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THE ROLE OF PROCESSORS, WHOLESALERS AND RETAILERS IN THE MARKETING OF FOOD IN SOUTH AFRICA*

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INTRODUCTION

The importance of the middlemen of marketing was recently high-lighted with the publication of a thirty-item 'food basket' for South Africa. While the producer's share of the food basket is usually of chief interest to the farmers of our country and often to agricultural economists, the field of traditional agricultural marketing takes in the whole area from farm gate to consumer's table. The important role of the manufacturers and marketers of agricultural products and farm requisites has long been recognised in some American universities by a distinct specialization within their departments of agricultural economics, namely 'agri-business'. It would be difficult to justify the same degree of specialization given the constraints within which agricultural faculties operate in South Africa, but nevertheless the importance of the 'agri-business' side of agricultural marketing should not be neglected.

The purpose of this paper is to show briefly the importance of consumer expenditure on food and the relative share to producer and marketer, and to examine the role of the most important middlemen, namely food processors and food wholesalers and retailers in transferring food from producer to consumer.

CONSUMER EXPENDITURE ON FOOD IN SOUTH AFRICA

Food remains the most important item of expenditure of private consumers in South Africa. In 1977 of a total of nearly R20 000 million, consumers spent slightly more than R6 500 million or 33 % of their budgets on food, beverage and tobacco[1].

The relative importance of food and seven other items for 1970 and 1977 are shown in Table 1.

TABLE 1 - Private consumption expenditure in South Africa, 1970 and 1977

Category	1970 R1 000 million	1970 %	1977 R1 000 million	1977 %
Food, bev. & tob.	2,5	32	6,5	33
Clothing	0,8	10	1,9	10
Rent, fuel & power	1,0	12	2,3	12
Furn, equip. & hshld. op.	1,1	14	2,7	14
Medical	0,3	3	0,6	3
Trans. & communication	1,1	14	2,8	14
Recr., ent., educ. & cult.	0,4	6	1,4	7
Misc. goods & services	0,6	8	1,5	7
Total	**7,8**	**99**	**19,7**	**100**

Source: Bulletin of Statistics, 1978, Vol 12(3), xv[1]

As can be observed from the table, the expenditure on food in proportionate terms exceeds any of the three next largest items (transport and communications; furniture, equipment and household operation; and rent, fuel and power) by between two and three times.

Food plays an even more important role in the budgets of lower income households as shown in the survey conducted of all-race groups in the twelve major metropolitan areas of South Africa in 1975, and used for the construction of the recently updated all race consumer price index. Lower income earners (those earning less than R2 000) spent 42,5 %, middle income earners (R2 000 to R5 999) spent 33,4 %, and high income earners (R6 000 and more) spent 23,4 % of their incomes on food, including beverages and tobacco[2].

THE PROPORTION OF THE CONSUMER'S RAND RECEIVED BY FARMERS AND MIDDLEMEN

The importance of the middlemen of food marketing may be shown by the difference between the amount paid by the consumer and that received by the producer. This margin may be calculated in two different ways.

Firstly, the margin may be obtained by subtracting the farm value of food production from total consumer expenditure on food. Taking 1975 as an example, private consumption expenditure on food, beverages and tobacco amounted to R5 008 million (1). Based on the consumer survey conducted in that year 85 % of this amount (i.e. R4 274 million) was for food, excluding alcoholic

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beverages, colddrinks and tobacco[2 3]. The marketing margin is obtained by subtracting from this amount, the gross farm value of food production corrected for net food exports, namely R1·915 million for 1975, leaving a margin of R2 359 million or 55 % of the consumer's expenditure[4]. The marketing margins calculated in this manner for the years 1970 to 1977 vary from 46 % to 55 % as shown in Table 2.

