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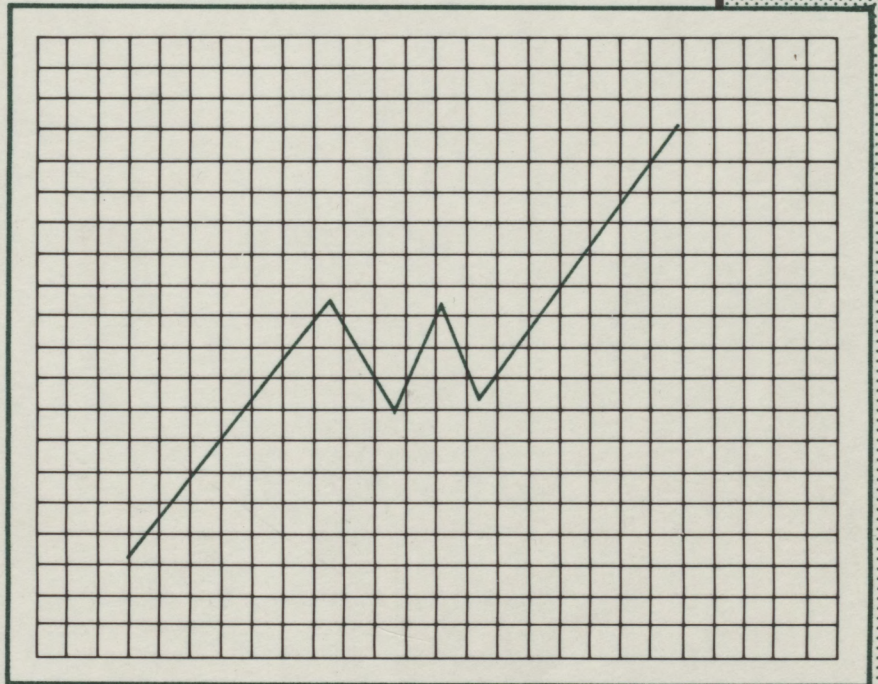
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MACRO CONSIDERATIONS IN MARKETING MANAGEMENT: CONSUMERS, PRODUCERS AND FRESH PRODUCE MARKETS

by S. MARX*

INTRODUCTION

Dr Anton Rupert once remarked that we are living in interesting, challenging and stimulating times. At no previous period in history has man engaged in planning on so wide a scale, or for so distant a future. In the technological sense we, like Adam, are standing on the threshold of a new world (Rupert 1967: 3). If we apply this statement to the theme of this paper, namely *Macro Considerations in Marketing Management: Consumers, Producers and Fresh Produce Markets*, we are indeed obliged to agree with Dr Rupert.

It is a fact that the Republic of South Africa is passing through a period during which more rapid and fundamental structural changes are taking place in the marketing, economic, technological, institutional, social, political, physical and international environments than is probably "normal" for a country with the Republic's general level of development (Marx & Bolt 1983: v). With the exception of a few basic products, most products on the market today were developed during the past 60 years. For instance, Paul Kruger did not know aeroplanes, the radio, television or nuclear power. Jan Smuts never encountered antibiotics, personal computers, photocopiers or space travel, and John Vorster knew nothing about robot factories, space flights undertaken by ordinary citizens and silicon protein molecules that make the silicon chip look old-fashioned (Cronje *et al.* 1987: 53).

These developments and changes in the technological and other fields hold out unique new opportunities and/or pose new threats to certain industries, and specifically to the fresh fruit and vegetable industry - the focal point of this paper.

With the fresh fruit and vegetable industry as the focal point, the theme of this paper will be addressed from a macro point of view under the following headings:

- The fresh fruit and vegetable industry as a dynamic system
- The operation of the system: a functional approach
- The interdependence and reciprocal influences of the variables in the system
- The balancing forces in the system

THE FRESH FRUIT AND VEGETABLE INDUSTRY AS A DYNAMIC SYSTEM

A dynamic system comprises a number of mutually dependent variables that form a moving entity. As applied to the fresh fruit and vegetable industry, the definition implies that this industry can be illustrated as a dynamic system, as represented in Figure 1.

