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REQUIREMENTS FOR CONTRIBUTIONS

Articles in the field of agricultural economics, suitable for publication in the journal, will be welcomed.

Articles should have a maximum length of 10 folio pages (including tables, graphs, etc.) typed in double spacing. Contribuitions, in the language preferred by the writer, should be submitted in triplicate to the Editor, c/o Department of Agricultural Economics and Marketing, Pretoria, and should reach him at least one month prior to date of publication.

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Contents

Marketing planning and adjustment in agriculture in the seventies

by

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INTRODUCTION

The approach of the paper is sixfold. Firstly to outline as clearly as possible what the concept of marketing comprises, with special reference to agriculture; secondly to indicate the functions of marketing management and the task field of marketing planning; thirdly to sketch certain important basic characteristics of agricultural marketing in South Africa; fourthly to explain certain important aspects of the market for agricultural produce; fifthly to make a few remarks about the major changes that can be expected in the general economy and in agriculture in the new decade; and lastly to indicate how agricultural marketing should adapt itself to these changes.

THE CONCEPT OF MARKETING

It is interesting to observe in the literature on the subject how the concept of marketing gradually developed and expanded to its present comprehensive meaning.

Various definitions of marketing

Marketing as an economic activity originated in the barter trade in goods and services which inevitably followed in the wake of the division of labour and specialisation in the primitive communities of the earliest years. Small wonder therefore that Plato and Aristotle were outspoken on the part played by "middlemen" in society. Despite certain differences, these pronouncements in both cases were of a less flattering nature, and it was only many centuries later that the profession of the trader was acknowledged and accepted as useful, essential and respectable.

The earlier contempt was based mainly on the erroneous view that to practice trading was not really a productive action and also did not represent any contribution to the overall welfare of society. Today, however, it is fairly generally accepted that the trade is productive and creates utility of the following nature, namely form, place, time and possession.

As far as agricultural marketing is concerned, the definition of the task almost invariably embraces the creation of form utility by means of some method of treatment or processing, whereas in the case of the other sectors of the economy it is mostly regarded as part of the normal production process, and only the latter three types of utility are associated with marketing.

From the nature of the fact that the concept of marketing is inseparably connected to the concepts of market and market economy, one can understand that originally a relatively narrow meaning was attached to it and that in the individual firm it was often regarded as synonymous with the selling action. It is clear from the earlier definitions of marketing that originally the approach was production-orientated and that the emphasis was mainly placed on efforts at finding a buyer or user for the product (or service) of the firm in the most efficient manner. This can be described as mainly one-way traffic of production to consumer.

Marketing was defined for instance as:

"(The task) to get from production to consumption".[1)]

"The science involved in the distribution of merchandise from producer to consumer, excluding .... alterations of form".[2)]

At a later stage the importance of the selling action emerged more clearly and marketing was for instance defined as:

"The economic process by means of which goods and services are exchanged and their values determined in terms of money prices".[3)]

More recent years have seen a further and very significant change in orientation. Everything now revolves around satisfying the consumer's needs and preferences, and marketing practically becomes two-way traffic between production and consumption. Marketing is consequently seen as the key activity in the existence of the undertaking. This change-about is clearly reflected in the following quotations:

"Mass production does indeed generate great pressure to 'move' the product. But what usually gets emphasized is selling, not marketing..... The difference between marketing and selling is more than semantic. Selling focuses on the needs of the seller (to convert products into cash), marketing on the needs of the buyer (satisfying the customer by means of creating, delivering and consuming the product)."[4)]

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1) R.F. Breyer, The Marketing Institution (McGraw-Hill Book Co. Inc., New York, 1934).
2) P.T. Cherington, The Elements of Marketing (MacMillan Co., New York, 1920).
3) Duddy & Revzan, Marketing, an Institutional Approach (McGraw-Hill Book Co., Inc. New York, 1947).
4) Theodore Levitt, "Marketing Myopia" in Modern Marketing Thought, compiled by J. Howard Westing & Gerald Albaum (The MacMillan Co., Collier-MacMillan Canada, Toronto, Ont. 1969) p.15.

"Marketing is the analyzing, organizing, planning and controlling of the firm's customer-impinging resources, policies, and activities with a view to satisfying the needs and wants of chosen customer groups at a profit."[5)]

Different functions of agricultural marketing

There is a great deal of agreement on what is traditionally regarded as the basic functions of agricultural marketing. For the sake of convenience these functions can be grouped into four main classes: Exchange, information, physical supply and general business.

The more detailed list which follows is actually self-explanatory: Assembling, grading and standardising, packaging, processing, transporting, storing, financing and risk-bearing, and distributing (selling).

Integrated marketing

As will be observed from the definitions of marketing, later years have seen a material change in the approach of the task of marketing, particularly by firms standing next to, or quite apart from agriculture. It is, namely, to combine under one strong central direction the different departments of the firm which previously performed their individual marketing functions relatively independently and with little co-ordination. This is how the concept of integrated marketing originated.

