the purchasing and consumption thereof.

As a result of the large number of businesses engaged in the retail distribution of vegetables and fruit, distribution costs are high. Contrary to general belief, it may be stated that the profits made by these retail dealers are not excessive. Although not all of these businesses operate efficiently, there are certain characteristics, peculiar to the trade, which tend to keep distribution costs on a relatively low level.

Thus for instance, this trade became concentrated in the course of time in the hands of certain groups of the population who find it extremely difficult to find employment in other spheres. An appreciable percentage of these traders has a comparatively low standard of living and, as far as labour is concerned (which is one of the main cost factors), they rely largely on family labour. Furthermore, some of these traders produce themselves a certain portion of the produce they sell. The sharp competition amongst traders also contributes towards the fact that their profit margins are smaller than what is considered as reasonable in most other branches of the trade.

#### RETAIL DISTRIBUTION COST

According to an investigation in Pretoria by the Division of Economics and Markets in 1960, the average weekly turnover, gross profit, costs and net profit per enterprise of a representative group of green-grocers were as follows:



	Value	Percentage of
	R	turnover
		%
Average weekly turnover	334	100.0
Average cost of goods sold	262	78.3
Average gross profit	72	21.7

Average Costs per enterprise

Cost item	Amount	Cost as percentage of gross profit	Cost as percentage of turnover
	R	%	%
<u>Sales and distribution cost</u>			
Wages and salaries <sup>1)</sup>	36.43	50.35	10.92
Land and buildings	15.54	18.71	4.05
Equipment	0.81	1.12	0.24
Vehicles and bicycles	0.77	1.06	0.23
Other	4.37	6.04	1.31
<u>Administrative cost</u>	7.22	9.98	2.16
<u>Financing cost</u>	0.22	0.30	0.06
Total cost	63.36	87.56	18.97
Net profit <sup>2)</sup>	9.00	12.44	2.69
Gross profit	72.36	100.00	21.66

<sup>1)</sup> Includes remuneration for owner and family labour.

<sup>2)</sup> Includes interest on capital.

Wages and salaries, which include remuneration for the owner<sup>1)</sup> and his family labour<sup>2)</sup> are the main cost items in this trade. It comprises about 57 per cent of the total distribution cost of the trader. Land and buildings are of second importance, and represent about 21 per cent of the cost.

The average net profit of these traders in Pretoria amounted to about 2.7 per cent on turnover - which can naturally not be regarded as an excessive rate of profit.

The following hypothetical case will show the effect on the producers' price and consumers' price of the marketing cost incurred by the producer, as well as the price mark-up in the wholesale and retail trade. It is assumed that the market price is equal to the cost of goods sold by dealers, and that the distribution cost of the product is equal to the average cost of distribution of the combination of products normally handled by the dealers.

<sup>1)</sup> Remuneration for the owner calculated at a rate of R100 per month.

<sup>2)</sup> Remuneration for family labour calculated at a rate of R70 per month.

### Example

	<u>Cent</u>
<u>Farm price per unit (product packed and delivered to producer's station)</u>	39.25
Railage .....	5.00c
Agent's commission .....	3.75c
Market dues .....	2.00c
Marketing costs per unit borne by producer	<u>10.75</u>
<u>Market price per unit of product</u>	50.00
<u>Wholesale distribution, sales and administrative costs per unit</u>	
Wages and salaries .....	1.30c
Rent of land and buildings .....	0.42c
Other costs .....	0.97c
Net profit .....	1.77c
Price mark-up per unit in the wholesale trade .....	<u>4.46</u>
<u>Retail distribution, sales and administrative costs per unit</u>	
Sales and distribution cost .....	11.66c
Administrative cost .....	1.50c
Financing charges .....	0.04c
Net profit .....	1.88c
Price mark-up per unit in the retail trade .....	<u>15.08</u>
Consumers' price (or retail selling price) per unit .....	<u>69.54</u>

In practice retail dealers do not buy all their requirements from wholesalers. It is mostly cafes, milk bars, restaurants, etc., which make use of the services rendered by wholesalers. Green-grocers obtain most of their requirements on the fresh-produce markets. Wholesalers are also more active on some markets than on others.

The main reasons why retail dealers prefer to make use of the services rendered by wholesalers, are the following:

- (a) The wholesaler grants credit;
- (b) products which are not satisfactory may be returned to the wholesaler;
- (c) the correct quantity and variety of products are more easily obtainable from the wholesaler;
- (d) the wholesaler delivers the produce at the shop; and
- (e) especially the small buyer, who usually has a one-man concern, may devote all his attention to his business and is not compelled to spend much of his time on the market (where he would in any case find it difficult to buy the necessary variety of products at the auctions in the various sections of the market).

## FUTURE DEVELOPMENTS IN THE FIELD OF RETAIL DISTRIBUTION

Taking into consideration the development in the field of retail distribution of vegetables and fruit in certain overseas countries during the past decade, it is acceptable that such developments will sooner or later also affect conditions in the Republic.

In order to improve the marketing of perishable agricultural products, it is often required that changes be brought about more or less simultaneously in different fields of the marketing process. This will undoubtedly be the case if developments overseas are to be applied successfully in South Africa.

Some of the most important factors restricting modernisation of retail distribution of vegetables and fruit are the limited outlets at the disposal of the retailer; his limited capital, and the fact that most of them are, for reasons already mentioned, able to make a living at the present low profit margin.

It could be expected, and the indications are there already, that the major developments in the field of retail distribution would take place mainly outside the sphere of the present distribution system.

As the consumer is not yet sufficiently quality conscious (and pays more attention to the price of the product), and also because the present distribution of retail shops are basically convenient for the consumer, the financially stronger enterprises, entering the retail trade, will undoubtedly have to operate efficiently. Such enterprises will have to maintain a large turnover; and will have to apply cost-saving practices such as cold storage, pre-packaging and self-service - in order to keep their unit cost at the lowest possible level.

Pre-packaging would eventually become a necessity, and will create a demand for pre-packaging on commercial scale, either through co-operative organisations or private enterprise. This in turn would give rise to the direct flow of produce from the producer to the pre-packaging plants.

Sooner or later, when the trade has reached this stage of development, the producer would no longer produce what he likes but, as is the case in certain overseas countries, will have to produce to the specifications laid down by the trade in respect of variety, grades, etc. As a result of the comparative advantages which one area has over another, it could then be expected that product specialisation will be applied to a greater extent in the various production areas.

This development will not eliminate the one-man enterprise altogether, because in overseas countries such as the United Kingdom (where the retail distribution has been modernised to a relatively large extent) these dealers still constitute the backbone of the distribution system for vegetables and fruit.<sup>1)</sup> This is the position not only for reasons already mentioned, but also because some consumers are not willing or able to pay for additional services such as pre-packaging, processing, freezing, etc..

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<sup>1)</sup>Marketing of Fruit and Vegetables in Europe. O.E.E.C. Project No. 249C, 1956, p.p. 319.