A few comments on Figure 1 are required here.

- The whole system revolves around the attainment of certain goals.
 - The overall goal is *orderly marketing*, which means the fair and equitable treatment of all parties involved in the system.
 - For the consumers the objective is optimal satisfaction of needs at acceptable prices.
 - For the producers as private enterprises the objective is optimum profitability that will enable and encourage them to remain in the industry in the long term.
 - At the *fresh produce markets* there are various parties. For the *market authority* the objective is the rendering of a remunerative service to the community it serves. For the *market agents and buyers* the objective as private enterprises is optimal profitability, as in the case of the producers, to enable and encourage them to remain in the industry in the long term.
- The chief interest groups in the industry are the *producers*, the *consumers* and the *middlemen*, consisting of the fresh produce markets, market agents who operate at markets, retailers and wholesalers and chain stores and other institutions engaged in the direct marketing of fresh fruit and vegetables.
- The activities and level of target achievement of the chief interest groups are limited by the changing economic, technological, social, political, physical, institutional and international environments within which the fresh fruit and vegetable industry functions.
- The Commission for Fresh Produce Markets was established under the *Commission for Fresh Produce Markets Act, 1970 (Act 82 of 1970)* and advises the Minister of Agriculture and other interested persons on a wide variety of aspects relating to the fresh produce industry.
- The dynamics and interdependence of the system are represented by the linking arrows.

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THE FUNCTIONING OF THE SYSTEM

The functioning of the fresh fruit and vegetable industry can probably best be described by means of a combination of the institutional and functional approaches to marketing. The following *nine* marketing activities can be identified (Marx & Dekker 1986: 3):

- *The primary activity*
 - Transport
- *The auxiliary activities*
 - Obtaining and supplying information
 - Standardisation, grading and inspection

- Reassortment
- Storage
- Financing
- Carrying of risk
- *The exchange activities*
 - Selling
 - Buying

These marketing activities are mainly performed by producers, market authorities, market agents, buyers, the Directorate: Agricultural Product Standards and the Commission for Fresh Produce Markets, as follows:

