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**Hhohho Fruits and Vegetable Cooperative Society
and
Khulumela Kwenta Cooperative Society**

Marketing Manual : Marketing Guide

**Swaziland Commercial Agricultural Production and
Marketing Project**

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A. What is Marketing?

Marketing is many things to many people, to the housewife, it may mean a trip to the supermarket, to the farmer it may mean loading the bakkie with cabbages for a trip to the Encabeni Market, or arguing with a vendor woman over the price to be paid for a load of tomatoes. Marketing may be thought of as the connecting link or the bridge between the food producer and the consumer. It is not only a physical bridge, but an economic bridge designed to facilitate the movement and exchange of foodstuff from farm to table. The agricultural marketing system is composed of various products, alternative market flows (marketing channels), a number of firms (middlemen) and a variety of business activities (marketing functions).

The agricultural marketing system is composed of various products, alternative market flows (marketing channels), a number of firms (middlemen) and a variety of business activities (marketing functions). The marketing system plays two important roles:

- the physical distribution, handling and transfer of produce from grower to consumer, and
- an economic role by adding value to the farm produce and facilitating the exchange between buyer and seller.

Agricultural marketing is both complicated and costly. Some farmers produce small amounts of a number of products, others produce larger amounts of a single commodity. Agricultural production tends to be seasonal and often at a great distance from the consumer. The produce must be collected, sorted and rapidly moved to market. These activities are the basis of the marketing system. There are few commodities that are more demanding of their marketing system than food products. This is especially true of vegetables.

Marketing is expensive. Two or more of every three Rand spent on food is spent on marketing. A 6.5 kg box of tomatoes which might sell for R5,50 in Johannesburg contains only R0.98 worth of tomatoes, the rest of the cost is due to the box, grading and packing, transportation, labour, and various commissions and fees.

A good general definition of agricultural marketing might be: all the business activities involved in the movement of food products from the point of production until they are in the hands of the consumer. Marketing does not only take place beyond the farm gate, since a farmer should not produce anything without a market, the marketing process begins on the farm.

The relationship between farmers and marketing tends to be competitive and complimentary at the same time. Just as there would be no food without farmers, little or no food would reach the buyer or consumer without the marketing system.

Marketing is productive, many people do not recognise the value of marketing. Farmers, in particular, often complain of the profits of middle men, yet there are many activities, transporting, grading and packing, storing, advancing and collecting payment etc. which must be done for a farm product to reach the consumer. A farmer, who has produced a tomato in Siphofaneni, has not produced a salad on the plate of a consumer in Durban. It is important to remember two facts when considering the marketing process:

- the overall ruler and co-ordinator of the marketing process is the consumer, and
- price must fully reflect all the costs involved in the production and marketing of a particular product or the system will breakdown.

B. Summary of Marketing Functions

Marketing can be broken down into a number of activities:

- Exchange functions (the transfer of goods)
 - Buying (assembling)
 - Selling
- Physical functions (handling and moving the commodity)
 - Storage
 - Transportation
 - Processing(grading and packing)
- Facilitating functions
 - Standardisation
 - Financing
 - Risk bearing
 - Market intelligence

There are three important characteristics of these marketing functions. One, is that the marketing functions affect not only the costs of marketing food but also the value of food products to consumers. This value added function is important to remember when discussing marketing.

Secondly, it is important to note while it may be possible to eliminate the middleman, it is very difficult to eliminate marketing functions. Eliminating the middleman involves a transfer of marketing functions and costs elsewhere. Farmers may choose to assume some of the marketing functions through the creation of a marketing association, eliminating certain middlemen, but they can not eliminate the task of performing the marketing functions and the cost involved.

Lastly, the various marketing functions may be performed by anyone anywhere within the food system. The key questions are whether the necessary market functions are being performed to assure the movement of food from farmer to consumer and if they are being performed most efficiently, in the least costly manner. Farmers may wish to assume additional marketing functions, but there is no guarantee that this will increase profits. Just as supermarket owners would probably make poor

farmers, farmers may lack the skills and ability to manage a supermarket or marketing organisation.

C. Characteristics of the Production Process.

Since agricultural marketing begins on the farm, it is useful to consider the nature of the raw product and its production. An understanding of the product and the production process will help explain the operation of the market and marketing systems.

Farming, in general, is and has been changing in many ways. There have been improvements in seeds, varieties, fertilisers, pesticides and other areas of crop production. This has resulted in an increase in production and an increase in the amount of product that has moved into commercial marketing channels. In addition, fewer people live on farms or in farming areas, so farmers are more dependent on the marketing system to supply ever larger quantities of their products to far away city populations. Several observations about agricultural production are important in their influence on the marketing process:

- Much agricultural production is made up of small quantities of produce grown on a large number of individual farms,
- Farmers by nature tend to be more interested in production than marketing. Since the small farmer is usually manager/labourer, the demands of production absorb most of his time and energy.
- In many areas large specialised farms are developing.

The marketing system has had to deal with these realities, since the marketing system finds it easier to deal with a few larger suppliers, the small farmer must organise themselves to protect their interests. Certain characteristics of agricultural food products must also be considered to better understand the marketing process.

- The output of a farm is a raw material that usually requires further processing to make it acceptable to consumers. With vegetable crops, this may entail grading and packaging only or may involve further processing.
- Compared to other products farm products tend to be bulky and perishable. The bulky nature of agricultural products affects the marketing functions concerned with physical handling. Since bulky products take up a lot of space relative to their value, they tend to have high transportation and handling costs. Since most agricultural products, especially most vegetable crops are highly perishable, they must be moved to the consumer rapidly or they lose their value. The perishability of these products makes it difficult for the farmer to withhold the product from the market, when it is ready it must move. Perishability also increases the need for speedy and specialised handling and increases the cost of marketing.
- The quality of farm products tends to vary from year to year, season to season, and farm to farm. This variation in quality makes demands on the marketing system, since one of its functions is standardisation of products.

But, despite the variation in quality, which occurs in farm products, once farm products are graded and prepared for market, they are relatively homogeneous. That is buyers have little reason to prefer one farmer's product over another. The result is that farmers receive about the same price for the same quality product.

Farmers have a good deal of control over the quality of their products. This is one area in which they can favourably influence their selling price. Just as the nature of farm products are interesting to consider when analysing the marketing of agricultural products, some of the characteristics of the production process also influence the agricultural marketing system.

- Better production practices are increasing farmers productivity, greater output, however, often depresses prices.
- Farm production is subject to great annual variability. This variability is due to some uncontrollable factors, such as weather and disease and unpredictable response to price and other factors. This characteristic of agricultural production heightens the uncertainty of prices and increases the risks involved in marketing.
- Seasonal variability in production must also be considered. The effect of climate will affect the cost of production and the competitiveness of one area over another.
- Costs of production vary between farm operations and are affected by climate, technology, farm size and individual skill. The cost of production will vary widely between farms and areas. Studies show that larger farm operations are generally more efficient than small farms in both the economies of production and marketing. This implies that for small farmers to remain competitive, they must work together to achieve economies of scale.

The variability of production costs also means that at a given price for a commodity, there will be some farmers making money, some breaking even, and some farmers who are losing money. The role of the farm supply sector in the production process must also be considered. Most agricultural inputs, such as seeds, chemicals, fertilisers, and tools, come from off the farm. Some 60 - 80 % of the gross farm income is spent on the purchase of farm supplies. This adds another market for the farmer to operate in, since farm income can be increased by the efficient buying of supplies just as it can by the skilful selling of farm produce.

D. The "Farm Problem" and the "Farm Marketing Problem".

The "farm problem" is usually linked with unstable and generally low farm prices and incomes. A related set of problems might be called the "farm marketing problem". There are several elements of this problem.

- It is difficult for farmers to adjust production to meet changing market conditions. This is due to the large number of independent farms and the fact that many factors beyond the control of the farmer, i.e.. weather,

disease etc. will affect yield. This coupled with the fact that it is not possible to quickly turn on or off production means that the market must adjust to farm supply in the short run. This inability to adjust quickly to changing conditions creates a high element of risk in agriculture.

- Another part of the farm marketing problem is that it is difficult for the farmer to improve prices through individual or group activities. Farmers are for the most part price takers, they can not influence the price of their products through output decisions. To raise prices through the control of supplies or marketing activities, farmers must act as a group.

The large numbers of farmers and their differing economic and social backgrounds frustrate farmers attempts to organise. Another part of this problem is the free rider. Group effort requires each member to sacrifice for the good of the group. When group activity is successful, the resulting price increase or other benefit will extend to all farmers regardless of their level of participation or whether they have contributed to the program at all.

- The competitive nature of agriculture tends to keep farm prices close to the cost of production. This cost - price squeeze would not be such a problem if the cost of production fell with falling farm gate prices. On the other hand, rising farm prices attract more farmers to a particular crop, bidding up the costs of production while acting to lower prices through increasing supply.
- Lastly, is the fact that since marketing firms are generally larger, they have superior bargaining power. Marketing firms tend to have national and international connections and better access to market information, further enhancing their competitive advantage. Farmers, on the other hand, have shown resistance to participating in the marketing process, thus choosing to remain a supplier of raw material to the food industry.

E. Farm Marketing Questions.

Farmers have a tremendous stake in an efficient marketing system. An effective marketing system is one that will guide the production of products in quantities that when sold will give the farmer the maximum return after the deduction of marketing charges and production costs.

A knowledge of marketing and it's problems will help the farmer make the following decisions:

- What to produce and how to prepare it for market? For example, which tomato variety is best for the target market and what packaging is needed?
- Where and when to buy and sell? Different products will have higher or lower prices through out the year.
- How much of the marketing job can be done by the farmer as an individual or as a group?

- What can be done to expand markets? Improvements may be possible in variety, quality, packaging, transport, etc.
- Which marketing arrangements are more desirable? This may involve a choice between a fixed contract versus commission sales.
- What can be done to correct undesirable practices or problems? This could include appeals to government for action, creation of a farmer's association to tackle certain marketing problems or a number of other activities.

F. The Farmers Marketing Plan.

The marketing plan consists of a set of objectives, strategies, and tactics which will help the farmer make production and marketing decisions. A marketing plan begins with the statement of goals and objectives. Usually, there will be several and they will have to be ranked in importance because of conflicts which may arise in trying to meet more than one goal at the same time.

When queried farmers often state that "their goal is to make more money". This goal is too broad to be a useful guide to marketing activity. Making more money is often the result of achieving other more specific goals and objectives. Farmers may be motivated by a number of goals: farm growth, greater efficiency in production, better access to markets, price stability, preservation of the family farm, etc. Farmers will choose between these and other goals and give them different priorities and these will shape their market decisions.

Goals and objectives indicate where one wants to go. Strategies are ways of getting there. There are a number of alternative strategies for achieving goals:

- rapid versus slow, steady growth,
- top dollar for each sale versus lower reasonable prices over the long run,
- high risk and high profit versus lower risk and lower profit,
- profit improvement from cost reduction versus price enhancement.

Tactics are the day to day decisions that implement marketing strategies. For example, a farmer with a low risk strategy might wish to fix a contractual price for his product.

The market plan is an important tool in setting up and evaluating a farmer marketing program. It helps the farmer organise his production and marketing program and answer marketing questions. Strategies follow goals and objectives and tactics follow from strategies in a logical fashion. The marketing plan also provides a way to measure the success of the marketing effort. Success occurs when tactics and strategies lead to goals. The marketing plan must be flexible and able to be altered to fit new circumstances. It is also important that the farmer know when he is departing from the plan and when it is time to make a new plan.