TABLE 2 - The marketing margin as a proportion of private consumption expenditure on food, 1970 to 1977

Year	(1) Pvt. cons. exp. on food	(2) Gross value food *less* net exports	(3) Marketing margin	(4) (3) as % of (1)
		R million		
1970	2 116	1 096	1 020	48
1971	2 327	1 214	1 113	48
1972	2 507	1 225	1 282	51
1973	2 999	1 634	1 365	46
1974	3 623	1 956	1 667	46
1975	4 274	1 915	2 359	55
1976	4 824	2 387	2 437	51
1977	5 606	2 794	2 812	50

Source: Calculated for Bulletin of Statistics 1978[1 3]; Abstract of Agric. Stats., 1977 & 1979[4]

A second method of determining the relative share of producers and middlemen of marketing is that of a food basket as presently compiled by the Department of Agricultural Economics and Marketing and summarized in Table 3. In this case a typical range of basic consumer items was taken such as bread, flour, meal, sugar, meat margarine, milk, butter, eggs, fresh fruit and vegetables and the farm prices and consumer prices calculated to determine the share of the consumer's food rand to producer and to marketer[5 6].

TABLE 3 - The marketing margin as a proportion of the consumer's food rand, 1974 to 1978

Year	Cost of food basket (R/month)	Producer's share (%)	Marketing share (%)
1974	74,76	55,1	44,9
1975	85,53	53,7	46,3
1976	91,05	52,9	47,1
1977	98,15	48,7	51,3
1978+	108,90	46,3	53,7

+ = estimated from 11 months data
Source: Crops and Markets, 1979, 58(680), p. 3.[6]

It will be noticed from Table 3 that the marketing margin widened considerably over the period 1974 to 1978 from 45 % to nearly 54 %. A widening of the marketing margin is not necessarily a cause for alarm in that it could simply mean that the consumer is demanding a more processed product with more built-in maid services than before. A widening margin is a feature of a developing economy. In the United States over the period 1915 to 1976 the marketing margin varied from 47 % to 63 % and averaged approximately 60 % of the consumer's dollar[7].

The margins as shown in Tables 2 and 3 are roughly of the same order of magnitude, viz. 46 % to 55 %, although the former does not show the definite widening trend as indicated by the food basket. Both series have their limitations. The food basket, for example, is based on a dated household survey of 1966 and is applicable only to urban Whites. Nevertheless they are sufficiently similar to give a reasonable indication of the size of marketing margin. We still need, though, to indicate the shares which go to each type of middleman.

PROBLEMS IN QUANTIFYING THE RELATIVE IMPORTANCE OF THE MIDDLEMEN OF MARKETING

Any attempt to determine the relative importance of the various middlemen is complicated by two factors:
(1) a lack of applicable data; and
(2) data which is out of date.

Perhaps the most obvious source of information would be the relevant censuses. As at the first quarter of 1979, the latest available censuses, published some five years or more after the date of enumeration, were the 1972 Census of Manufacturing and the 1971 Census of Retailers and Wholesalers[8 9]. Data is needed, however, on both the sources of supply of materials (raw or processed as the case may be) and the institutions, industries, and/or the types of businesses to which the products are directed. Only the Census of Manufacturing, however, contains data on the sources of materials purchased.

Failing the censuses, an alternative would be to follow the flow of agricultural commodities directly from the farm to consumer or indirectly through processors and/or wholesalers and/or retailers with the aid of the national input-output tables published by the Department of Statistics. The latter is faced with the same problems mentioned above, but in addition, and unfortunately for our purpose, "the input-output table does not trace flows to and from the (wholesale and retail) trade." In other words, in the input-output tables "the commodities move directly from the producer to the consumer, i.e. as if they are not handled by the wholesale and retail trade . . ."[10].

Therefore, given the limitations mentioned above, the next section is at best a fairly crude attempt to indicate in some measure the relative importance of the chief middlemen, namely processors, wholesalers and retailers.