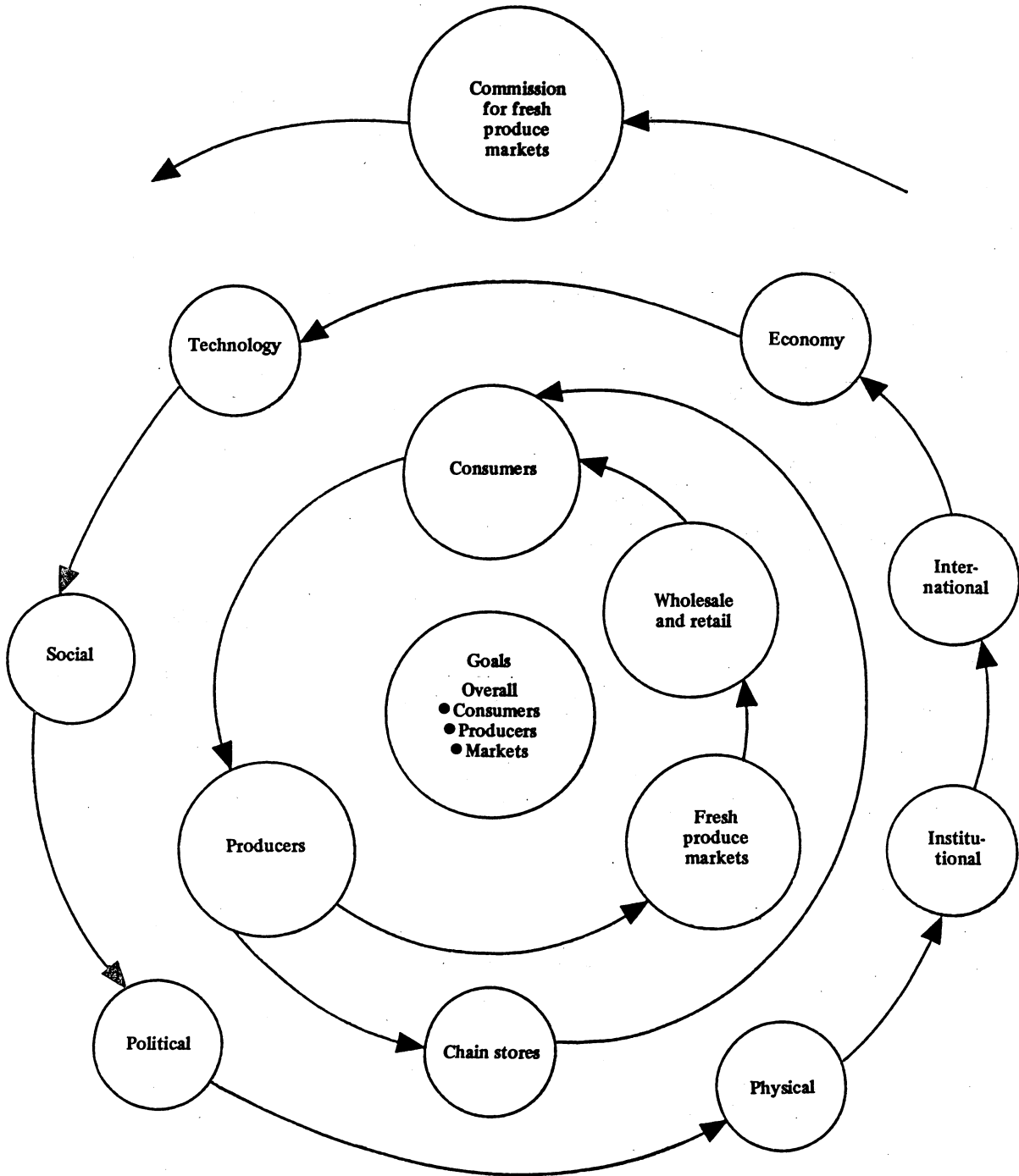


FIG. 1. The fresh fruit and vegetable industry as a dynamic system: a macro marketing management approach

Producers and their marketing activities

Apart from their production function producers are normally also responsible for:

- The grading of their produce according to predetermined standards;
- the transportation of their fresh produce to the national markets and other middlemen involved in the marketing of these products; and
- the carrying of *economic risks* (e.g. price fluctuations due to unbalanced supply and demand), *physical risks* brought about by natural and other causes, and *human risks* which have their origin in the dishonesty or negligence of man, until the produce is sold.

Market authorities and their marketing activities

Market authorities as the owners of the national fresh produce markets mainly supply and manage the physical facilities required for orderly marketing. In this regard they participate in the internal *transport and handling* of fresh produce on the market floor: they *obtain information* on types of fresh produce unfit for consumption and *supply* such information to the other parties concerned; they store fresh produce *inter alia* to increase the *time utility* of such produce; and they finance buyers to enable them to *buy* fresh produce.

Market agents and their marketing activities

Market agents' primary marketing activity is to *sell* fresh produce on behalf of their principals. Selling comprises product planning, negotiations and contractual agreement. To perform the selling function effectively market agents are normally responsible for the physical handling and *transportation* of fresh produce on the market floor and the *reassortment* of produce, that is, the product quantities and types have to be reassorted in such a way that they are adapted to the buyers' specific needs. They *obtain and supply information* to producers and buyers regarding the supply and demand conditions, prices and other marketing aspects pertaining to fresh produce on a daily basis; and in certain cases, they also *finance* producers and buyers of fresh produce.

Buyers and their marketing activities

Buying is the mirror-image of selling and also includes product planning, negotiation and the contractual agreement. Once the sales transaction has been concluded, the economic, physical and human risks are transferred from the producer to the buyer. The latter is then also responsible for the transportation, storage and selling of fresh produce to other middlemen and/or final consumers.

Directorate of Agricultural Product Standards and its marketing activities

This Directorate is responsible for the setting of standards for certain fresh produce and the

inspection of such produce on the national markets to determine whether the gradings allocated by producers are in accordance with the standards.

The Commission for Fresh Produce Markets and its activities

The objectives of the Commission, *inter alia*, are "... to advise the Minister on all matters in connection with the siting, erection, extension, alteration, use, management and conduct of fresh produce markets and the performance of services at such markets, and in general, to assist the Minister to co-ordinate and rationalize activities connected with such markets" (Commission for Fresh Produce Markets Act, 1975: Clause 3).