G. The Middlemen of Marketing.

Middlemen are individuals or businesses that specialise in the various marketing functions involved in the purchase and sale of goods as they move from producers to consumers. They are engaged in the different marketing jobs, grading, packaging, transport, advancing and collecting payment etc. Unfortunately many farmers look on those in these positions as parasites on those who really produce the goods. Farmers also complain about the profits of middlemen. Yet as we have stated before the middle man is essential. To argue who is more important, the farmer or middleman, is senseless, because both groups are essential to furnish the final product to the consumer. There are several types of middlemen involved in vegetable marketing.

The middlemen involved in vegetable marketing may be classified as follows:

1. Merchant middlemen

There are two Merchant middlemen who take title and own the products they handle. They buy and sell for their own profit. The retailer buys product for resale directly to the consumer. The retailer performs most if not all of the marketing functions, thus the retailers job is quite complex. Retailers are the most numerous of middlemen and include such people and organisations as market vendors and supermarkets.

Wholesalers sell to retailers, other wholesalers, and other users, but generally not to the end consumer. Wholesalers include; local traders who buy in the producing area directly from farmers and then ship them to larger cities as well as traders such as those located at the Encabeni facility at Nokwane. Wholesalers may specialise in one or a few items or may be full line wholesalers, who deal in a wide range of products. Wholesalers may operate on a cash and carry basis or they may extend credit or other services, others may require that the seller extend limited credit. Example: Gastaldi Brothers.

2. Agent middlemen

They act only as representatives of the clients they serve. They do not take title to, and therefore do not own, the products they handle. Agent middlemen sell their services to their clients, the farmers they represent. They do not actually sell goods to the consumer but use their know - how and knowledge of the market to bring buyer and seller together. Unlike wholesalers and retailers, who make their income from a margin between the buying and selling price, agent middlemen make their income in the form of fees and commissions.

The difference between commission men and brokers is subtle and one of degree. The commission man is usually given broad powers by the client who consigns goods to him. He usually is involved in the physical handling of the product, arranges the sale, collects payment, deducts his fee, and remits the balance to his client or principal. Commission agents are typical of the agents who normally

operate in regional markets such as the Durban or Johannesburg Fresh Produce Markets. Examples: John Bell and Kie, Model Marketing Agency, Marco Co-operative.

A broker does not usually take physical control of the product and has less discretionary power in negotiating price than a commission agent. Brokers do not normally operate as agent middlemen in the vegetable industry, although they are common in other areas of food marketing, such as the grain industry.

3. Speculative middlemen

They are fairly uncommon in the fresh vegetable marketing channels. They take title to products with the purpose of profiting from short term price movements. A livestock or grain speculator may buy hogs or grain futures today and sell them back tomorrow or even in the same day. All middlemen are speculators to the extent that they face uncertain market conditions, wholesalers and retailers try to reduce their level of risk while the speculator seeks out and specialises in risk taking. Example: Boodhoo and Sons.

4. Processors and manufacturers

They are middlemen, who change the form of a product to make it more desirable to the consumer. They may be wholesalers or retailer or both. Fruit and vegetable canneries are one example this of type of middleman. Another type of processor that is often overlooked in considering this category of middleman is the restaurant.

5. Facilitative middlemen

They are generally organisations that assist the various middlemen in their marketing activity. They do not participate directly in the marketing process as do merchants, agents, or processors. They may furnish the physical facilities for handling the products or they may establish the "rules of the game", such as hours of operation or terms of payment. Facultative organisations generally derive their income from fees and assessments on those who use their facilities. The Encabeni facility as well as the Johannesburg National Fresh Produce Market are typical facilitative organisations. Various trade organisations may also fall into this category of middleman. While these organisations may not be active in buying and selling goods, they may be active in gathering and disseminating information, and conducting research. They may also act as unofficial policemen in preventing unfair trade practices and lobbying groups to represent their constituencies interests.

Farmers and consumers can and often do assume the middlemen functions of storage, transporting, selling and even processing. A farm roadside market is an example, where middleman functions have been transferred to farmer and consumer, eliminating the middleman. Why, then, are there so many middlemen if they could be replaced by farmer and consumer? The reason is that specialised

middlemen can often perform marketing functions more efficiently than either farmer or consumer.

The emergence of middlemen specialising in activities, such as transportation, grading and packing, retailing, processing and so on, is an example of the division of labour and specialisation, that has characterised modern society. The middleman frees farmers to specialise in agricultural production and allows the consumer to specialise in a non-farm career. The gain from specialisation by market middlemen means that many marketing functions are marked by economies of scale. This means that the cost of performing a particular market function falls as the volume of product rises. For example, the freight rate for a full container of tomatoes to Durban works out to about R 1.00 / box, the rate for a container that is only half full is R 2.00 / box.

In addition, middlemen also reduce market search and transaction costs. There are costs involved with finding buyers and sellers and negotiating transactions between them. By specialising in these functions, middlemen relieve farmers and consumers of considerable expense they would otherwise incur in buying and selling.

What is the best system? A general rule is that middlemen will perform agricultural marketing functions when their costs are lower than those of farmers and consumers. The comparison is the middlemen's cost versus farmer or consumer costs for performing marketing functions, not the middleman's cost versus no cost. The large number of middlemen involved in the agricultural marketing industry indicates the former condition is frequently met.

This is not to say that all middlemen are efficient or necessary or that farmers may not find it desirable and cost effective to perform certain middleman roles.

H. The Role of Price and Price-making Forces in the Marketing Process.

The exchange functions of marketing, buying and selling, are at the heart of the marketing process. As goods move through the system, they change hands many times, with each change in ownership, price must be decided upon. The study of markets and prices goes hand in hand, one cannot understand marketing without grasping the basics of pricing.

The agricultural marketing system is a system of communication, conflict resolution, and co-ordination. The marketing system must provide buyers and sellers with information that will assist them in their decision making, it must reach a compromise between producers' and consumers' goals and it must encourage efficiency within the system. In much of the agricultural marketing system and the world economy, this is accomplished through prices set by competition. Other systems that have been used to direct the marketing system are: custom and tradition, i.e.. one bull is valued at five ram goats, and centralised, authoritarian control, i.e.. government control of prices and market channels. For various reasons, the market or competitive price system has dominated in directing the market place.

A basic principle of the market price system is that profit seeking behaviour will serve societies' interest by allocating goods and services to their highest valued use. A competitive market price has the advantage of being impartial, fairness is left to the composite judgement of the marketplace rather than individuals or political parties. The system also has the advantage of continuously adjusting to changing conditions in the market place. In a competitive economy, prices transmit orders and directions. To some, high and rising prices mean increased profit and an incentive to go ahead and produce more. To consumer, however it may mean slow down or even do with out. Low or falling prices would signal opposite directions to producers and consumers.

Fluctuating, competitive prices perform three major jobs:

- They guide and regulate production decisions.
- They guide and regulate consumption decisions.
- They guide and regulate market decisions.

Prices are, therefore, a form of communication signal that act in various ways to co-ordinate market decisions. Prices serve as guides before decisions are made and rewards for correct decisions.

1. Relative Prices and Agricultural Marketing Decisions.

Profitable production and marketing decisions involves choices among many alternatives. Substitutes exist at every level of the food production and marketing system. Growers may use the same basic resources to produce tomatoes or peppers. They may choose to market their crops through various channels. Retailers and restaurants may decide to feature one food or another. Consumers have the greatest range of alternative choices. How do each of these groups; farmers, marketing concerns, and consumers, choose among these alternatives?

Tradition, custom, and personal preference play some role in market choice, but prices and profit motive provide a better explanation of changing market choices. Farmers will plant more tomatoes and less cabbage if prices and profits favour tomatoes. Consumers may be encouraged to substitute more cabbage for lettuce if prices are favourable.

It is important to note that it is the relative price of one product to another which will influence what will be purchased, produced, and sold by farmers, marketing firms and consumers. The relative price is a ratio stating the price of one alternative product to another. The relative price of fresh market tomato to jam tomato is 2:1 if the price of fresh market tomato is R 2.00 / kg, while that of jam tomato is R 1.00 / kg. The relative prices not the absolute prices signal market choices. If tomato prices raise to R 4.00 / kg for fresh market and R 2.00 / kg for jam tomatoes, consumption patterns will remain stable. However, if the relative price of fresh market tomato to jam tomato increases to 4:1, there will be a shift by buyers to increase the consumption of jam tomato relative to fresh market tomatoes. In short,

producers and consumers will respond to changes in the relative price of substitute items to improve their economic position. For producers, this means relative price adjustment toward increased profit. For consumers, it means cost-minimising and value maximising decisions.

2. Supply and Demand.

The basis for price in the competitive market place is supply and demand. There is probably no more overused or misunderstood term in economics or marketing than the "law of supply and demand". Since this concept is so fundamental to the formation of price, it will suit us to briefly consider the basic ideas of supply and demand.

Demand is a series or schedule of different quantities of a commodity that buyers will purchase at different prices at a given time and place. The law of demand is the relationship between quantities taken and prices. Simply stated, the lower the price, the more will be purchased; and the higher the price, the less will be purchased.

The reason for this relationship between the amount sold and the price charged arises from several facts about consumers and consumption. First, is that as a buyer has more of an item, the usefulness and desirability of each additional amount decreases. Next, consumers differ greatly in their likes and dislikes. For most consumers too, even though they like an item and would find it useful, prices must be lower before they can buy it. Lastly, it is a mathematical fact that consumers must buy less of a product if it's price increases and their income does not change.

A hypothetical demand schedule can be given for prices and quantities that might exist for a given commodity at a given time and place. The graphic presentation of the demand schedule is called the demand curve. If the law of demand is valid, the demand curve will always slope downward and to the right. The demand schedule and the demand curve illustrate the relationship between price and quantity as established by potential buyers. It is important to note that the demand schedule does not indicate what the price and quantity are; only the effect that different prices will have on amounts purchased. The price that will exist has not yet been established, and demand alone cannot set price. To forget this fact will lead to the common error of associating demand with a price change or a consumption change alone.

The demand that is important in marketing is effective demand. Effective demand is the wants and needs of the consumer backed up by purchasing power. The marketing question should always be, "how much will be bought at a price?"

Supply is a schedule of different quantities that will be offered for sale at different prices for a given time and place. The law of supply is the relationship that exists between price and the amount offered for sale. The higher the price, the more will be offered for sale, the lower the price, the less will be offered for sale. Just

as for demand, a hypothetical supply schedule of quantities and prices can be made and from this a supply curve can be plotted. It must be remembered that here too, at any one time and place only one point on the supply curve reflects the actual situation. Again the supply schedule and the supply curve represents the relationship between price and amounts offered by prospective sellers. If the law of supply is valid, the supply curve will always slope upwards and to the right when presented graphically. It is common for changes in production to be labelled as changes in supply. Despite this common usage, supply in an economic sense means a series of price-quantity relationships.

Time is very important in considering the concept of supply. Supply exists at a given time. The time period being considered can be of different lengths, usually designated the short run, the intermediate run, and the long run. In the short run, supply can not usually change greatly since the existing amount of goods has already been produced and is limited to the amount on hand. The intermediate period is that time during which goods can be produced using only existing production facilities. The long run is that time period over which production facilities may be expanded or reduced. The question of time brings into consideration the idea of fixed and variable costs.