THE ROLE OF PROCESSORS, WHOLESALERS AND RETAILERS IN DISTRIBUTION

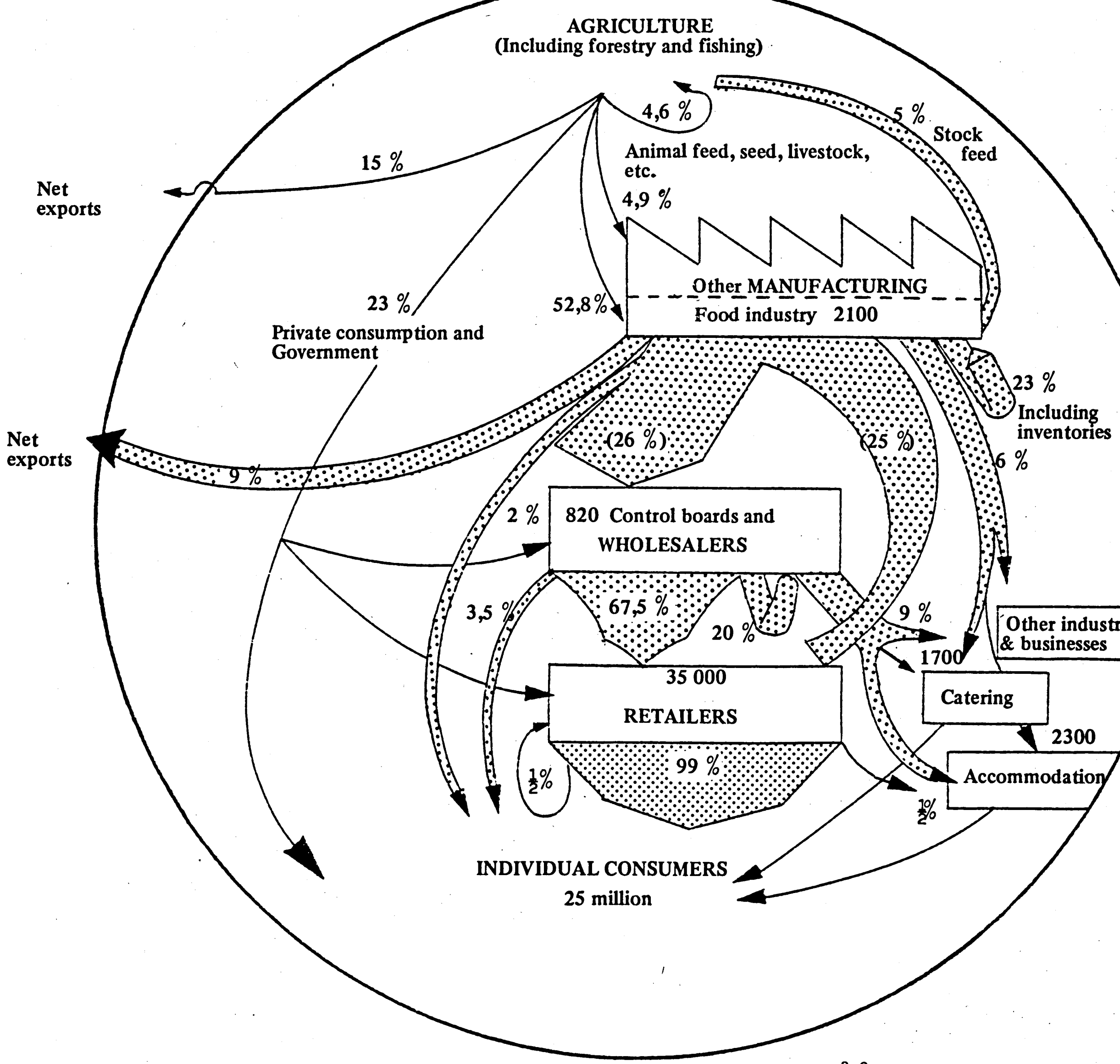
The food processing industry consists of approximately 2 100 food, tobacco and beverage establishments (2 164 in 1976) or 14 % of all

TABLE 4 - Input-output: agriculture and food industry, 1975 (R million)