In the literature this is referred to as the new concept of marketing, and the critical importance of enlightened marketing management for the successful operation of the firm is strongly emphasised. I shall return to this in the discussion of marketing planning, but it may be useful to quote here the following formulation of the "new" marketing doctrine as typical of the current approach to the broad function of marketing and the role of marketing in the firm:

"(i) Fundamentally a business depends for its continued existence on its customers rather than its production facilities.
(ii) The basic function of marketing is to define the need of the customer and to find a way to satisfy it at a profit.
(iii) This implies that marketing decides what is wanted and how much should be made, and also controls the operations necessary to get the product to the consumer because until the product is 'consumed' the need of the consumer is not satisfied.
(iv) This concept firmly places marketing in the centre of the business as the energising force from which all else is driven."[6)]

THE FUNCTIONS OF MARKETING MANAGEMENT AND THE TASK FIELD OF MARKETING PLANNING

In the light of the "new" approach to marketing it will be advisable to dwell briefly on the functions of marketing management and the task field of marketing planning.

Planning has been described as "the attempt to exercise such foresight with respect to the anticipated outputs of an organisation so that the inputs can be utilised with maximum efficiency".[7)] Planning, in the case of marketing, means the formulation of a programme of action, defining objectives and indicating the means to realise them in terms of time, money and effort. This forms an integral part of marketing management.

P. Kotler[8)] deals with the functions of marketing management under the following main headings: Analysing marketing opportunities, organising for marketing activity, planning the marketing programme and controlling the marketing effort.

In an anthology compiled by S.H. Britt and H.P. Boyd, Jun.,[9)] the different contributions are grouped together according to a classification very similar to that of Kotler. It consists of setting marketing objectives, developing the marketing plan, putting the marketing plan into action, organising the marketing function and controlling and reappraising the marketing programme.

Marketing planning chiefly boils down to the following: Determining the firm's current position in the market (with reference to customers, suppliers and competitors), and identifying expected changes in the marketing situation, setting marketing objectives, generating the most suitable strategy to achieve the planned market position, formulating a marketing programme to carry out (apply) the strategy, and getting the programme adopted and implemented. To this may be added controlling the success of the marketing plan.

Two tasks that receive a lot of emphasis in this regard are those of marketing research and segmentation of the market. The former is directed at the characteristics of the product, the market for the product, method and channels of distribution and the general business policy. In this way the firm can determine the scope, features and requirements (preferences) of the consumers and the methods that can be employed to serve the market in the best manner. On this basis it is further decided on what segment the firm should concentrate with the greatest possibility of success.

The marketing plan or "marketing mix" normally comprises the following aspects:

(1) What product(s) should be offered (characteristics, quality, brand name, etc.)
(2) The most suitable packing (design, material, etc.)
(3) Price and price policy (with reference to profit margins, commission, discount, price differentiation, etc.)

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5) P. Kotler, Marketing Management (Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1967) p.12.
6) R.W. Chapman, Marketing Today (Intertext Books, London, 1969) p.15.
7) Wroe Alderson, Marketing Behaviour and Executive Action (Homewood, Richard D. Irwin, Inc., Illinois, 1957) p.414.
8) Op. cit.
9) Marketing Management and Administrative Action (McGraw-Hill Book Co. Inc., New York, 1963).

(4) Marketing channels (choice of selling points and go-betweens - direct, wholesale, retail, special agents, etc.)
(5) Physical distribution and stocking (regular supplies, choice of transport media, etc.)
(6) Promotion (amount to be spent, most suitable method of sales promotion, most suitable media, etc.)
(7) Sales staff (number, classification, training, remuneration, etc.)

As indicated in the later definitions of the concept of marketing, the objective should be to satisfy the needs of the consumer at a profit to the firm. In the final analysis it is also the task of marketing management to control the marketing results in order to ensure the realisation of the latter objective.

A FEW IMPORTANT FEATURES OF AGRICULTURAL MARKETING IN SOUTH AFRICA

It is generally accepted today that in a free economy, agriculture is subject to a great deal of instability. This instability may largely be attributed to the fact that the total demand schedules of the main agricultural products are relatively inelastic and that it is difficult to keep total supply within reasonable limits of the quantity consistent with the long-term equilibrium level.

This problem of adapting supply to demand is caused to some extent by the relatively low price elasticity of the total supply curve of agricultural produce and to some extent by the strong seasonal pattern inherent in the production of certain products, while on the other hand consumption is distributed fairly evenly over the year. In South Africa we often also see the effects of unplanned variation in the volume of production as a result of the notorious unstable climatic conditions occurring both intra- and inter-seasonally.

Hence it was inevitable that at one stage or another the Government should have to give assistance in trying to ensure stability.

The role of the Government and statutory marketing organisations

In South Africa, as in most other countries, the first attempts by the Government to try to bring about agricultural stability were mainly aimed at fostering the co-operative movement. As far as the disposal of agricultural produce was concerned, farm leaders strongly propagated compulsory co-operation, the primary objective of which was to increase their bargaining power.

Only in the case of wine and tobacco was this ideal realised at the time, and in the case of the major agricultural products, efforts to achieve the objective had to be limited to voluntary co-operation. The history of this is one long line of dismal failures, and ultimately the Government decided to create by means of legislation, of which the Marketing Act (No.26 of 1937) was the most important, a legal framework for the establishment of control boards for the different agricultural products.