Fixed costs are those costs, which are involved with equipment and materials which can be used over several production periods. Once purchased, these are costs to the owner whether they are being used or not. Variable costs are those items which are used up in one production cycle. Variable costs therefore vary according to the level of production. In vegetable production, the cost of pesticides and fungicides are variable costs, the cost of the sprayer is a fixed cost. Over the intermediate period, fixed costs do not influence a seller's decision to supply. If prices cover the seller's variable costs, he may decide to produce and sell. In the long run, however the costs of all factors of production, i.e., fixed and variable costs must be covered and will enter into the determination of supply.

3. The Equilibrium Price.

The equilibrium price is that price where supply equals demand, this occurs where the demand and supply curves intersect. This equilibrium price is the price which will be established if the forces of competition are allowed to function. The equilibrium price is a compromise between the desire of sellers for a higher price and the desire of buyers for a lower price. At the equilibrium price, buyers will take all that sellers offer; the market will be cleared.

The equilibrium price is not a point that is readily found and maintained, normally prices are constantly fluctuating around the market clearing price. The change in prices may be small but occur frequently as buyers and sellers search for the equilibrium price. As prices move above the equilibrium price, it is a buyers' market, more is supplied than demanded and price cutting occurs. As prices move below this mark, it is a sellers market, and buyers will bid up prices towards the equilibrium level. Therefore, the equilibrium price is the price toward which actual prices will tend to move.

Many factors can cause supply or demand curves to shift, by acting to increase or decrease supply or demand schedules. Shifts in either supply or demand curves or both will result in a new equilibrium price being set.

4. Elasticity of Supply and Demand.

The law of supply states that as prices go down, quantities offered for sale will decrease. The law of demand states that as prices go down, the amounts purchased will increase. How much will quantities change in response to changes in price? The relationship between change in quantity to changes in price is known as price elasticity. Both supply and demand curves can be classified according to their elasticity into two groups. Demand is said to be elastic when the change in quantities taken are proportionately greater than changes in price. Inelastic demand is when the changes in quantities taken are proportionately less than the change in price. Demand curves where the change in quantity taken are of the same magnitude as the changes in price are said to display unit elasticity. Commodities which have few substitutes and are considered necessities generally have inelastic demand. Most agricultural products display inelastic demand curves.

The concept of elasticity can also be applied to supply. Products that are very responsive to price changes have elastic supply curves, while those that respond relatively little to price changes have inelastic supply curves. Time is an important factor in the elasticity of supply. Over the short run, supply is nearly perfectly inelastic. Over the intermediate and long run supply curves tend to be more elastic, depending on the ease and cost of increasing or decreasing production. Perishable products also tend to have a greater inelasticity of supply, since producers have little choice in whether to move the product when it is ready to sell.

5. Applications of Supply and Demand Analysis in Agricultural Situations.

Farm prices tend to be more volatile than non food prices. This is due to the inelastic supply and demand curves for agricultural products, and because of the unpredictable changes in food supplies resulting from, weather, pests and diseases, and other factors. Because of the inelasticity of supply and demand curves, shifts in either supply or demand will result in relatively large price changes for farm products. Since the demand for most farm products is inelastic, falling prices will reduce total returns and rising prices will increase returns.

Inelastic demand provides farmers with an incentive to restrict production to raise prices and gross farm income. In practice, this is difficult for farmers to achieve. Individually, it is difficult for a single farmer to affect the level of supply necessary to raise prices. Since farmers tend to increase production in response to higher prices resulting from organised supply control schemes, there is a tendency for supply expansion to erode higher prices. Most successful agricultural supply control programs require government intervention. It is important to note that the costs of such programs are borne by consumers.

Due to the inelastic demand curve for farm products, an unexpectedly high yield increases supply and results in lower farm prices. Thus farmers are penalized for unexpectedly large crops. New production techniques also tend to increase supply, thereby resulting in lower prices and reduced gross farm income. This may be balanced by lower production costs. On the whole, it is the consumer who benefits from technologies and conditions that increase supply.

Over the short run, there is no relationship between costs and prices received in the market. Since goods have already been produced, a high level of demand will result in higher prices and sellers may be able to dispose of their entire crop at a profit. Over a short time period no more production is possible to increase supply and drive down prices. At the opposite end of the scale, a low level of demand may mean that goods must sell at a loss. This is especially true for highly perishable products.

Over the intermediate and long run, producers can adjust production in response to price. If demand and prices are high, and high profits are being enjoyed, existing businesses will expand production and new firms may enter into production, prices will then come under pressure from increased supply. On the other hand, if demand and prices are low, businesses may operate at a loss and eventually enough firms will be forced out of business so that the remaining producers will share in the demand under favourable prices. Therefore, over the long run, production will adjust so that average prices will tend to equal average costs. The returns to capital, land, labour, and management will be no more or less than could be received if devoted to other forms of production. This is the basis for the cost-price squeeze in agriculture.

6. Marketing and the Law of One Price.

In order for the market to perform its role of co-ordinating the activities of buyers and sellers, buyers and sellers must be able to communicate with one another, must be capable of exchanging products with one another, and must be exposed to similar price signals. In the market arena, buyers and sellers are highly sensitive to each others' transactions. Market boundaries are defined by the interdependence of buyers and seller over time, form, and space. These boundaries are not fixed and the interdependence of buyers and sellers is measured by price sensitivity. The law of one price defines the relationship among prices in space, time, and form markets. This law implies that under competitive market conditions all prices within a market will tend to be uniform, after taking into account the costs of adding place, time, and form utility to products within the market.

7. Price Discovery and Price Determination.

Price determination is the process by which the broad forces of supply and demand establish a market clearing equilibrium price for a commodity. Price discovery is the process by which buyers and sellers arrive at a specific price for a given lot of produce at a given place and time.

Price discovery is a human process, subject to errors in judgement, and the relative bargaining power of buyer and seller. In real life, the discovered price will tend to vary around the equilibrium price. These variations in the price discovery process make it profitable for buyers and sellers to shop around and to bargain on price and terms of trade.

Several systems for price discovery for agricultural products have been identified. Two of these: individual, decentralised negotiation and organised, central market trading predominate in the fresh vegetable industry. In individual, decentralised negotiation each farmer bargains individually with buyers to set price. The resulting prices depends on the information, trading skills, and bargaining power of the buyer and seller. Prices tend to vary widely as result of this method of price discovery. In addition, the time and energy costs of this form of price discovery are rather high.

Organised, central markets shift the scene of price discovery from the farm gate to a central marketplace. All buyer and sellers, and their supplies and demands are represented in a central market. This form of price discovery generates more information than individual trading, reduces some of the costs of price discovery, and results in more uniform prices for transactions.

In some cases, prices for agricultural products may be set through bargaining. This involves collective bargaining and pricing on the part of farmers. It works best when there are few producers, production is concentrated in a small geographic area, and with products that can be stored or withheld from the market.

In summary, prices are signals that influence and co-ordinate the decisions and activities of producers and consumer and marketing middlemen. Prices are the result of supply and demand forces operating in a free competitive marketplace. Prices tend to return to the supply and demand equilibrium price when disturbed. In the short run, agricultural products tend to have an inelastic demand coupled with an inelastic supply. This results in highly variable farm prices and incomes. The highly competitive nature of agriculture results in a constant cost price squeeze for farmers. Discovering equilibrium prices for agricultural products is a difficult task for farmers and market middlemen.

Note: it is realised that this material is in parts rather technical and academic, it is intended that trainers will adapt this information and translate it into terms that farmers understand, since much of it describes reasons for things that farmers observe and/or a seeking answers for.

I. Market Analysis

Given it's wide range of climatic zones and abundant resources, Swaziland is capable of producing a wide range of vegetable products on a year round basis. Especially in the winter month's it's location and climate give producers a comparative advantage in the production of certain horticultural crops. It has long been realised, however that Swaziland's consumer base is inadequate to absorb it's

capacity for horticultural production and that for the industry to thrive marketing connections would have to be established with the larger regional markets, particularly in the Republic of South Africa. This section is an attempt to quantify the potential which exists for Swazi products.

1. Regional Markets

The Republic of South Africa represents by far the greatest regional market for Swaziland's horticultural production. This is due to relative proximity of Swaziland to large urban areas, 250 km to Johannesburg - Pretoria, 450 km to Durban, excellent road connections to these centres, and Swaziland climatic advantage particularly in the winter months. Three of the four largest regional fresh produce markets, Johannesburg, Pretoria, and Durban, handled in excess of 1,200,000 metric tons of vegetables in the year ending June 1989. This had a value of over 570,000,000 Rand.

Using Johannesburg National Fresh Produce Market as a guide, the major commodities traded in order of importance were:

<u>Item</u>	<u>Value</u>	<u>Mass</u>	<u>Av. Price/MT</u>
potatoes	R61,955,000	181,000 MT	R 342.00
tomatoes	R58,384,000	84,500 MT	R 690.00
onions	R13,768,000	34,750 MT	R 396.00
cabbage	R 5,071,000	37,000 MT	R 137.00
carrots	R 4,726,000	14,500 MT	R 325.00
beans	R 4,600,000	4,400 MT	R1,039.00
lettuce	R 4,054,000	9,900 MT	R 409.00
pumpkin	R 3,033,000	10,133 MT	R 299.00
gem squash	R 2,828,000	7,900 MT	R 357.00
swt. potatoes	R 2,504,000	8,740 MT	R 287.00
beetroot	R 2,141,000	8,400 MT	R 253.00
cauliflower	R 1,619,000	5,300 MT	R 304.00
other	R35,019,000	54,042 MT	R 648.00

Note: figures presented are from Johannesburg Fresh Produce Market for the year ending June 1989.

Although, these figures are a bit dated, they do yield some interesting information. Although onions and potatoes are traded in large volumes, Swaziland has little hope of competing in these markets due to several factors. These include a well developed infrastructure for the long term storage of these crops, inability of Swaziland to produce long day onion varieties which have good storage potential, and fairly stable low prices on the market which when transportation is taken into account on these bulky items makes Swaziland less than competitive in these products. With some of the other major crops, cabbages, beetroot, sweet potatoes, low average prices again makes Swaziland uncompetitive when transportation is considered. With lettuce and cauliflower, relatively low average prices and the need for refrigerated

facilities for the handling and transport of these items makes it unlikely that Swazi farmers will penetrate these markets readily.

Two areas, however show good promise for Swazi products, these are tomatoes and the range of other miscellaneous vegetables. It can be seen from the data presented above that these are high value items, with average annual prices in excess of R600 per metric ton. This will allow Swaziland to be competitive in these lines despite the relatively high price of packaging and transportation from Swaziland. This is particularly true during the winter season when prices tend to be higher than the annual average and the inability of other areas to produce gives Swazi farmers a strong competitive edge. This is also true for pumpkins and gem squash to a certain extent, that during the winter season when higher than average prices and climatic advantage allows Swaziland to be a competitor in the market.