THE INTERDEPENDENCE AND RECIPROCAL INFLUENCES OF THE VARIABLES IN THE SYSTEM

The producers, consumers and fresh produce markets in perspective

The producers

There are probably about 20 000 primary producers involved in the horticultural industry. In 1986/87 horticulture contributed about 19,2 per cent to the total gross value of agricultural production. This amounts to about R2,46 billion at producer prices (Directorate: Agricultural Economic Trends, 1988).

The consumers

During 1987/88 the approximately 35 million inhabitants of the Republic of South Africa spent about R4,90 billion on fresh fruit and vegetables. The annual *per capita* consumption of fresh fruit and vegetables was about 98 kg in 1987. By mass, therefore, vegetables and fruit made up about 25 per cent of the total food basket of the consumer in 1987 and they form a relatively important part of the daily diet of most South Africans.

The fresh produce markets

The 14 national fresh produce markets are undoubtedly the most important distribution channel for fresh fruit and vegetables in the Republic of South Africa at present. The fourteen national markets had a joint turnover of a little more than R1 million in 1987/88. This amount was paid for about 2,17 million metric tons of fresh produce, at an average price of R475 per ton. About 80 market agents, who are private enterprises, sold this fresh produce to a wide variety and a large number of buyers on behalf of the producers (*Agricultural News* 12/9/1988: 3).

Since the major portion of the fresh produce flows from the producers to the consumers via the fresh produce markets, there is a very important interdependence between these three parties from the marketing point of view.

The interdependence of and reciprocal influences among the variables

In this section I should briefly like to note the interactive variables outside the fresh produce industry such as the economic, technological, social, political, physical and international environments that have an actual or potential effect on the producers, consumers and fresh produce markets but that are not susceptible to influence by these groups, or are influenced only slightly. *It is, however, important to note that it is from this external environment that many marketing opportunities for and threats to the fresh produce industry come.*

The economy, producers, consumers and fresh produce markets

The growth in the gross domestic product (GDP), economic trends, various growth patterns in certain sectors of the economy and geographic areas, inflation, interest rate fluctuations, the level of investment and the level of employment or unemployment are typical economic magnitudes that have an actual or potential effect on the producers, consumers and fresh produce markets. The exact nature of this effect is open to question; thorough consideration and research are still required.

Unfortunately it is a fact that since 1974 the Republic of South Africa has been ravaged by a double figure *inflation rate*. The rate of inflation and the declining rate of exchange are probably chiefly responsible for the fact that, to put it mildly, agricultural inputs have become relatively expensive. For instance, at present it may cost a tomato producer between R20 000 and R30 000 to produce a single hectare of tomatoes. It may also be asked whether the rather excessively high input costs in the fresh produce industry have not been largely responsible for the fact that the tonnage of fresh produce sold on the 14 national markets during the past two years has remained virtually constant. The increase in mass was only 0,08 per cent for 1987/88 whereas the rise in rand value was about 25 per cent (CFPM, 1988). In 1987/88 the consumer paid about 11 per cent more in *real terms* for fresh fruit and vegetables in comparison with the previous year.

Here it is important to note the population growth rate of 2,5 per cent per annum on average over the past 10 years. This growth rate means that there are about one million extra mouths to be fed each year. For the potato industry, for instance, this implies that if consumption habits do not change there will be an additional demand for 25 000 tons of potatoes or about 1,6 million 15 kg pockets per annum.

For the fresh produce markets the constant or even declining tonnage of fresh produce they handle could interfere with the full utilisation of their facilities and be an obstacle to expansion.

The technology, producers, consumers and fresh produce markets

Technology represents the results of man's ingenuity, skills and expertise as expressed in the form of

machines, tools, equipment, processes, instruments, apparatus, materials, methods, procedures and products. Dr Rupert could just as well have said that, like Adam, the fresh produce industry is standing on the threshold of a new world. Further technological innovation is probably possible in virtually every area of the fresh produce industry: here one thinks of aspects such as the extension of the shelf-life of products by means of irradiation, improved packing methods and materials, standardised packaging, palletisation, mechanical handling of produce, computerisation of processes, the cold chain and the development of information systems for producers, consumers and fresh produce markets. In this regard producers and fresh produce markets will have to make every possible effort to adapt timeously, but especially in an economic and efficient manner, to the prevailing and expected technological changes.