Up to June, 1969, a total of 20 schemes have been put into operation under the Marketing Act, comprising about 69 per cent of the total gross farm value of agricultural production in 1968/69. In the case of 13 schemes, the products of which represent 42.3 per cent of the total gross farm value, one-channel marketing arrangements are in operation. Of the 31 per cent of production not falling under the Marketing Act, there are stabilisation measures in terms of specific legislation in respect of 17.4 per cent (inter alia for wool and sugar). This means that the products for which the Government has not created any stabilisation measures represent only 13.6 per cent of the gross farm value of agricultural production.[10]

According to the traditional composition of these organisations, producers form an absolute majority on each of them. Despite the fact that the price and other basic marketing arrangements of these bodies are subject to the approval of the Minister of Agriculture, it means that producers have been placed in a potentially dominating position as far as bargaining power is concerned.

The role of agricultural co-operatives

It is important to note that in the case of the one-channel schemes it is only the control boards for chicory, rooibos tea and bananas that handle their products themselves (jointly this represents only 0.28 per cent[11] of the total gross farm value), while the other boards appoint agents for the handling and storing of their products. Mainly as a result of the "umbrella" the price stabilising measures actually were to them[12] and the policy followed by most boards in the granting of agencies, agricultural co-operatives have progressed from mere subsistence to an element of dominance in the first phase of the marketing of agricultural products.

Table 1 shows what percentage of the total gross value of the main agricultural products in 1968/69 is represented by quantities bought by agricultural co-operatives. According to these figures it was only in the case of sugar, slaughter stock, butter and milk powder that the co-operatives did not dominate the scene.

In the Report of the Steenkamp Commission[13] it is pointed out that those agricultural co-operatives that are mainly concerned with the disposal of unprocessed products are by far the most important ones. In 1962 the turnover of unprocessed products formed 74.9 per cent of the total turnover for all the agricultural co-operatives together.

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10) Annual Report of the Secretary for Agricultural Economics and Marketing for the period 1st July, 1968, to 30th June, 1969, pp.8 - 10.

11) Ibid.

12) This aspect was treated in greater detail in a previous paper by the same speaker at the Second Annual Conference of the Agricultural Economic Society in 1963, under the title: "Die Finansiering van Landbou-afset".

13) Report of the Commission of Enquiry into Co-operative Affairs (RP 78/1967), Department of Agricultural Economics and Marketing, Pretoria, 1967, pp.15-23.

TABLE 1 - The turnover of agricultural co-operatives in certain agricultural products as percentage of the total gross farm value of agricultural products for the 1968/69 season

Product	Percentage
Maize (in area "A")	79
Wheat	97
Sunflower seed	87
Groundnuts	98
Sugar	9
Slaughter stock	40
Wool	90
Dairy products: Cheese	63
Butter	43
Milk powder	30

Source: Calculations made by officials of the office of the Registrar of Co-operative Societies and the Department of Agricultural Economics and Marketing.

The relative position of the processing co-operatives showed little improvement in the period 1944-1962, and their activities were mainly concerned with dairy products, mills and bakeries, wines and spirits and canned fruit and vegetables.

It is a pity that more recent data on the ratio in the turnover of unprocessed and processed products were not available, because there are indications that in recent years some of the larger agricultural co-operatives have been concentrating more and more on processing the products of their members.

Export and price differentiation

Traditionally, South Africa is an exporter of agricultural produce. According to the Report of the Secretary for Agricultural Economics and Marketing for 1968/69[14], the export of agricultural produce expressed as a percentage of total exports (excluding gold) fluctuated between 35.2 (1966) and 48.4 (1963) in the period 1960-1968.

In this connection it can be added that the dependence on the export market was a strong additional consideration on the part of producers to try and increase their bargaining power on the domestic market. Price levels tended towards export parity, and because of South Africa's remoteness from the main export markets of the time (the United Kingdom and Europe), price levels frequently were quite unprofitable.

Producers were of the opinion that in those cases where the domestic market represented a material portion of total disposal, price differentiation could be applied to advantage in the local and overseas markets if they could obtain full control over the disposal of the product. This approach is of course applied successfully under the existing marketing arrangements.

14) Op. cit., p.6.

Dependence on public transport

South Africa is a sprawling country with large sparsely populated areas. The major concentrations of consumers with high purchasing power are found in a few large industrial and mining complexes in the interior and in a few large harbour cities. On the other hand, agricultural production is more widely scattered, as a result of which products have to be conveyed over long distances, giving rise to high direct transport costs.

Because of the bulkiness of most agricultural products, rail transport is mostly used. During the past two years serious bottlenecks in transport developed and delays in the supply of trucks and in the delivery of consignments that were put on rail caused further considerable indirect costs.

Wide gap between producer and ultimate consumer

Normally, in the case of agricultural marketing, there exists a relatively wide gap between the primary producer and the ultimate consumer, since a very small portion of the production is supplied to the end-user direct. This is not only due to differences in location and time but also to differences in form. As a rule the product must first be processed. It is therefore often stressed that the demand to be met by the primary producer is really a derived demand. Hence there is a great deal of "intermediate trade" in the channels conveying the flow of agricultural produce to the end-user. This applies to food as well as fibre products.