Tomatoes are particularly attractive because they are traded in very large quantities (over 1500 metric tons per week in Johannesburg alone). This volume makes it unlikely that scheduled production and export of tomatoes by CAPM farmers to South Africa would affect market prices, since they would be unlikely to produce even 10 % of the volume of tomato traded on a weekly basis. This large demand for tomatoes also provides Swazi farmers with a volume line around which to base an export program. The "other" line which includes: green peppers, chillies, sweet corn, butternuts, baby marrows, and others including specialty items, such as baby vegetables, demonstrate favourable average annual prices and become extremely interesting during the winter season when prices rise well above average and climatic conditions again give Swaziland a competitive advantage. These "other" crops share with pumpkins and gem squash, the characteristic that they are traded in relatively small volumes (200 metric tons per week for pumpkins and much less for other products). This low volume makes it difficult for Swaziland to produce and export these crops in volume without negatively affecting the market price. These crops however, do present the possibility for shipping mixed loads to South Africa, particularly during the winter "market window". Despite the restriction on large volume market potential, these minor crops provide the marketing program an opportunity for diversification and are particularly suited for the smaller growers, who are incapable of producing large volumes in any event. Some these minor crops are also suited to the smaller grower since they require intensive management.

Discussions with buyers in the various regional markets tend to confirm the above observations. Conversations with agents in Johannesburg, Pretoria, and Durban, indicate good potential for baby marrows, brinjals, butternut squash, chillies, gem squash, green beans, green peppers, pumpkins, sweet corn and tomatoes, during the winter season. The strategy that suggests itself is to ship large volumes of tomatoes with mixed lots of the smaller volume crops to round out the loads.

It must be noted that the feeling amongst many of the farmers, is that financing for the necessary packaging and transportation is beyond their capability. This might be an area in which the project can assist in small test shipments of mixed loads to commission agents or wholesale buyers. This would demonstrate to the

growers the feasibility and profitability of such arrangements, while providing them with documentation with which to seek the necessary financing from commercial sources. At the same time, they could pursue arrangements with the Indian speculators from Durban for movement of large volumes of tomato. One buyer has indicated that he would be capable of absorbing 2500 20 kilo lug boxes per week each of both salad and plum type tomatoes. This would provide an outlet for large volumes of product, thus relieving some of the pressure from the growers for markets and introducing them to a commercial production and marketing situation. At the same time it would be desirable to pursue alternative arrangements so that in the future the growers would not be dependant on a few market speculators.

J. Fresh Market Tomato Analysis

In terms of quantity and value, fresh market tomatoes are the second most widely traded vegetable commodity in the Johannesburg National Produce Market. Some 84,554 metric tons of tomatoes, valued at R58,384,890, were sold through the market for the year ending in June 1989. Over the 5 year period from 1984 - 1989, the highest average price was R690.50/MT or R4.42/6.5 kg box for the year ending June 1989. The lowest average price was R384.07/MT or R2.46 / 6.5 kg box, for the year ending June 1986. over the entire five year period, the average price for fresh market tomatoes was R540.87/ MT or R3.79/6.5 kg box.

Clearly, based on the calculated break even price per box of R5.50, the average yearly price for fresh market tomatoes would not allow the profitable movement of Swazi product into the South African market. This picture, however, changes when the variation in price through out the year is examined. Analysis of price trends within a particular year, indicates that the highest prices tend to occur from May through November. The average price per 6.5 kg box for this period, in the year ending in June 1989, was R6.54 per box, in the Johannesburg National Produce Market. Similar analysis of fresh market tomato prices, For the Durban and Pretoria Fresh Produce Markets, for the years 1992, and 1993, reveals a similar trend, with the price per box averaging well above R5.50 for the months of May through November.

It should be noted, however, that daily price per box ranged between R3.96 and R3.20 during the period. This wide fluctuation, which is typical of perishable vegetable products, must be considered since it will pose a problem for the proposed farmer marketing organisations, in that an equitable method of payment to growers will have to be derived, to prevent contention among members arising from price differences over relatively short periods of time. It must also be noted that the data available for analysis covers only one to two years, and that even within the period represented, price averages for several months is based on only a few days price information. Therefore, while suggesting trends, the data presented is far from complete and would ideally be drawn from a longer time period, i.e.: 5 years, for the target markets. It is suggested, that this data be collected and analysed by the CAPM team, and systems developed to continue orderly and routine analysis and retrieval of market price information for relevant markets. (See attached graphs - appendix 1)

Based on available data and various other reports, there appears to be a market window for Swazi fresh market tomatoes, during the months of May - November in the regional South African produce markets, i.e. Durban, Johannesburg, and Pretoria. The daily price per box is volatile but the average price R6.54 / box, over the period May - November, is adequate to cover the cost of production and marketing while allowing the producer a reasonable return for his efforts. In addition, to a favourable price analysis for Swazi fresh market tomatoes during the market window in South Africa, the large volume of tomato traded on the South African market, some 1620 MT per week in the Johannesburg market alone, makes it unlikely that the quantities of tomatoes available from Swaziland will impact on tomato prices in the major South African markets. The production planned by the CAPM project farmers will be in the range of 40 - 60 MT per week. This will be far below a 10% market share, therefore it is unlikely that this volume will affect market prices by causing sudden gluts of supply in the market place. This would be particularly true if the projected tomato production is traded in two or three of the top South African markets.

FRESH MARKET TOMATO-JOHANNESBURG

Production cost/ box (Based on 24 mt/ha)	E0.98	E1.19
Transport - field/p house	E0.25	
Box - 6,4 kg	E1.94	
Labour	E0.05	E0.10
Subtotal	<u>E3.22</u>	<u>E3.48</u>
Association's operating fee 15%	E0.48	E0.75
Transport - p house/jo-burg	E0.75	E0.85
Subtotal	<u>E4.45</u>	<u>E5.08</u>
Market price to break even	R5.10	R5.85

Note: using the cost figures above it will be necessary for a sales price of approximately R5.10 and R6.85 to accommodate the 12.5% commission for the commission broker in johannesburg. It is also important to note that using these numbers, the return to the farmer will be only his cost of production or E0.14- E0.17/kg.

ANALYSIS OF MARKET PRICE TO GROWERS NET RETURN

<u>MARKET PRICE</u>	<u>NET RETURN TO GROWER</u>	
<u>E./6.5 KG BOX</u>	<u>R/6.5 KG BOX</u>	<u>E./ KG</u>
R5.10	E0.01/BOX	E0.00/KG
R5.20	E0.10/BOX	E0.01/K
R5.30	E0.18/BOX	E0.03/KG
R5.40	E0.27/BOX	E0.04/KG
R5.50	E0.36/BOX	E0.06/KG
R5.75	E0.58/BOX	E0.09/KG
R6.00	E0.80/BOX	E0.12/KG
R6.25	E1.02/BOX	E0.16/KG
R6.50	E1.23/BOX	E0.19/KG
R6.75	E1.46/BOX	E0.22/KG
R7.00	E1.67/BOX	E0.26/KG
R7.25	E1.89/BOX	E0.30/KG
R7.50	E2.11/BOX	E0.33/KG
R7.75	E2.18/BOX	E0.31/KG
R8.00	E2.55/BOX	E0.40/KG
R10.00	E4.30/BOX	E0.67/KG
R12.50	E6.58/BOX	E1.01/KG
R15.00	E8.68/BOX	E1.36/KG

Note: net return is calculated by subtracting agents commission (12.5%) and fixed cost of landing box in marke

FRESH MARKET TOMATO-DURBAN

Production cost/ box (Based on 24 mt/ha)	E0.98	E1.19
Transport - field/p house	E0.25	
Box - 6.5 kg	E1.94	
Labour	E0.05	E0.10
Subtotal	<u>E3.22</u>	<u>E3.48</u>
Association operating fee 15%	E0.48	E0.75
Transport - p house/durban	E0.90	E1.00
Subtotal	<u>E4.60</u>	<u>E5.23</u>
Market price to break even	R5.25	R6.00

Note: using the cost figures above it will be necessary for a sales price of approximately R5.25 and R6.00 to accommodate the 12.5% commission for the commission broker in durban. It is also important to note that using these numbers, the return to the farmer will be only his cost of production or E0.14-E0.17/kg.

ANALYSIS OF MARKET PRICE TO GROWERS NET RETURN

MARKET PRICE R/6.5 KG BOX	NET RETURN TO GROWER	
	E./6.5 KG BOX	E./ KG
R5.25	E0.00/BOX	E0.00/KG
R5.30	E0.04/BOX	>E0.01/KG
R5.40	E0.13/BOX	E0.02/KG
R5.50	E0.21/BOX	E0.03/KG
R5.75	E0.43/BOX	E0.06/KG
R6.00	E0.65/BOX	E0.09/KG
R6.25	E0.87/BOX	E0.12/KG
R6.50	E1.08/BOX	E0.15/KG
R6.75	E1.30/BOX	E0.18/KG
R7.00	E1.52/BOX	E0.22/KG
R7.25	E1.74/BOX	E0.24/KG
R7.50	E1.96/BOX	E0.28/KG
R7.75	E2.18/BOX	E0.31/KG
R8.00	E2.40/BOX	E0.34/KG
R10.00	E4.15/BOX	E0.59/KG
R12.50	E6.34/BOX	E0.90/KG
R15.00	E8.52/BOX	E1.22/KG

Note: net return is calculated by subtracting agents commission (12.5%) and fixed cost of landing box in market.

2. Market Exploration tour- January 17 -19, 1994 Pretoria, Johannesburg, Durban

On January 17, 18, and 19, an exploratory tour of the Pretoria, Johannesburg, and Durban National Fresh Produce Markets was organised to introduce farmer organisation representatives to these important regional markets. Four farmer representatives were chosen by their respective groups to go on the trip. These were: Simon Mhlabane, chairman of the Mkhovu Packhouse Association, located in the Northern Hhohho District, Patrick Dlamini, Chairman of the newly forming Siphofaneni Vegetable Growers Association, Vincent Mamba, representing the farmers of the Sithobela area, and Solomon Magagula, Chairman of the Vuvulane Irrigated Farmers Association. The CAPM team was represented by Timothy Dlamini, Doyle Grenoble, Gene Mc Avoy, and Dumile Sithole.

The justification for the trip was several fold:

- To expose farmers to the different vegetable products, which could be produced in Swaziland, being traded on the various markets,
- To introduce farmers to the standards of quality and packaging required to be competitive in the South African regional markets

- To explore the various forms of marketing arrangements that commonly exist in the fresh produce trade
- To introduce farmers to several of the buyers operating in the markets visited, and
- Most importantly, to involve the farmers from the onset, in the entire decision making process, by examining the pros and cons of the possible ways of penetrating the local and regional markets.

In Pretoria, the group walked the floor of the fresh produce market and were able to observe the different vegetable crops being traded. The diversity of produce seen literally covered the alphabet from A - Z. Important items with good potential for Swazi growers included: baby marrows (zucchini, yellow crook-neck and similar summer squashes), brinjals (eggplants), butternut squash, chilli peppers, cucumbers, garlic, gem (acorn) squash, green beans, green peppers, hubbard and marrow squashes (winter squashes), pumpkins (winter squashes), sweet corn, and tomatoes (both salad and plum types). Fruits with potential include: mango, papaya, and strawberry. In addition, to the diversity and relative volumes of produce traded on the floor, it was also possible to observe the quality, packaging and presentation of produce necessary to be competitive in the market.