The social environment, producers, consumers and fresh produce markets

In the Republic of South Africa changes are probably taking place even more rapidly in the social area than in the technological field. A few social phenomena that directly affect producers, consumers and fresh produce markets are the relatively high growth rate of the Republic's population, the relatively high rate of urbanisation, the electrification and upgrading of black residential areas, the development of residential areas further and further away from the city centres, changes in the structure of families and the rise of consumerism. The following are a few implications of these social phenomena:

- Up to the year 2000 there are expected to be eight million new entries to the labour market.
- There are expected to be about 7 million unemployed by the year 2000 (Greyling 1986).
- An increase of 13,7 million to 30 million people, is expected in the urban and semi-urban areas of the Republic of South Africa by the year 2000.
- About 40 per cent of the increase is expected in the PWV area.
- About 14 per cent of the increase will probably be in the Durban-Pinetown-Pietermaritzburg area.
- An increase of 5 per cent is expected in the Port Elizabeth-Uitenhage area, 5 per cent at East London and 13 per cent in the Western Cape.
- The remaining 23 per cent are expected to flock to smaller centres such as Bloemfontein, Nelspruit and Pietersburg (Spies: 155).

It is extremely important to note that the 14 existing fresh produce markets are all situated within the above-mentioned urban and semi-urban areas. This urbanisation undoubtedly offers the producers new sales opportunities, since it will no longer be possible for these urban consumers to supply their own requirements for fresh produce from their own gardens. There will undoubtedly also be new

opportunities for the existing fresh produce markets to increase their turnover. It can also pose a serious threat to them. The question is: *taking into consideration the geographical positions and infrastructure of our present fresh produce markets, will they by the year 2000 be able to cope effectively with the demands of an increased urban population?*

The fresh produce industry will have to give serious consideration to this question, particularly with a view to the expansion of the facilities of the existing markets, the erection of new markets and the creation and further development of new distribution channels such as direct marketing by wholesalers, chain stores and other retailers.

The development of the *informal sector* should never be underestimated. In certain production areas a new distribution channel, where fresh produce is bought directly on the farms and sold from the backs of lorries, has become very popular. These vegetable lorries may have the same effect on the distribution of fresh produce as the "kombi taxis" have had and are continuing to have on urban bus transport.

The political/legislative environment, producers, consumers and the fresh produce markets

Certain aspects regarding trading at the 14 national fresh produce markets are regulated at present by the following legislation:

- The Commission for Fresh Produce Markets Act, 1970 (Act 82 of 1970);
- the Agricultural Produce Agency Sales Act, 1975 (Act 12 of 1975);
- the Labour Relations Act, 1956 (Act 28 of 1956);
- section 84 of the Marketing Act, 1968 (Act 59 of 1968);
- the Trade Metrology Act, 1973 (Act 77 of 1973);
- provincial ordinances governing the marketing of fresh fruit and vegetables; and
- the by-laws/regulations passed by local authorities that regulate the marketing of fresh fruit and vegetables.

These acts, ordinances and by-laws cover an extremely wide field and have as their chief objective the orderly marketing of fresh fruit and vegetables. They include provisions in respect of market fees, ownership, financing, subsidies, agents' commission, the packing and grading of certain products and the daily conduct of business on the market floor. In a certain sense this legislation affects all the parties involved, such as the Commission for Fresh Produce Markets, producers, market agents, market authorities, buyers and consumers. In view of the White Paper on Privatisation and Deregulation in the Republic of South Africa the desirability of all this legislation will undoubtedly be scrutinised in time. It is, however, true that when fresh produce is marketed through the national markets, decisions frequently have to be taken quickly in order to respond effectively and timeously to opportunities

and threats. The above-mentioned acts, ordinances and by-laws do occasionally impede rapid decision-making.