In the situation of controlled marketing applying to the main agricultural products in the Republic at least one additional link is inserted in the chain connecting primary producer to end-user. According to the definition of the services rendered by these links, they are concerned with the functions of assembling, storing and price-forming as well as the first phase of physical distribution.

In the nature of the case it is then still more difficult to make the primary producer conscious of the requirements and preferences of the consumer and to elicit a positive response from him.

Agri-business

The phenomenon of vertical and horizontal integration in agriculture is seen in many of the developed countries. Vertical integration may either assume the form of producers who also undertake the processing and distribution of the finished consumer product (particularly by means of agricultural co-operatives) or that of large firms in trade or industry extending their operations to agricultural production. Sometimes the latter merely takes place by means of contracts with producers but often the production process is undertaken by the firm itself.

In recent times the latter phenomenon has given rise to fervent public debates. It is to be doubted, however, whether in a country such as South Africa this development will ever become a very important factor. From a purely investment angle agricultural land may still be attractive, but the return on working capital and managerial inputs has up to the present been so much higher in the other sectors of the economy and the long-term prospects in respect thereof remain so favourable that a vast influx into agriculture seems unlikely.

The practice of horizontal integration and concentration of economic power in the distributive trade - supermarkets and chain stores - occurs more frequently, resulting in the wholesale and retail functions in the case of food distribution being taken over to an increasing extent by such large firms.

In my opinion, integration is not yet a very important element in the total disposal of agricultural products at this moment. It can, however, increase in future and in this manner also intensify the application of the new approach to marketing in the case of certain agricultural products and expedite adjustments in that direction.

Implications for marketing approach

Seen against the background of the historic struggle by producers to increase their bargaining power, the present composition of the statutory marketing organisations, the gap between primary producer and consumer and the problems inherent in adapting agricultural production to the needs and likes of the consumer, one can understand that the basic way of looking at agricultural marketing in South Africa will be more production-orientated. The basic approach as a rule therefore was, as earlier in the case of non-agricultural marketing, that the product was there, and marketing had to find an outlet for it.

The important question that arises is whether the "new" marketing concept can be applied to agricultural marketing and, if so, what methods should be employed to do so as successfully as possible.

A FEW IMPORTANT ASPECTS OF THE MARKET FOR AGRICULTURAL PRODUCTS

In view of the subsequent discussion of the changes that can take place during the seventies, it is desirable to refer briefly to a few important aspects of the market for agricultural produce. Some of these are really of a universal nature, but others have a specific bearing on the situation in the Republic and are therefore of special interest.

The principal factors that are usually singled out as determinants of the demand for any product (or group of products) at any given time are its price, the prices for substitute and complementary products, the number of consumers, their disposable income and consumer preference. I wish to refer briefly to certain aspects thereof.

Elasticity of demand

It is an acknowledged fact that, generally speaking, the price and income elasticity of the demand for agricultural produce (and food products in particular) in the retail trade is rather low.

In view of the fact that the price paid by the consumer also includes the cost of marketing, it is further admitted that the price elasticity is still lower at the farm gate than in the retail trade.

As far as the income elasticity of the demand for agricultural produce is concerned, it is believed that this decreases as income levels rise. This approach is in agreement with the well-known law of Engel.

It is important to note that although the income elasticity decreases, it is normally still positive and should remain positive for the total population (only in the known case of an inferior product, also called the Giffen paradox, this does not apply). Normally a rise in income levels should therefore bring about an increased consumption of agricultural produce.

Distribution of income and patterns of spending

Apart from the diversity of the Republic's population groups, we indeed have a dualistic economy. Although historically and economically there are very good reasons for the situation, we have in the Republic a very skewed distribution of the gross domestic product between the developed sector (really representing the numerically small White population groups) and the developing sector (really representing the numerically large non-White population groups). The result is that their average per capita income and hence also their living standards are relatively high in the case of the Whites whereas the opposite holds for the non-Whites.

According to surveys of the monthly family expenditure of urban Bantu[15]) and White households[16]), the Bantu family proportionately spends about twice as much of its income on food (44.9 per cent) as the White family (20.52 per cent). The figures are not directly comparable, because they are taken from different surveys and different questionnaires have been used, while the Bantu survey was made in 1965 and the White survey in 1966.

From Table 2 it appears that there are also considerable differences in the proportionate spending of Bantu and White families on the different food groups - for instance, 22.5 per cent of the food budget is spent by Bantu families on grain products compared with only 10.7 per cent by White families; on the other hand, White families spend 18.9 per cent and Bantu families 12.2 per cent of the food budget on milk products and eggs. Spending on meat and vegetables in the case of Whites forms 26.7 per cent and 9.8 per cent, respectively, and in the case of Bantu 22.5 per cent and 12.2 per cent, respectively, of the food budget.

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15) Market Potentials of Bantu living in Pretoria/the Witwatersrand and Vaal Triangle, 1965, Research Report No.21. (Bureau of Market Research, Pretoria, 1969.)

16) Report No.11-06-02, Survey of Family Expenditure - November, 1966, (Bureau of Statistics, 1968).