While in Pretoria, the group met with Mr. Joe Vermeullen, of Gastaldi Brothers, a wholesale buyer which operates in the Pretoria National Fresh Produce Market and also on the floor of the Johannesburg (City Deep) National Fresh Produce Market and the Swaziland Fresh Produce Market at Nokwane. Mr. Vermuellen expressed interest in working with Swazi farmers, particularly in the winter months. He indicated several items of interest and the relative amounts that his firm traded on a weekly basis. These included baby marrows (300 boxes / week), brinjals (100 pockets / week), butternuts (500 pockets / week), cucumbers (200 pockets / week), gem squash, green beans (300 boxes/ week), green peppers (500 boxes / week), tomatoes (both salad and plum), and sweet corn (500 boxes/ week). He expressed the importance of quality, packaging, and uniformity, in order to be competitive in the market. Mr. Vermuellen explained that Gastaldi purchased the produce from the growers, unlike a commission agent, who merely brokers the produce for a percentage of sale price. He indicated that he would require extension of approximately a week's credit, before payment was made for produce delivered. It was suggested that pre-packaging of produce into consumer packs ready for delivery to retail operations was of great interest in the industry and was a possible way for farmers to gain a competitive edge in the market. Mr. Vermuellen indicated that negotiations for any sales in Swaziland would have to be discussed with the Gastaldi Brothers operation at Nokwane Market.

In Johannesburg, the group visited the Johannesburg (City Deep) National Fresh Produce Market, the largest regional produce market in the Republic of South Africa, with Pretoria, ranking second and Durban, being the third largest. Once again, the farmers had the opportunity to walk the floor and observe the different types and quantities of produce being traded, as well as the quality, packaging, and presentation of the various vegetable lines. It was quite impressive to

see the range in quality and packaging and note the fact that inferior goods were rotting on the floor for lack of buyers.

At the Johannesburg market, the group had the opportunity to visit Marco Co-op Limited, the largest vegetable producer's co-operative operating in South Africa. Marco, has approximately 600 members and occupies a large portion of one of the six vast halls which comprise the Johannesburg Fresh Produce Market. In addition, to acting as a market agent on behalf of it's members and any other farmer who wishes to consign his produce with Marco, the coop is active in brokering transport arrangements and supplying agricultural inputs. The visit provided a vivid example of what farmers could achieve by organising themselves in a co-operative manner. At Marco, the group met with Mr. Bill Kerr, technical advisor on the agricultural inputs operation and Mr. Vito Rugani, Chairman of the Board of Directors, and Executive Director.

Mr. Kerr, formerly field trial director of Mayford Seeds, explained to the group that marketing actually begins in the field and that a good knowledge of plants was essential in producing the yields and quality required to be competitive in the market. He briefly discussed some of the better varieties of vegetable crops and led the group on a tour of Marco's agricultural supply warehouse indicating the various items available. In ending Mr. Kerr, emphasise to the farmers, the fact that buyers and consumers buy by sight and that visual appearance, packaging, and presentation were key to successful marketing of vegetables.

Vito Rugani, explained how Marco came into existence through the co-operative effort of vegetable growers who sought to improve their competitive advantage in the industry. He made several points to the farmers:

- Centralised packing operations is vital in ensuring a consistently, uniform high quality product.
- The organisation would only be successful if it had the loyal support of it's members, and this could only be assured by the organisation providing its members with better service and prices than other marketing entities.
- Marketing costs money and that the farmers must be prepared to pay for desired services.
- The need for consistency and quality to gain market recognition.

Mr. Rugani went on to explain that the market was changing and becoming more competitive with the increasing education and level of skill of growers. He indicated that market windows quickly opened and closed and that successful farmers had to be prepared to be on the market over the long run and not try for a quick buck, and they must adapt to changing market conditions and consumer tastes. Questions from the group were solicited. Mr. Rugani wished the group well in their endeavours and closed by indicating he could be available to come to Swaziland and assist the farmers in their efforts.

The visit to Johannesburg ended with visits to Woolworth's and Hyperrama's fresh produce department. Here the farmers were able to see the final stage of the marketing process, retail sale to the consumer. They were able to see and compare the different vegetable products, quality standards, presentation, and various packaging techniques. The baby vegetable line at Woolworth's met with great interest, as did some of the more unusual and exotic items.

On the third day the group travelled to the Durban Fresh Produce Market, where the observations made earlier in the trip were again re-emphasised, i.e. the need to achieve markets standards, the importance of quality and presentation. Here the group visited the trading floor and had meetings with representatives of the Model Agency, and John Bell and Kie Co. Both of these companies operate as commission agents on a consignment basis. The representatives did a good job of explaining their method of doing business. Like all other commission brokers operating in the various national produce markets, they operate on a 12 1/2 % commission, of which 7 1/2 % goes to the agent and 5 % to the market. The day after the produce is sold, which usually takes a day or two, payments to the growers are calculated and checks drawn. These are posted Mondays, Wednesdays, and Fridays or may be deposited by electronic transfer to the suppliers account. It was explained that payment for all consignment transactions which occur in the market are guaranteed by the market. Model Agency indicated that provisions could be made for cash purchases of produce, with payments being made weekly.

The group was given indications of the types and volumes of produce which could be handled. Both agencies stressed the need for quality and consistency, and both indicated they would be able to assist in the procurement of packaging material and transportation.

The last visit of the tour was with Suren Bisnath of B. L. Boodhoo and Sons, an Indian speculator, who operates near the market in the Durban suburb of Clairwood. Some of the local marketing firms, which were included in the CAPM project, have done business with Boodhoo and Sons in previous seasons under the CAPM project. Like all market speculators, Boodhoo buys from the farmers on a cash basis. Unlike many others this firm renders payment in the form of a bank guaranteed check on the time of pick up of the product. Post harvest handling of the product entails rudimentary grading and minimal bulk packing into lug boxes. The arrangement is attractive to the farmers since they have little financial outlay in the marketing of the crop and the buyer assumes most of the risk. Discussions with Mr. Bisnath centred mainly around ways of improving the previous year's operations and expanding the number and volume of crops handled by B. L. Boodhoo and Sons. Mr. Bisnath expressed interest in obtaining 2500 lug boxes per week of both salad and jam type tomatoes, as well as, expanding into sweet peppers, butternut squash, and possibly garlic and chilli peppers. He also stressed the need for centralised collection points and improved grading and quality control. It was also indicated that there might be the possibility of assisting the farmers with an older lorry for the collection of vegetables from the farm.

The tour was quite successful in meeting the objectives laid out. While many of the observations were predictable to someone experienced in the vegetable industry, the tour allowed the farmers to witness first hand many of the concepts the project has been attempting to instil in them. There is a tremendous demand for a wide range of vegetable products in the regional markets in and around Swaziland. High quality, proper packaging and consistency needed to be competitive on the market. The ultimate consumer purchases produce based on visual appeal and guided by this the market sets the standards required for vegetable products to be profitably marketed. The group was able to speak with and compare the advantages and disadvantages of the different market agents; the wholesale buyer, the commission agent, and the speculative middleman. The movement of produce was tracked through the marketing process to the point of retail sale. Many of the buyers indicated that one of the major obstacles to marketing produce from Swaziland in the South African regional markets would be transport, some offered assistance in this regard, while others suggested that the farmers attempt to identify possibilities for back haul arrangements with empty trucks returning to South Africa.

Discussions with the group on return to Swaziland, revealed that they saw tremendous possibilities for large volume sale of Swazi produce, if they produced high quality vegetables. graded and packaged them properly to ensure a consistent, quality package with good visual appeal, and arranged for transport to target markets. Several members expressed reservation about their organisation's financial ability to secure adequate packaging and transportation. They felt that they would have to rely heavily on speculators initially. Since with this marketing arrangement, the buyer would purchase the product in bulk in Swaziland, would arrange his own transport, and assume most of the risk, thus limiting the farmers exposure.

The CAPM team discussed the possibility of assisting the farmer's organisations with test shipments to wholesale and commission agents in the regional markets. This would consist of pick - up truck size loads of a small range of items, properly graded and packaged, to test the feasibility of using this other market channels in the future. It would also begin to expose the growers to the potential advantages and disadvantages of alternative marketing arrangements in a low cost - low risk manner.

MAIN VEGETABLE CROPS CONSIGNED THROUGH NAMBOARD-1992

<u>Crop</u>	<u>Total volume</u>	<u>% Swazi origin</u>
Potatoes	4,876 mt	12.6%
Onions	2,300 mt	1.0%
Cabbages	1,785 mt	45.7%
Tomatoes	334 mt	7.7%
Carrots	278 mt	2.3%
Beetroot	152 mt	0.9%
Butternuts	90 mt	4.0%
Cauliflower	67 mt	>.1%
Lettuce	50 mt	1.4%

Pumpkins	48 mt	1.8%
S. Potatoes	29 mt	0.0
Beans	25 mt	1.0%
Other Vegetables	131 mt	2.9%

* Information presented above is from Nokwane Market, data supplied by NAMBOARD

3. Local Market Prospects for Vegetables

Data supplied by NAMBOARD indicates that for the top 12 crops traded in 1992, Swazi farmers produced less than 50% of any particular crop traded. This situation becomes even more dramatic, when it is realised that for 10 of the 12 crops less than 10% of the volume traded was produced locally, and for over half the vegetables listed only 1-2% of the total traded was derived from local production. It would seem that this situation would present the opportunity for an increase in vegetable production for local consumption, particularly for smaller growers, who would be better suited to produce the limited quantities that the local market requires.

When one examines onions, the second most traded vegetable crop on the local market, with a volume of some 2,300 metric tons sold at the Nokwane Market in 1992, there seems to be no reason why a much greater local production should not be encouraged. Over the 5 year period, from 1989 - 1992, the lowest price reported for this item was around E4.50 per 10 kg pocket. The price averaged between E6 -8.00 per pocket and in 1992 reached prices of over E12.00 per pocket for several months in the winter season. When market price is contrasted with the cost of production of around E3.00/ pocket delivered to market, there is no period during the last 5 years that local onion production would not have been profitable.

Although a detailed price versus cost analysis over time has not been done for the other major crops on the local market, the figures presented above indicate an opportunity for Swazi vegetable growers to achieve a greater share of the local market. With all the major locally traded items, except cabbage, local growers supply only between 0 - 12 percent of the crops consumed in Swaziland. Even with cabbage, they still do not produce 50 percent of the quantity consumed.

Given the reluctance that local traders have to sever their ties with their South African suppliers, it may be necessary for growers to approach NAMBOARD with a detailed plan of action, so that the necessary steps may be taken to limit onion and other imports into Swaziland. Growers themselves may also take actions which improve their competitive on the local market. Programmed production to assure buyers of consistent supply and to avoid periodic gluts and shortages is one necessary measure. Consistent availability, combined with centralised assembly of a select range of products at an easily accessible packing shed will serve to attract vendors and traders, as well as institutional buyers. Realisation that the Swazi consume and local market is more sophisticated than it is given credit for, should lead growers to strive for higher, more uniform quality standards. This knowledge would also

suggest improvements in packaging and standard packs. The local supermarket industry and even the local town vegetable markets seems to be moving toward pre - packs of a wide range of vegetable products growers would be wise to take note and provide this service in attempting to achieve greater penetration and acceptance on the local market.

Another area where growers must become more aware is in their costs of production. All too often, growers are heard grumbling about local prices, when upon analysis they are making 50 -100 percent above production costs at the perceived low price. Cost of production versus price awareness would permit growers to devote more time to productive activities than expending energy on things that they can not influence greatly and are not actually too bad if considered rationally. Continued training efforts in this area are recommended.