The physical environment, producers, consumers and fresh produce markets

The physical environment refers to the availability, conservation, improvement and exploitation of the limited natural resources of the Republic of South Africa. Agriculture, and especially the fresh fruit and vegetable industries, has a direct influence on the Republic's ecology and resource position. The results of agricultural activities, such as container pollution, chemical pollution, pollution caused by wastes, and the injudicious use and wastage of resources such as water can have a directly adverse effect on the availability, conservation and improvement of the Republic's physical environment.

It does appear, however, that in general the agricultural industry is not indifferent to the conservation of its environment. As an instance, an advisory committee on the use of hormone herbicides recommended the following, *inter alia*, to the Minister of Agriculture:

- A complete embargo should be placed on the use of these herbicides in the Tala Valley;
- an embargo should be placed on the aerial application of all hormone herbicides in Natal; and
- all operators should be subject to compulsory registration in terms of Act 36 of 1947 (*Agricultural News* 5/9/1988).

However, legislation on its own cannot conserve the physical environment. Conservation really depends on the voluntary contribution of producers, consumers and the fresh produce markets.

The international environment, producers, consumers and the fresh produce markets

Every national economy has its own - often unique - economic, technological, institutional, social, political and physical environments.

The fresh fruit and vegetable industry of the Republic of South Africa has to take thorough cognizance of international technology, international economics and, especially, international politics. In the arena of the United Nations and other international bodies the Republic is frequently the focal point for threats; indeed the Republic is at present subject to boycotts and disinvestment in numerous fields. The fresh produce industry is especially vulnerable to boycotts. If these boycotts are successful, producers will have to think seriously about their marketing strategies and one of the consequences will be that fresh produce markets will have to be able to deal with an increased domestic offering of fresh produce.

The institutional environment, producers, consumers and the fresh produce markets

The institutional environment embraces all those institutions with which the fresh produce industry

has direct or indirect contact and ties. In view of their nature and size the most important institutions with which the fresh produce industry has dealings are probably local and central government, the organised business world, suppliers, financial institutions, specialist institutions and trade unions.

From a business point of view, the fresh produce industry is well organised. For instance, the National Fresh Marketing Committee of the SAAU takes care of the interests of producers, the United Municipal Executive of South Africa and the Institute of Market Masters of South Africa look after the interests of the owners, namely the local authorities, the Association of Co-operative Market Agents and the Institute of Market Agents of South Africa serve the interests of co-operative market agents and independent market agents, the Afrikaanse Handelsinstituut and the Association of Chambers of Commerce of South Africa are at the disposal of the buyers and the South African Co-ordinating Consumer Council looks after the interests of consumers.

Individual producers, markets, market agents, buyers and consumers can generally do very little on their own to influence variables in the macro environment. Membership of an association of some kind places them in a better position to respond to opportunities and threats from the macro environment.

Summary: Interaction between variables in the different sub-environments

So far each environment and its influence on producers, consumers and fresh produce markets has been considered chiefly in isolation. However, there is a continuous interaction between the variables in the different environments and events in one environment can lead to changes in another. From this point of view the fresh vegetable and fruit industry is a fairly complicated system.

THE BALANCING FORCES IN THE SYSTEM

In most economic systems and industries there are two basic forces by means of which the objectives of the system or industry can be achieved. These forces are decisions by the authorities on the one hand and the action of the market forces (supply and demand), which depend mainly on the independent decisions of individuals, on the other.

In the fresh fruit and vegetable industry both

these forces are functioning at the moment with the overall objective of achieving orderly marketing. The exact contribution each of these forces makes to achieving this objective is difficult to determine.

It appears, nevertheless, that the future market forces will play an increasingly important part in the fresh produce industry.

The White Paper on Privatisation and Deregulation has the following to say, *inter alia*, on the optimal functioning of market forces:

"Because the provision of services and profits by the public sector is not subject to self-regulatory demand and supply to the same extent as in the private sector, the provision of as many services and products as possible should be left to the private sector. In that way it will be left to the market to determine both the demand for and the supply of such services and products to the benefit of the country's economy" (White Paper 1987: 8).

In this regard the fresh fruit and vegetable industry is faced with a major and dynamic challenge!

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