TABLE 2 - Proportionate spending on food groups by urban White and Bantu households

Food group	White households (in 1966)	Bantu households (in 1965)
	%	%
Grain products	10.7	22.5
Meat and meat products	26.7	22.5
Fish	2.6	1.8
Fats, oils and margarine	1.8	2.7
Milk products and eggs	18.9	12.2
Vegetables	9.8	12.2
Fruit and nuts	6.8	1.6
Sugar and related products	6.1	5.6
Non-alcoholic beverages	6.0	5.1
Other foods	2.8	
Meals and refreshments (away from home)	7.8	13.8
	100.0	100.0

Sources: White households - Report No.11-06-02, Survey of Family Expenditure - November, 1966 (Bureau of Statistics, 1968).
Bantu households - Market Potentials of Bantu living in Pretoria/the Witwatersrand and Vaal Triangle, 1965, Research Report No.21. (Bureau of Market Research, Pretoria, 1969.)

It should also be noted that the proportionate importance of expenditure of urban Whites on food in the total family budget for the period 1955 until 1966 declined from 24.22 per cent to 20.52 per cent, and that the figure for clothing, footware and accessories dropped from 11.20 per cent to 8.48 per cent. The most important increases occurred in transport (including the purchase of motor vehicles) which rose from 10.17 per cent to 12.52 per cent, and insurance and pensions (from 4.65 per cent to 5.66 per cent).[17] The other expenses that showed proportionately fairly large changes are not of material importance as budget items.

An analysis of the changes in spending on the different food products in the food budget shows decreases for all items except meat (an increase from 25.4 per cent to 26.7 per cent) and a striking rise from 2.9 per cent to 7.8 per cent in the case of meals and refreshments.

Increasing demand for marketing services

The phenomenon referred to in the last sentence directs our attention to an important facet of consumer spending in highly developed economies, namely that as income rises, more is spent on services. This does not only apply to personal services such as the preparation and serving of food in restaurants, but also to other services previously rendered by the consumer himself, for instance preparing vegetables for cooking, selecting choice quality and special meat cuts, special packings for easy handling and safe storage, and also a preference for partially or completely precooked products, frozen products, etc.

The remuneration for these services forms part of the consumer's price for the product, which explains to a large extent why marketing costs are rising and why the primary producer is receiving an ever-dwindling portion of the price paid by the consumer. In the United States for instance the producer has now for quite a few years been receiving only about 40 cents from each dollar spent by the consumer on agricultural produce.[18]

The mere fact that consumer spending on agricultural produce is rising, does therefore not mean that the producer will, as a matter of course, also have increased earnings. On the other hand, the total earnings of producers normally show an increase, despite this decline in the producer's share in the "consumer's rand", since the proportionate increase in the volume of sales more than compensates for this decline.

Government subsidy on consumption of certain agricultural produce

The Government annually spends considerable amounts on subsidies to the maize and wheat industries (and to a lesser extent to the dairy industry) with the object of keeping consumer prices for these two staple foods as low as possible. These subsidies totalled about R55 million in the 1968/69 financial year.[19]

Granted that the price elasticity of demand for the staple foods will be very small, it nevertheless means that consumption of these products is at a higher level than it would have been otherwise.

A FEW REMARKS ON CHANGES IN THE SEVENTIES

The concluding section of this paper will deal with adjustments that can be expected in the field of marketing in the seventies. It is desirable, therefore, to dwell briefly on those expected changes in the general economy and in agriculture that may be of particular interest from a marketing point of view.

In this regard I unfortunately have to limit the discussion to the domestic market. In spite of the fact that the export market is of great importance to some agricultural products and that important changes in that field are at hand, space and time do not permit me to do more than refer to this in passing.

Expected changes in the general economy

The first of these is perhaps the most natural one, namely population growth. The latest census suggests that earlier projections of total population figures and of separate racial groups have not been very accurate. It is nevertheless enlightening to note the forecasts (see Table 3).

17) Figures for 1955 obtained from: Report No.4, Survey on Family Expenditure - November, 1955 (Bureau of Statistics, Pretoria, 1959).

18) The Farm Index, June 1970 issue (U.S. Government Printing Office, Division of Public Documents, Washington, D.C. 20402).

19) Annual Report of the Secretary for Agricultural Economics and Marketing, op. cit., p.123.

TABLE 3 - Forecasts of the total population and the individual race groups (1 000)

Year and other details		Total	Whites	Bantu	Coloureds	Asiatics
1965		17 867	3 398	12 186	1 751	533
1970	Upper estimate	20 182	3 808	13 721	2 055	598
	Lower estimate	19 879	3 736	13 521	2 026	596
1980	Upper estimate	25 707	4 704	17 393	2 851	759
	Lower estimate	24 501	4 420	16 644	2 687	750
Increase 1970-1980	Upper estimate	5 525	896	3 672	796	161
	Lower estimate	4 622	684	3 123	661	154
Percentage of total expected increase	Upper estimate	100.0	16.2	66.5	14.4	2.9
	Lower estimate	100.0	14.8	67.6	14.3	3.3

Source: South African Statistics 1968, Table A 12, Population Projections (Bureau of Statistics, Pretoria 1968)

According to the upper estimate, there will be 5.5 million more people and therefore potential consumers of goods and services in the seventies, 4.6 million (or 84 per cent of the increase) of whom will form part of the developing sector. The increase in total population comes to 27 per cent.