Development and increased penetration of the local market for Swazi vegetable products would also tie in with an export thrust in the misc. crop line since it would allow greater flexibility in marketing by allowing movement of product between the two markets as conditions dictate.

K. Summary

In order for Swazi vegetable farmers to become commercial vegetable producers, they must expand their penetration and share of both local and regional markets. Led by South Africa, both markets are increasingly sophisticated and require a consistent supply of high quality vegetables. In regional markets, Swaziland's competitive advantage appears to be in winter production of tomatoes and a wide range miscellaneous crops. Tomatoes will provide a high volume line to lead the export program, with mixed lots of misc. crops (green peppers, sweet corn, butternuts, pumpkins etc.) filling the loads. Exploration of ways to reduce transportation and packaging costs will increase Swaziland's competitive position in the regional markets. Backhaul arrangements and bulk importation of lower cost packaging materials are possibilities.

Development of regional markets needs to be tied to increased penetration and market share of local market possibilities. This strategy will reduce risk by giving greater flexibility to a marketing program and reducing dependency on one crop or market. This approach will also provide greater year round through put for a pack shed operation and provide a wider, more stable economic base to a farmer's organisation.

Success in both local and regional markets is dependent on consistent production of high quality products, attractively packaged according to market dictates. The initial program will probably rely heavily on marketing arrangements with Indian speculators, with alternative arrangements in regional centres being explored with project assistance. Programmed production and expansion in local markets will be explored simultaneously.

Since marketing arrangements will be dependent on the organisation and formation of functional farmer groups a great deal of emphasis must be placed on the timely organisation and training of farmers to prepare them for the task ahead.

L. Marketing Activities

During 1976 when I was PRO for the Durban Market the Pongola area was our main supplier of tomatoes and we supplied other retail markets like Port Shepstone, Isipingo, Verulam, Stanger and the "Squatters" market in Durban.

An Additional market, specially created for the small scale farmer, called the Farmers Market, operated three days a week on the Durban Market premises. Here the farmer could sell his own produce to the public - mostly herbs, spices, and jam tomatoes.

The jam tomato is an essential ingredient of curry dishes made famous in Natal by its' large Asian population.

The juicier the tomato the better for the curry, consequently the Roma variety is preferred to the Nema.

The speculators traveled across the border at Golela into Swaziland where they bought crops of tomatoes directly from the farmers at a very cheap price and then resold the tomatoes directly to informal markets and street vendors at a substantial profit, but still at a lesser price than the graded rounds.

The arrangement suited the small time farmer very well because he had no transport, no packaging material and no communication to establish what current prices and market trends were. The speculators thrived on supplying the farmers with misinformation regarding marketing trends.

The Government of Swaziland, realising that the country needed a wholesale market sent a delegation led by the Executive Secretary, Mr. Patrick K. Lukhele to the Johannesburg National Fresh Produce Market, where co-incidentally I had now become the Senior Assistant Director. I also allotted the task of conducting the Swazi delegation through the Johannesburg market. The Swaziland Fresh Produce Market was born in 1987 but unlike the South African system of consignment sales by commission agents, Encabeni market allows it's agents to act as wholesalers. Towards the end of 1989 another roll player entered the marketing arena.

The Commercial Agricultural Production and Marketing Project (CAPM), backed by a grant agreement between the governments of the Kingdom of Swaziland and the United States of America and managed by Chemonics International, the project first aimed at creating a conducive environment within the public and private sectors for the development of agriculture.

The project was redirected in December 1991 to focus directly on assisting small scale farmers to produce horticultural products.

I joined the CAPM Project in September 1994 when the project was already three years in operation.

Pack sheds were operating at Siphofaneni and Hhohho - interim committees were in place and produce was being harvested but the season was almost over.

Being mostly subsistence farmers maize would be the crop planted for summer season.

K. Identifying Markets

My contract as Marketing Expert was from September 1994 until November 1995 - sufficient time, according to my estimation to organise and establish markets and trade links.

I reasoned that the crops were planted, the pack sheds were in operation and, given the product, the marketing there of would not be a difficult task but I first had to identify the outlets.

- Local Fresh Produce Market - a market established to assist the small scale farmers.
- Regional Fresh Produce Markets - markets in South Africa in reasonable distance of Swaziland via. Nelspruit, Witbank, Pretoria, Johannesburg and Durban.
- Hotel & Catering Trade - Swaziland is a popular tourist venue, consequently it has some good hotels and restaurants.
- Wholesale and retail trade.
- Speculators (Natal & Mocambique)
- Vendors.
- Government contracts.
- Export to neighbouring countries.

M. Description of Markets

1. Local Fresh Produce Market

Encabeni Fresh Produce Market was established under the wing of the National Agricultural Marketing Board (NAMBOARD) which is controlled by the Government of Swaziland.

The Market is served by four market agents and was commissioned specifically to assist the smaller farmers of Swaziland to market locally produced fresh produce.

The market agents can either act as wholesalers and buy the produce from the farmer and resell it at the market at a profit to themselves, or sell the produce at the market on a commission basis.

2. Regional Fresh Produce Market.

They are situated in South Africa and each market is owned by the local authority of that city/town.

All produce sold at the markets are received on a consignment basis and sold by the agencies on a commission basis.

The transactions are in cash and the farmer has by law to be paid out within 15 days of the consignment being sold.

The market agents may not function without a trust fund being established and registered with market authority.

Market authority collects all payments, processes accounts and after deductions, authorises the relevant agency to pay out the farmer.

Marketing expenses to the farmer are as follows:

- 5% market admin. Costs
- 7.5% agency commission

Additional expenses to be taken into consideration are:

- transport costs
- packaging costs - produce sent to SA markets has to be packed in prescribed standard packaging material.

The produce remains the property of the farmer until it is sold - any losses through deterioration is born by the producer - unless the agency has been negligent in which case the market authority will compel the agency to pay the farmer.

Consignment control is done by market authority from the time that the produce enters the market gates until it leaves. Any variation from standard procedures, low prices, damage or loss has to be accounted for by the agent to market authority who determines compensation.

Prices are daily determined by the market agents and is based on historical data combined with the current supply and demand ratio.

Point of sale data is also fed into a common data base and the 15 national markets and any other interested parties can virtually obtain prices as sales are taking place.

Some factors which influence the prices in a positive way:

- shortage of product at the market (drought, inclement weather, strikes, political climate, mechanical breakdown of transport etc.)

holiday season, big sport events

Some factors that influence the prices in a negative way:

- producers sending part consignments to the market and selling part consignment to a customer who normally buys at the market (usually at a reduced price)
- an over supply of low quality produce
- an over production of a specific product

Other short term factors influencing a particular consignment:

- time of transportation
- duration of transportation
- day of the week
- attractive packaging
- quality

3. Speculators.

Traditionally, one of the oldest and important marketing outlets in Swaziland for the local farmers and the one outlet that will probably survive ad infinitum. Selling to the speculator has many advantages for the producer:

- the price agreed upon, is the price paid i.e. there is no hidden charges
- payment is made in cash
- no bank commission or charges to be paid by the farmer
- produce is collected on the farm, consequently no transport charges are involved i.e. from the farm to the pack shed and from the pack shed to other markets.
- the speculators provide their own plastic crates so no packaging charges are involved for the producer.
- often times the speculator harvests the crop with his own labour, thereby saving the farmer from hiring casual labour.
- The speculator also moves the product in bulk

The speculator has a thorough knowledge of marketing trends and prices and feeds the uniformed farmer with mis-information thereby paying pitifully low prices for the produce they buy.

Making huge profits is the name of the game that is played by the speculator, and they become totally unscrupulous in their business dealing - cash payments is the one form of guarantee that a producer can utilise.

4. Vendors.

Mbabane, Mhlanya, Manzini and Hlangano all have retail markets where hawkers sell their fresh produce. Vendors also establish informal selling points at busy parts in towns and along main roads. They are a very important link in the marketing chain as they buy up the lesser quality - which would otherwise be unsold - either from Encabeni FP Market or directly from the pack sheds. The farmer is not involved in any transport costs and the transactions in cash.

5. Catering Trade.

The tourists trade in Swaziland is indeed a thriving industry, and apart from the many hotels which cater for the tourists, there are also many good restaurants.

Some of the hotels occasionally buy directly from the producer but the inconsistency of supplies and the indifferent quality of the product motivates them to buy from wholesalers who are able to obtain consistent quality produce from across the border.

Midway Wholesalers at Ezuluweni is the local wholesaler who has a firm hold on the catering trade and apart from sending produce weekly to regional markets in South Africa, they are also able to obtain produce which is in short supply in Swaziland for the caterers.

Produce from Hectorspruit (RSA) is another main supplier to the catering trade.

6. Government Contracts.

For prisons, hospitals and government institutions are supplied directly from Encabeni.

7. Export Trade.

A potential lucrative trade is busy building up from the Mocambique side and Nelspruit FP Market is getting most of the trade. Large cold stores are in the process of being built at Hectorspruit and a wholesaler at Komatipoort is also gearing up by extending his premises.

Encabeni gets an off-spin of the business but then it is mainly potatoes which is imported from the RSA.

Swaziland, being closer to Maputo, the main town of Mozambique could eventually realise the full potential of the fresh produce trade from that country, but irregularities at the border posts need to be addressed.

8. Other Pack sheds (RSA).

The Checkers - Shoprite group of companies are supplied with fresh produce from pack sheds close to Swaziland. Prodcure at Hectorspruit buys up supplies from producers at market related prices and after grading and packing sends the bulk to Gauteng for distribution.

Prodcure also markets fair quantities of pre-packed produce to supermarkets in Swaziland - notably Spar and Score.

Freshmark (the main company of Prodcure) also have pack sheds at Badplaas and Whiteriver.

A ready market awaits the producer who can send produce to these pack sheds.

9. Market Data and Price Information.

Swaziland, due to its close proximity to South Africa shares many similarities with that country with regards to Agriculture, e.g. weather, soil, climatic conditions, monetary values, to name but a few.

South Africa however is a vast country and has a population of 43 million people compared to Swaziland's 900,000 inhabitants, but one can safely assume that the market forces affecting the South African fresh produce industry will have a similar effect on the Swazi scene.

The SA markets operate on a free market system and although each market is owned by a specific local authority, the markets do not enjoy any protection or special privileges from legislation.

Each market - through its agents and own initiative - has to attract produce from the farmers on a consignment basis and custom from the fresh produce industry, creating the supply and demand ratio from which prices are determined as described earlier in the report.

One of the strong points of this system is that it is completely transparent and farmers in the remotest areas are still able to assess marketing trends and current prices.

- Prices are obtainable from each market individually by fax or phone
- Prices and marketing trends are published daily in the press
- Daily prices and marketing trends are broadcast after the noon news radio broadcast

- Johannesburg market assimilates prices from all 15 national markets throughout the country, summarises and then disseminates this data to interested parties
- Data is assimilated in a central computer and interested parties with PC's can log into the very latest trends and parties
- Data is fed into the computer at the point of sale

Johannesburg market, being the biggest market in the country, with a turnover of R880 million is generally considered to be the price barometer of the country and it was therefore essential to receive price print outs on a weekly basis.

Gastaldi (agency at Encabeni) and Lowveld Market Agents (Nelspruit FP Market) base their price determination on Pretoria market prices.