Industry Output in rows Input in columns	Agric.	Food	Other	Total dd.	Pvt. exp.	Govt	Total inter-mediate Fixed inv.	In-vent.	Export	Less im-ports	Total
Agric. for fish	141	1 621	152	1 914	671	27	-	2	600	142	3 072
Food processing	222	771	272	1 265	2 301	132	-	226	658	229	4 353
All other ind.	740	1 185	19 994	21 919	10 226	1 312	7 074	1 384	5 846	7 289	40 472
Total inter inputs	**1 103**	**3 577**	**20 418**	**25 098**	**13 198**	**1 471**	**7 074**	**1 612**	**7 104**	**7 660**	**47 897**
Rumeneration empl.	452	393	10 714	11 559	469	2 381	-	-	-	-	14 409
Gross op. surplus	1 517	421	8 185	10 123	-	2 60	-	-	-	-	10 183
Nett ind. taxes	13	1	721	735	714	2	107	5	21	-	1 584
Plus net transfers	(-)13	(-)39	260	208	-	(-)208	-	-		-	0
Total	**3 072**	**4 353**	**40 298**	**47 723**	**14 381**	**3 706**	**7 181**	**1 617**	**7 125**	**7 660**	**74 073**

Source: Summarized from input-output tables, 1975, Dept. of Statistics Report 09-16-03[10]

FIG. 1 - Distribution channels of food middlemen



Source: Census of Wholesalers and Retailers, 1971; Manufacturing 1972 [8] [9] manufacturing. Most of the raw food from the agricultural industry is produced by the approximately 75 000 (mainly White) farmers of the 'modern sector' - in 1974 for example, homeland agriculture, forestry & fishing contributed only R100,7 million or 3 % of the total gross domestic product due to that sector as a whole in South Africa. In any event, only R16,7 million of that amount entered the market system[11]. The food industry is responsible basically for the conversion of raw food by processing, mixing, cooking or baking, packaging, etc. to the forms which are commonly bought by the housewife (individual portions, pre-mixed, pre-cooked, instant) at the approximately 40 000 retail food outlets (including cafes and restaurants) and accommodation establishments.

The inputs and outputs of the agricultural sector and the food industry are contained in Table 4. The output of each of the industries is contained in the rows while the input for that industry is contained in the relevant column.

Of the total output of the agricultural industry 53 % goes to the food industry, 23 % to the private consumer and Government (most of it via wholesalers and retailers), while net exports make up 15 %. The output of the food industry is broken up as follows: 5 % to the agricultural industry (mainly stock feed); 23 % to the food industry itself (intermediate inputs and stocks); 9 % as net exports, 9 % to other industries and services including cafes, restaurants, and accommodation establishments and Government institutions; and 53 % to the consumer direct and via wholesalers and retailers.

As indicated previously, we now need to turn to other sources to indicate the distribution by wholesalers and retailers. The 1967/68 Census of Manufacturing gave the following distribution of manufactures sold for 'large' establishments:

	%
Food industry	11
Service industry	5
Other industries	5
Government	1
Exports	13
Wholesalers	31
Retailers	30
Individuals	2
Not indicated	2
Total	**100**

The percentage distribution to 'private consumption' as per the input-output definition was 53 % compared to the 63 % of that in the Census. There are probably several reasons for the discrepancy apart from the lapse in years, but the most important is that the latter information pertains to gross sales and therefore does not account for imports or for stocks. If the imput-output data is adjusted accordingly the relevant percentage is in fact reduced to 53 %. On that basis then, it can be assumed fairly safely that the proportionate output of the food industry designated 'private consumption' goes:

26 % to wholesalers;
25 % to retailers; and
2 % to individulas.

On the basis of the latest appropriate censuses (1970 and 1971), there were some 820 wholesalers, 35 000 retailers, 2 300 accommodation establishments, and 1 700 cafes, restaurants, bars and other eating places in that year. The proportion of gross sales by chief customer is given in the following table for wholesalers and retailers.

TABLE 5 - Distribution of wholesale and retail sales by chief customer, 1971

Customer	Wholesalers	Retailers
Wholesalers	20,0	-
Retailers	67,5	0,5
Export	1,5	-
Other businesses (incldg Govt)	7,5	0,5
Individual consumers	3,5	99,0
Total	**100**	**100**

Source: Census of Wholesalers and Retailers, 1971[9]

As shown by Table 5 wholesalers have 'other wholesalers' and retailers as their chief customers while retailers sell 99 % of their products direct to the individual consumer. The distribution from agricultural producers through to the individual consumer can be best illustrated by a diagram constructed from the information presented thus far.