In addition, one should take account of the change in age structure within each racial group and of the fact that this in itself will lead to a disproportionate continuation of existing consumption patterns.

A second and very important change is the expected increase in the gross domestic product and hence changes in the disposable income of the population. It was estimated recently that the former would amount to at least R25 000 million at the end of the seventies[20] (an increase therefore of R13 400 million or 115 per cent). Unfortunately it is not possible to indicate how this increase will be divided between the developed and developing sectors and also between the different production factors. Taking into account the increase in population, it means that the per capita gross domestic product will increase by 69 per cent.

A third aspect to be considered is the intensified Government policy of decentralising industrial development. This will counteract the trend towards over-concentration of geographic markets and can also facilitate the social and cultural adjustments that have often assumed crisis proportions in the rapid urbanisation process of the past two decades.

A fourth aspect closely related to the previous ones is the Government's declared policy of accelerated economic and social development of the Bantu homelands. The change from a subsistence economy to a market economy in these areas will definitely bring about an increase in the consumption of agricultural produce.

The long-term effects of the above-mentioned two changes may hold interesting side-effects for the disposal of agricultural produce. If it should result in the proportion of labour to capital in the production factors employed being higher than when the firm would be located (or remain) in the existing industrial complexes, it may mean that a greater share of the proceeds would go to labour, with a high propensity to consume. This would not only mean that more of the additional income is spent, but that according to the known consumption pattern, a large portion thereof will be spent on food.

It is difficult to assess the net effects of the above changes at this stage. However, the already noticeable changes in the spending pattern of consumers can definitely be expected to continue in future, and as a result of the increase in the disposable income, the proportionate importance of those changes will also increase considerably.

Expected changes in agriculture

It may be desirable at the beginning to have a look at expected changes in the volume of production and consumption.

Table 4 contains projections in respect of some of the most important products. Despite the fact that agriculture, particularly in South Africa, is extremely unpredictable and although the facts may differ much from these estimates, it does give an indication of the practical situation with which agricultural marketing will have to cope.

Apparently export marketing will be an important aspect in the case of maize, kaffircorn, oilseeds, sugar, citrus and deciduous fruit, whereas local production will have to be supplemented by importation, particularly in the case of red meat, and there will therefore be strong competition from substitute protein products (inter alia poultry products).

In the case of structural changes in agricultural production existing trends may be expected to continue - for instance, that the size of commercial farming units will keep on increasing, that mechanisation and capital intensity will cotinue to increase, that the practical application of technological changes aimed at increased productivity will continue at an increasing rate, and that the managerial function will become more and more business-orientated.

Government policy in respect of agriculture

This is not the occasion and time also does not permit me to go into detail as regards the com-

20) Given in a speech by W.T. Passmore before the Institute of Bankers (reprinted in The Standard Bank Review, August, 1970).

prehensive part played by the Government in agriculture. Suffice it therefore to point out that the Government has already indicated that the basis on which technical and financial assistance will be rendered in future will differ drastically from that of the past few decades. This approach will probably encourage sound farming practices and promote the creation and maintenance of economic farming units. It will therefore operate in the same direction as the structural changes referred to.

Summary and conclusions

From the discussion of expected changes it will be clear that all the factors affecting domestic consumption favour an increase in demand. It can therefore be expected that the total demand schedule for agricultural produce will shift to the right. However, it is difficult to predict the magnitude of the shift and also the extent of the shift of sub-schedules for individual agricultural products. One would, however, expect the shift for cereal products to be smaller than that for protein products.

On the other hand the total supply schedule can also be expected to shift to the right, and in the case of individual products it is quite possible that the new equilibriums will be at lower price levels than at present.

TABLE 4 - Projections of the production and consumption of some agricultural products for 1970 and 1980 (1 000 metric tons)

Product	Year	Production	Consumption	Surplus (+) Shortfall (-)
Maize	Base[1]	6 695.0	4 218.4	+ 2 476.6
	1970	6 930.9	4 436.1	+ 2 494.8
	1980	9 071.9	6 087.2	+ 2 984.7
Wheat	Base[2]	752.9	1 170.2[1]	- 417.3
	1970	879.9	1 242.8	- 362.9
	1980	1 025.1	1 642.0	- 616.9
Kaffircorn	Base[2]	471.7	281.2	+ 190.5
	1970	426.3	326.5	+ 99.8
	1980	562.4	498.9	+ 63.5
Oilseeds	Base[2]	290.7	208.7[1]	+ 82.0
	1970	319.3	235.8	+ 83.5
	1980	422.5	310.7	+ 111.8
Sugar	Base[3]	1 268.3	769.7	+ 498.6
	1970	1 413.4	851.9	+ 561.5
	1980	1 862.5	1 114.9	+ 747.6
Meat (Beef, veal, mutton and goat's meat)	Base[3]	472.5	682.8	- 210.3
	1970	501.7	744.4	- 242.7
	1980	593.2	873.8	- 280.6
Citrus fruit	Base[3]	563.8	254.6	+ 309.2
	1970	620.9	268.4	+ 352.5
	1980	836.6	366.9	+ 469.7
Deciduous fruit	Base[3]	526.7	358.9	+ 167.8
	1970	580.2	394.6	+ 185.6
	1980	778.1	515.3	+ 262.8

1 Average 1965/66 - 1966/67

2 Average 1965/66 - 1967/68

3 Average 1964/65 - 1966/67

Source: Estimates by B.L. de Jager, Division of Agricultural Marketing Research, Department of Agricultural Economics and Marketing, Pretoria

This means that in those cases a downward pressure on prices can be expected. If domestic prices were maintained at the same level as at present, an increased volume would therefore have to be disposed of on the export market.