The better marketing days being Tuesdays and Thursdays faxed prices were arranged for those days. The Natal speculators had knowledge of the Durban Market prices, consequently data was also obtained from that source in order to form a more realistic picture.

In stark contrast to the South African markets, Encabeni was not properly geared to disseminate information in a timely manner and it is expected that the new computer system will improve the situation.

Contact persons at the various markets are as follows:

- Johannesburg	0711 613-2049	Monique van Jaarsveld
- Pretoria	0712 326-0972	Erika
- Durban	0731 465-4222	Peter Wilke

Information is supplied to Beltel by all the markets, the latter processing the data and making it available through computer.

N. Development of Strategies

Having identified various markets it now became necessary to develop a plan to service them and as there were two pack sheds in operation slightly differing strategies had to be planned.

Both pack sheds had sorting machines and it was planned that co-op member harvest their tomatoes and deliver it to the pack shed. The tomatoes would be sorted into different grades, sizes and colour.

Lack of transportation was a big problem for the farmer, not only from the farm to the pack shed but also from latter to the markets.

Namboard contracted to provide transportation at an economic tariff - but, produce would only be delivered to Encabeni and to no other customer.

Encabeni Fresh Produce Market is the only wholesale market in Swaziland and was specifically commissioned to benefit the small farmer, obviously with CAPM's connection with the grower's organizations the first priority would have to be Encabeni.

The strategy for KK because of its central situation would be as follows:

- Good quality produce would be sent to Encabeni FP market twice per week. The product would be sold to the Agent and only if the agency is reluctant to buy, a consignment delivery would be implemented.
- Verbal agreements would be negotiated with the Durban based speculators to buy supplies from the pack sheds and not from the farms. This would be mostly unsorted tomatoes and not necessarily the best quality.
- Vendors would be encouraged to buy from the pack sheds.
- Arrangements were made with Protea Market Agents, Pretoria to receive produce on consignment basis.
- Similar arrangements were concluded with Dapper Agency, Johannesburg.
- Peter & Co., Market Agency, Durban also agreed to receive consignments of produce.
- Midway Wholesaler agreed to receive a weekly delivery and pay cash - (catering trade)
- Bellamy Farm also placed a weekly order and pay fortnightly.
- Gastaldi from Encabeni had a contract with OK Bazaars and he also supplied the Spar shops with pre-packs (bubble packs). There was no sense in supplying both Gastaldi and his customers unless he did not service his customers properly.

I would monitor the situation very carefully.

The marketing strategy for HFV would be slightly different because they were situated closer to the RSA border in the North of Swaziland and had some excellent marketing opportunities in the close proximity to the pack shed.

The pack shed was also situated on a dirt road and almost impossible for heavy vehicles to reach it in wet weather.

HFV farmers also produced more round tomatoes than processing tomatoes.

A fully loaded vehicle would also take approximately 2 hours to travel between Hhohho and Encabeni.

Prior to me taking up my assignment at CAPM I met with Dr. Johan van Deventer, Business Development Manager of Freshmark and a top fresh produce marketing man. He encouraged me to supply their pack shed at Hectorspruit (Prodcure Lowveld (Pty.) Ltd.) as it was only 42 kilometres away from Hhohho, and in so doing I would have an immediate entree into Checkers - Shoprite supermarkets throughout South Africa.

The marketing strategy for HFV would then be as follows:

- Good quality produce would be sent to Encabeni FP Market at least twice a week. The produce would be sold to the agent and only if the agency was reluctant to buy, would a consignment delivery be considered.
- Good quality bulk supplies of Floradade tomatoes would be marketed through Hectorspruit.
- Lowveld Market Agents at Nelspruit were keen to sell HFV produce which should be delivered at least twice per week..
- Bad roads not with standing, Natal speculators verbally entered into an agreement to obtain tomatoes from HFV.
- (V)Vendors would also play a vital role in the marketing chain by buying up the lesser quality product.
- Both co-operatives would supply plastic crates to the farmers on a loan basis and,
- the latter would harvest the tomatoes in the crates and send it to the pack shed
- the pack shed would grade and market the tomatoes in plastic crates
- Speculators and vendors would have to provide their own crates in exchange
- plastic crates would be recovered from Encabeni market after the tomatoes had been
- sold
- standardised packaging would be used for South African markets

Preference to the local fresh produce market, vendors catered for, regional fresh produce markets getting a share, speculators receiving the bulk of supplies and a start made with the catering trade - I seemed to have my basis covered.

Two further opportunities presents itself but would require quite a bit of research, and they are as follows:

Mocambique signed peace treaties after their country had been ravaged by years of war. Agriculture is virtually at a standstill and speculators are crossing the borders in ever increasing numbers to convey food back from Swaziland and (mostly) from South Africa. Unfortunately the level of crime and corruption, at the border and en route is still so high that it is not viable proposition to export in quantity to Mocambique. Following reports of motorists being robbed at gun point and of families being shot, I have not pursued the market prospects in Maputo.

Most SA towns round the borders of Swaziland seem to have Saturday morning markets along the pavements on their main streets where hawkers sell fresh produce bought from local farmers and mostly from regional markets in South Africa via. Witbank, Nelspruit, Springs, etc.

Nelspruit, Barberton and Malalane hawkers sell fresh good quality products, but in towns like Carolina, Ermelo, and Piet Retief the quality is poor. This could be a good marketing opportunity especially with pre-packs, but more research is needed.

O. Agreements

In order to implement the marketing strategy it was necessary for all the roll players to conform to some basic principals which would be to the mutual benefit of all.

- Members of the co-op would only market their produce through the co-op and NOT sell off the lands.
- Vendors verbally undertook to buy only from the pack sheds
- Speculators also verbally undertook to collect from the pack sheds
- Midway Wholesalers placed a weekly order which had to be delivered
- Protea Market Agency, Pretoria agreed to receive and sell any consignments that could be sent to them
- Dapper Market Agents, Johannesburg was very keen on Nema tomatoes and agreed to accept at least one delivery per week
- Peter & Co., Durban would accept consignment on a weekly basis
- Prodcure, Hectorspruit would purchase outright, but wanted the farmers first to visit the pack shed in order that they might see the quality and sizes which would be required
- Through a series of meetings between Encabeni Market Authority, Market Agents and the two respective committees, product transportation and tariffs were arranged, marketing procedure and payments finalised, agreement reached on the handling of the plastic crates and finally the quality of product to be sent to the market.
- Bellamy Farm placed a weekly order which I presumed was for prepackaging

P. Implementation

The marketing scene was set, the product had now to be produced. Tomatoes would be the main product although Floradade was not popular with the marketing fraternity due to its quick ripening qualities which resulted in the variety having virtually no shelf life. Roma tomatoes were also asked for by the Natal Speculators in preference to the Nema variety, but the latter had become so adapted to the weather conditions in Swaziland that it made no sense to try and alter a well tried variety.

Also to be considered was that time at this stage was of the essence, considering that the Capm Project had only one growing season left!

A variety of other vegetables was also asked for, continuity of supplies was essential, and quality of product had to be enhanced.

According, a planting programme was drawn up which the field staff would try and implement and accurate records would be kept allowing pre-planned marketing.

Both committees were taken on a visit to Hectorspruit, where it soon became apparent that neither the KK nor the HFV farmers were up to the standard that was required of them to supply Prodcure. Perhaps at some future date!

1. Responsibilities of Individuals.

- The Chairman and his committee would decide on marketing strategy according to prevailing circumstances at their normal weekly meetings and the Pack shed Manager would be instructed to implement their decision
- The Pack shed Manager would contact all the roll players - farmers, buyers, agents etc. and arrange the transaction.
- The Farmers, who should ALL be fully paid-up co-op members, should without exception send their fresh produce to the pack shed for marketing.
- CAPM Advisors would assist by advising each roll player in his task and providing training courses in the various aspects of marketing. Apart from lectures audio-visual aids were also used.

2. Markets used:

- Nelspruit Fresh Produce Market unlike the other 15 Regional National Fresh Produce Markets in South Africa is privately owned but works on exactly the same principals as the other markets:
- Produce is sold on a consignment basis by registered commission market agents,
- The forces of a free marketing system - supply vs. demand - dictates the daily prices achieved by the salesmen,
- Grading, packaging, rejections and pay-outs conform to the Agricultural Acts approved by Parliament, and
- Market fees (5%) and sales commission (up to 7 1/2 %) are in line with the South African system.

Lowveld Market Agents were keen to receive the first consignments of butternuts and green peppers.

Salesmen George and Enoch were delighted with the quality sent in from Hhohho and achieved very good prices.

Payment was made when the following consignment was delivered to the market - and I hoped that deliveries could be made at the least once a week to Nelspruit as that market was much more accessible to HFV than Encabeni.

Ezrom (PS Manager of HFV) took several consignments of various vegetables to Nelspruit and became well known to the Agency. Unfortunately there was no continuity of supplies to Nelspruit but I received 'phone calls regularly

requesting consignments. NFP Market has a big Mocambique trade and is not as easily over - supplied as Encabeni.

3. Difficulties to Overcome in Marketing at NFP Market are:

- Transport from HFV to Nelspruit,
- Quality produce must be sent to compete with South African standards, tomatoes must be graded
- Standard size and shape packaging material must be used
- Graded produce must conform to certain weight limits
- The co-op (or farmer) who exports produce is required by law to register as a trader at Namboard (E15-00) and
- obtain a permit for the product, stating variety and quantity, the papers being valid for a period of one month
- A certificate declaring the product free of disease must also be obtained from Mr. Leonard Sibandze or Ms Gnabede, Permits Office at Malkerns Research Station who needs to inspect a fair sample of the product, brought in from the farming area
- delivery of cheques through the normal postal services is time consuming

All things considered Nelspruit Fresh Produce Market is the best option for HFV and by the lack of progress and other considerations affecting Encabeni Market, KK may have to look in that direction.

4. Johannesburg Fresh Produce Market.

This market is the largest market by far in the Southern Hemisphere, and the 6th largest in the world. Top class producers send to this market and the buyers are experts in their field regarding choice of quality vs. price. However a trial run of sending a consignment of produce to the market was undertaken in order to assess the viability of using Johannesburg market.

The venture turned out to be an abysmal failure due to lack of expertise but all things being equal, deliveries to far off markets can be successful.

Various points to be considered are:

- Tuesdays, Thursdays and Fridays are considered the busiest days at the market (most buyers present). Deliveries to the market on Fridays should not be undertaken.
- Check with the selected agent before dispatch that an over supply situation is not apparent at the market and ascertain the current prices.
- The market is over 400 kilometres away, consequently a reasonably big load (20 tonnes of low priced produce) must be considered to cover costs. Currently, the co-ops do not produce enough to even contemplate such quantities on a continuous basis.

- Produce should be dispatched in the cool of the night to avoid deterioration during the journey.

5. Pretoria Fresh Produce Market.

A trial consignment of tomatoes was dispatched through Gastaldi and achieved reasonable success:

- Floradade tomatoes were packed into corrugated cardboard containers,
- approximately 6.5 kilograms in weight
- unblemished, same size and color in carton,
- the carton properly labeled with name and address of consignee,
- grade and variety of contents

Floradade tomatoes unfortunately do not travel well and 30 % of the consignment was down graded as being too ripe and eventually destroyed when it remained unsold.