Several details could not be included, namely the proportions of agricultural production passing through institutions such as the municipal markets and via the about 2 000 commercial agents including auctioneers, market agents, manufacturer's representatives and brokers. It is known, for example, that about 36 % of the total value of horticultural production in South Africa passes through the major fresh produce markets but following these lines are beyond the scope of the present paper. Figure 1 presents only the major channels of distribution which can be stated in summary as follows: 58 % of agricultural production passes to wholesalers and retailers via the manufacturing industry; the food industry supplies chiefly wholesalers and retailers and various other outlets; the wholesalers supply mainly to retailers (68 %), while the latter are almost exclusively (99 %) suppliers to the ultimate consumer.

THE SHARE OF THE MIDDLEMEN IN THE MARKETING MARGIN

An indication of the shares of each class of middlemen can be given by the proportion of the marketing margin enjoyed by each. An estimate of the proportions was made from an examination of the gross margin on sales for each class of middlemen. This gross margin consists of the gross value of sales less costs of purchases plus or minus inventory changes. The following information was obtained from the relevant censuses for 1971 and 1972:

TABLE 6 - Share of middlemen in the food marketing margin in South Africa, 1971/72 (R million)

Middlemen	Total revenue	Gross margin on sales	Other income	Wages	Other exp.	Profits
Food proc.	1 804,0	522,0	n/b	189,0	228,3	134,7
Wholesalers	1 064,1	112,3	121,8	40,8	171,9	21,4
Retailers 1	1 345,5	242,3	10,5	84,6	109,0	59,2
Retailers 2	1 020,4	83,4	139,1	78,7	95,5	48,3
Total	**5 234,0**	**990,0**	**271,4**	**393,1**	**604,7**	**263,6**

Source: Census of Manufacturing, 1972; Census of wholesale & Retail Trade, 1971[8 9]
Notes: Retailers 1 = butchers, dairies, grocers; retailers 2 = general dealers and Department stores.

On the basis of the total gross margin on sales food processers take the lions share, namely 56 %, with retailers a further 34 % and wholesalers 11 %. Not all the products sold by each of the middlemen classes in Table 6 are restricted to food, beverages and tobacco. If the totals for each are weighted accordingly, the share of the food processors increases at the expense of retailers since of their gross sales 'retailers 1' and 'retailers 2' sell 88 % and 45 % food respectively compared to 95 % for processors and 90 % for wholesalers.

The gross margin on sales of each should be evaluated in terms of the total food marketing margin. From our earlier attempt to establish the size of the marketing margin in monetary terms we would arrive at a figure of approximately R1 100 million for 1971. Deflating the various gross margins on sales by the proportion of food sales would then hopefully give us a more accurate picture of the relative shares, namely:

	% GM on sales (R900 million)	% of weighted GM (R876 million)	% of weighted mktg margin (R1 100 million)
Food processors	56	60	47
Wholesalers	11	12	10
Retailers 1	25	24	19½
Retailers 2	8	4	3½
Other middlemen	-	-	20
Total	**100**	**100**	**100**

Note: Processors weighted 95 %; wholesalers 90 %; Retailers 1 88 %; Retailers 2 45 %

On the above weighted basis food processors take 47 % of the food marketing margin, wholesales 10 %, retailers 23 % and other middlemen 20 %. The latter group includes agents, the facilitative middlemen, catering and accommodation establishments.

An analysis of the profits earned as a percentage of total value of assets show that the food processors and retailers both earned 16 % on assets wholesalers earned 9 %.

CONCLUSIONS AND SUMMARY

Recent developments in the marketing of food in the form of the introduction of frozen vegetables on a large scale since 1971, the introduction of hypermarkets which sell vast volumes at reduced mark-ups as well as a further by-passing of the wholesaler as the bigger chains increasingly set up their own warehouses is likely to have caused a change in the relative shares of the middlemen.

In summary we may conclude that in the first half of the 1970's the consumer's food rand in South Africa was apportioned as follows:

Farmer	52 c
Processor	23 c
Wholesalers	4½c
Retailer	11 c
Other middlemen	9½c
Consumer's food rand	R1,00

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