ADJUSTMENTS

There appears to be an increasing awareness that the existing order has given rise to serious bottlenecks in the case of several agricultural products. So for instance, there were no fewer than four investigations into the marketing of meat in the past decade (and special emphasis was placed on the provision of abattoirs), an investigation into the sugar industry, into the production and marketing of eggs, and currently there is an investigation into the marketing of wool. Other statutory organisations have also closely scrutinised certain aspects of their marketing arrangements as they can indeed be expected to do in the changing world in which we live.

In the light of the changes that are likely to take place in the seventies it is important for the policy makers in the field of agricultural marketing to reflect on the adjustments that will be required to protect the interests of agriculture and to ensure the agricultural sector of a fair share in the increased economic prosperity of the country.

One need not be a prophet to be able to say that the assault on the buying power of the population by the non-agricultural sector will further intensify in the new decade. All the indications are there that the consumer market will be influenced, developed and even exploited by means of the most modern techniques of integrated marketing. If agriculture therefore wishes to retain its relative position (let alone improve it), it will have to apply the "new" marketing concept itself and practice the latest techniques. Increased productivity in the production of agricultural commodities is not in itself a guarantee of increased prosperity to the producer. It is efficient marketing which is the key to full participation in the economic growth process and which should therefore be given particular attention.

As already stated, one of the basic problems in agricultural marketing is that there is often a wide gap between the primary producer and the end-user which is bridged by a long chain. In South Africa we also have the statutory marketing organisations as an additional link, and it is becoming more difficult to carry decisions on planning and adjustment through to their logical conclusion.

In my opinion the following adjustments in general approach and in certain sub-functions of marketing should be given maximum attention.

Reorientation

The first which is extremely desirable and also urgently necessary, is a general reorientation in agriculture and agricultural marketing. In all the links of the marketing chain a marketing state of mind should exist. Agricultural marketing should take a leaf out of the book of non-agriculture and with greater purposiveness apply itself to the task of satisfying the consumer's needs and preferences. The consumer is not, as has often been said in the past, always right, but he is always important.

The preoccupation with dominating bargaining power for producers that still prevails in certain circles is really no longer a topical problem in the present set-up of controlled marking. What is necessary is that the producer majorities on the boards should bear in mind that their own survival is closely interwoven with that of the consumer. By being consumer-orientated, producers by no means jeopardise their bargaining power and they definitely safeguard their future.

If the boards really wish to fulfil their task, they will have to apply themselves purposefully to the task of motivating the different sectors in their respective industries to such a new marketing approach. In the execution of their different marketing functions, agents, processors and distributors will have to concentrate to an increasing extent on satisfying the needs of the consumer, and by means of information, guidance and price policy the primary producer will have to be persuaded to adjust his production plans to this objective as far as possible.

In addition, the boards should endeavour to secure the co-operation of other authorities to ensure a purposeful and co-ordinated approach to agricultural marketing at all levels.

The following are a few comments on specific facets of the marketing job where adjustments should be given preference.

Product presentation and development

Bearing in mind the higher income levels and the accompanying tendency on the part of consumers to opt for greater convenience and comfort (because they can better afford it), serious attention should be paid to adjustment in the manner and form in which the product is offered, the size and design of packings, the type of packing material, the quality of the product, etc. Also, product development in the field of e.g. instant products (precooked or pre-mixed), frozen foods, time and labour-saving designs, etc., must be explored. In this connection the importance of suitable distribution channels for successful implementation of such changes must be borne in mind.

The rendering of additional services as an integral part of the final product may be of vital importance for retaining the present markets for some agricultural products.

The circumstances surrounding each product will determine the allocation of responsibilities for this adjustment between the boards and manufacturers.

Marketing research

For the adjustments to be successful it is essential that there should be sufficient knowledge about the market and that this be made available to the different links of the marketing chain. This will require more research and in more depth. To the really consumer-orientated, there must be comprehensive information on the market itself and on marketing opportunities. As a matter of fact, there will therefore also have to be an adjustment in respect of the research function.

Marketing research in the broad sense of the word, i.e. more than just market research, is necessary to be able to know what market is to be exploited and how this can be done efficiently. In this case too, the boards can take the lead in collecting information of a more general nature and making this available to the industry. Different sectors of the industry can also co-operate to make the results of such studies useful in practice.

It should be emphasised that research is not, and should not be an end in itself. It is therefore of the utmost importance that general market information be made available to all sectors of a particular industry and that individual firms should try to apply such information to their own best advantage.

The greater availability of electronic data processing equipment has opened up a whole new world in the field of statistical processing of market information. There are many internal sources of information on the industry as such (at the boards for instance) and on the marketing results of individual firms, that can now be properly utilised for the first time. Attempts should be made to make the most of these opportunities.

Market segmentation

A further adjustment, which really highlights one possible application of the research results, is that, generally speaking, agricultural marketing should make greater use of the technique of market segmentation. Soap, watches and cars are striking examples of the exploitation and development of the markets for cleansing agents, timepieces and means of transportation through segmentation. Different criteria can be used for market segmentation, for instance socio-economic, geographic and personality factors. The marketing functions must then be adjusted to serve the different market segments in the best manner and make maximum use of them.

In this case the basic information collected by means of broad marketing research can be used by individual firms as basis for depth studies. In the nature of the case the onus here is on the processor (or manufacturer).

Physical distribution

Another aspect is planning and adjustment in respect of all the aspects of physical distribution of agricultural produce. According to Table 4 there will be a considerable increase in the physical volume to be handled, stored, packed and transported. Metrication has of course necessitated certain adjustments that will take effect in a year or two. There are, however, also other aspects to be taken into account such as larger stocks at strategic distribution points, containerisation, faster transport for bulk traffic over long distances and an expansion of harbour facilities and shipping services.

In the first of these the boards and their agents will have to assume the real responsibility, but of course it is the task of the South African Railways and Harbours to overhaul the railway transport service. At the time of writing this paper the contents of a speech by the General Manager of the Railway Administration on the subject "The South African Railways and Marketing Orientation"[21], were not yet known, but I trust that it contained a positive approach to the early elimination of the bottlenecks being experienced at the moment in our basic transport system.

It is of the utmost importance for efficient marketing, and hence for the interests of both primary producer and consumer, that the product reach the consumer as quickly as possible along the shortest routes. In this regard the question at once arises whether agriculture and agricultural marketing can actually afford the prolonged and "unpleasant dispute" (to borrow an expression from the Prime Minister) about the meat marketing scheme and the erection and running of abattoirs.

Publicity and sales promotion

In many respects this facet of agricultural marketing is still in the initial stage of development. However, the judicious application of these techniques will become ever more necessary, and it would be short-sighted to expect that the market for agricultural produce could be developed without them. Because of the fact that many of the techniques applied successfully in other fields are not suitable for agricultural produce, considerable development can be expected here.

It is also a field where the activities of the boards and manufacturers should be supplementary as far as possible, and the best framework for the purpose will differ from one product to the other.

Marketing cost

A very important field that will probably require adjustments is that of marketing services. In trying to achieve greater efficiency, unnecessary overlapping of services will have to be eliminated or avoided.

One of the main aims of controlled marketing is to keep marketing costs as low as possible, and the umbrella of statutory marketing arrangements should not be abused to entrench inefficiency. Adjustment in this regard should be at all levels, but the boards should take the initiative.

Reference has been made to the dominant role of agricultural co-operatives as agents of the boards in the handling and storing of controlled products. Being so close to the primary producer (and actually representing mainly the producer interests) they have a special responsibility in performing their share of the marketing functions as efficiently and economically as possible. It surprised me therefore to learn recently of the extensive duplication of services between for instance the wool marketing co-operatives. Perhaps they should consider whether the system of area demarcation applied for instance in the case of grain co-operatives cannot assist them in bringing about rationalisation.

Even in the case of grain co-operatives the question arises whether maximum use is made of the advantages of economies of scale - particularly as far as the size of depots is concerned, but also with reference to amalgamating some small co-operatives.

Production planning

In the last place we return to the role of the primary producer in the "new" marketing approach. Reference is frequently made to the basic difference between agriculture and industry in that the former finds it much more difficult to adjust supply to changes in the demand situation. I do not wish to speak disparagingly of this problem.

But the fact of the matter is that for the sake of his own survival the primary producer will have to become more and more market and marketing conscious. Production decisions, within the restrictions of physical factors, will have to be based more and more on economic criteria. As indicated, there is encouraging evidence of progress in this direction - inter alia by making greater use in agriculture of the general principles of sound business management.

In this regard producers will have to establish much closer contact with the market. It is becoming ever more urgent that in this case the left hand should know what the right hand is doing.

There has been such an improvement in communication media in recent times (and one of these days we may get another very effective one, namely television) that there is no reason why the essential two-way traffic between production and consumption cannot be established and developed.

CONCLUSION

In conclusion, the position may be summarised as follows:

The well-known law of Say, namely that supply creates its own demand, does not apply in the modern economy. In the modern set-up the consumer is king in many respects, and agriculture must accept this fact. To be able to hold its own in a consumer-orientated national economy, agriculture will have to change drastically in many respects its attitude to marketing and will also have to adjust itself in future to many changes in the situation.

To achieve this end, all the parties in question will have to adopt a uniform fundamental approach, a marketing state of mind, and in the current institutional set-up the statutory marketing organisations will have to take the main initiative. In the widest sense of the word agricultural control boards will have to become agricultural marketing boards.

The agricultural economist is playing a key role in agriculture. As an opinion maker in the fields of research, extension work and planning, he is very well equipped to give momentum to this extremely important adjustment in the approach to agricultural marketing. This is the great challenge confronting us in the seventies.

21) Speech on the occasion of the 10th anniversary of the Bureau of Market Research, University of South Africa, Pretoria, on 29th October, 1970.