The following statistics are interesting:

- 200 cartons. sent which sold at R8-50 each	1700 - 00
- less 60 cartons. not sold and destroyed	510 - 00
	<hr/>
	1290 - 00

- less 5% market fees	64 - 50	
- less 7.5% agency commission	96 - 75	
- less transport 200 @ 50c per ctn.	100 - 00	
- less packaging @ R1-35 each	<u>270 - 00</u>	<u>531 - 25</u>
		728 - 75

- Average profit per carton = R3-64 per kg = 52c

Should the product have arrived at the market in a good condition and the whole consignment had been R1118 - 00 after deductions and the average profit per carton R5-91 i.e. ,86c per kg.

The shelf life of the product was not good and the distance traveled in the heat of the day was another factor which contributed to a loss in revenue.

Transportation is again a major stumbling block in using this market together with continuity of supply. A different variety of tomato is also essential.

7. Durban Fresh Produce Market.

This market is situated in excess 600 kilometres from the Swaziland border and is well supplied by highly professional farmers from the Pongola area The

Durban Speculators, our main customers for the Nema tomato service this market, and no advantage would be gained by doing our own marketing in Kwa-Zulu Natal.

8. Encabeni Fresh Produce Market.

This market, unlike the South African counterparts is under Central Government control and not under local government. Four market agencies serve the market and in 1992 when produce was scarce, they achieved a turnover of E14 million. Since that period the turnover has shown a downward trend every year and unless positive action is taken, I personally cannot see much of a future for the market.

Two systems of receiving and selling produce from farmers are in operation and is not of benefit to either the market, the farmer or end user, is conducive of fraudulent practise and price manipulation.

The co-ops however can use Namboard transport at a special low tariff to get their produce to Encabeni Market which is of tremendous assistance to them.

Quality produce is consigned to Encabeni in plastic crates and when the product is sold the crates are returned to the pack sheds.

Payments to the co-ops occur twice a month and market authority acts as arbitrator in respect of any dispute arising between the buyer and seller.

9. Deliveries.

- Namboard provides a fairly efficient service between the production area, pack shed and Encabeni market.
- Light delivery vehicles (bakkies) and one tonne trailers were provided to each co-op for farm collections, deliveries to buyers and also to markets in South Africa
- Bulk consignments to South African markets are catered for by hiring transport on a quotation basis.
- Plastic crates are mainly used for consignments to be sold in Swaziland.

The advantages of using crates are:

- they are re-useable
- well ventilated
- easily cleanable
- stackable
- sturdy constructive
- can be used as furniture!

The disadvantages are:

- stock control
- can't be sealed
- expensive

- can be used as furniture!
- corrugated cardboard containers for the marketing of tomatoes, beans, green peppers etc. are least expensive when bought from Nampac in Pinetown, Kwa Zulu, Natal. Local supplies are 54% more expensive.

Any product sold on the South African markets must be packaged in a standardised container.

- wooden boxes for tomatoes and green peppers are obtainable from Graskop and is the least expensive container.

Assembly of the boxes must be done at the pack sheds.

- plastic 1/2 pockets, full pockets and bags used for a variety of vegetables and acceptable on South African markets are obtainable from Encabeni market but less expensive when bought in bulk from South Africa.

10. Communications.

The only form of communication at KK was per radio 'phone which due to being solar powered, never worked during inclement weather. HFV was dependent on getting messages through per public telephone at a local super market.

Subsequently both pack sheds have had telephones installed and KK also has a fax machine.

Market trends and prices are faxed from South African markets on a regular basis which enables the respective managers to calculate proper prices and be more of marketing trends. Transport can be more effectively arranged and orders can be speedily accepted or confirmed.

HFV should also invest in a fax machine.

11. Linkages.

A lot of time and money was spent on taking committee members and managers to other markets and pack sheds but at the end of the day, it resulted in little success.

The manager at HFV, Ezrom was relieved of his post after building up good relationship with Nelspruit. His successor will no doubt be able to re-establish the links, should the committee so desire.

The discharge of Boniface effectively broke the links between KK and Nelspruit as the new manager never had a chance to leave the country, having no passport.

At the time of writing, a consignment of approximately 8 tonnes of mixed vegetables is due to leave for Nelspruit and this may be the start of things to come.

Linkages with van Rensburg of Prodcure (Hectorspruit) and Kieviet at Badplaas is not to my satisfaction because we have visited them often enough, enjoyed their hospitality and never reciprocated.

12. Training.

Lectures were given at both pack sheds with great difficulty as the venue was not really conducive to learning - usually under a tree with all sorts of distractions taking place. Inside the building was again unbearably hot and an interpreter had always to be used.

The Chairman at KK had no compunction about stopping a training session in mid-stride and getting on with some other business.

The use of flip charts and audio-visual apparatus invariably sparked some interest. Meetings and lectures in the Boardroom of Encabeni market tend to be more popular and successful.

Q. The roll of Encabeni Market.

Encabeni Market is the only wholesale fresh produce market in Swaziland, has been in existence for almost 10 years and is centrally situated between Mbabane and Manzini.

Unfortunately the access road is not good and the market cannot be seen from the main road, so any hope of attracting passing trade is very slight.

The Government of Swaziland established the National Marketing Board (Namboard) in November 1985 in terms of the National Marketing Board Act 1985 (Act 13 of 1985), and stands on two legs viz.:

- The regulation of the import and export of scheduled products.
- To improve a marketing outlet for local farmers and their produce.

Theoretically can be concluded that Namboard will protect the fresh forces of supply and demand to establish prices to the benefit of the farmer and consumer.

Practically the more that is imported the more Namboard makes money by 6.75% levy on imports, because a high demand and a moderate supply is neutralised the Swazi farmer gets a lower price for his product.

On occasions the imports of produce like cabbage, green peppers and tomatoes were stopped “to enable local farmers to sell their produce,” but that occurred when the country was in a state of over-production and imports had no effect on the price structure. Looking at the mission statement of the Swaziland Fresh Produce Market the first point refers to “providing an efficient and relevant infrastructure where horticultural and other products can be traded, particularly those of Swazi origin”

According to statistics which I ob obtained from Encabeni for 1994 the following percentages were ascribed to local throughput:

- Potatoes 4.7%
- Onions 3.7%
- Cabbage 61.5%
- Tomatoes 30.9%
- Carrots 29.6%
- Beetroot 7.2%
- Cauliflower 3.8%
- Lettuce 13.2%
- Pumpkin 18.2%

The grand throughput of local produce was 10.5%

The second part of the mission statement is “Establishing and maintaining efficient and cost-effective systems and methods whereby prices on the market can be negotiated ACCORDING TO SUPPLY AND DEMAND and to the benefit of both producers and consumers.

Firstly, one person by name Mariano Barajas of R. Gastaldi (market agency) dominates the price setting scene at Encabeni as neither Paul Davidson nor any of the other “salesmen “ have the expertise to be effective.

The agents have the choice of either buying the farmers produce outright and re-selling at a profit or receiving the consignment and selling it on a commission basis of 7.5%. Having exercised the first option he can choose to either sell the produce at Encabeni, directly to a buyer off-market or export to South Africa - the buying price must be low enough to cover transport costs and still make a profit. Co-op members prefer to sell outright to the agencies because they are at least assured that the product is off their hands at a certain price, whereas consignment stocks are not placed in the first line scale, many times not sold and after deterioration has set in, sold for no price at all or dumped. A problem now arises - should the farmer at the outset want a choice, (i) accept the price offered or (ii) ask the agent to sell it for him on a consignment basis. Should option (ii) be effected the agent will make sure that the produce which he owns will be offered to the buyers first and invariably the consignment stock will not be sold or eventually sold at a pittance when the fresh label has worn off.

One other practice which is plainly fraudulent is when the agent sells his own stock for a lower price than he sells the consignment stock and then changes the invoices so that he gets the higher price. I picked this up practice up on one occasion and the matter was eventually set right after a bitter argument between market authority and agent.

In south Africa the agency would have been closed down.

Consignment management by Market Agents and Market Management leaves a lot to be desired. The Market Agents do not actively canvas farmers to send produce to the market - in the event that there is a shortage of produce in Swaziland they just import more from South Africa. The higher prices for Swazi product created by shortage is thus neutralised.

There is lack of consistent and adequate supplies of good quality Swazi fresh produce reaching the market, simply because of the lack of communication between agent and farmer.

The transparency of the South African markets regarding prices and tendencies is a major publicity asset as farmers all over the country have access to the information which contains the prices paid for the farmers produce - but Encabeni Market publishes selling prices attained at the market and prices paid to the producer. The steady annual decline of the market turnover needs to be halted and both market authority and agents need to urgently adopt a more professional approach to the illnesses affecting the market.

Unfortunate part is that the problems experienced at the market affects the whole fresh produce industry and has definitely had an adverse reaction concerning KK and HFV.

For a financially viable fresh produce market industry to exist in Swaziland it is very important that a cost efficient and effective central wholesale market supports the industry.

- To my way of thinking research and implementation of the following suggestions would have a positive effect on Encabeni:
- Convert all sales onto a consignment/commission basis - the higher the price achieved by the agent the more money he earns.
- The importance of having at least two depots (preferably at border posts) must be emphasised - Mocambique trade.
- Serious consideration must be given to establishing a Co-op agency at the market or
- allocating an area where farmers could set up stalls and conduct out of hand sales of their own produce on specified days. Auction sales are time consuming and tend to encourage "price rings".
- daily contact with farmers is essential - prices, market tendencies and produce needed at the market is important information.

- Accurate farmer friendly consignment management by Market Authority and Agent must be introduced.

R. The Future.

Looking at the general picture it would seem that the goals which the CAPM Project set out to achieve, was realised.

Two farming communities had each successfully registered a co-operative society, elected committees, erected fully operational pack sheds, acquired transport, established marketing links and committees together with pack shed personnel trained in their respective duties.

1. Closer scrutiny Causes Concern.

- I have the perception that a change of attitude is needed in the farming community where subsistence farming is still firmly entrenched in the minds of the majority of farmers.
- not all the farmers making use of the co-op facilities are members of the society, consequently bona fide members are disadvantaged by having to pay membership fees.
- farmers are disloyal to the co-ops by selling quality produce off the land for cash and delivering poor quality to the pack sheds for marketing.
- poor farming practices, mainly through financial constraints results in the production of non marketable produce or,
- not enough production per hectare as the farms are very small to be viable with a low production.
- the pack shed manager is remiss by accepting poor quality produce, the slackers must fall by the wayside - not the pack shed.
- the paying of farmers for their tomatoes (and other produce) BEFORE grading - let alone selling - is committing economic suicide and is the one single factor which will ensure the none-continuance of the project.
- financially the co-ops are not viable and possibly more time should have elapsed before assuming independence - the committees needed to build up more knowledge and expertise.
- the lack of continuity of supplies and poor quality of product created tensions in the marketing world instead of solidifying linkages.
- Encabeni Market is a very important link in the marketing chain of KK and HFV Co-ops consequently it is vital that positive changes must speedily come into effect or else the link must be removed.
- The Co-op members themselves need to strengthen their links by becoming high yield, quality conscious producers and to discard the “subsistence farming” syndrome.
- The vendors buying from the co-ops are being harassed from doing honest business in the towns. They are as an important a link in

the marketing chain of the Co-ops as the FP Markets - indeed theirs is the only business that is showing a growth rate.

- Namboard is making money out of imports, putting local farmers at a disadvantage and causing inflated prices in the shops.
- The GROWER'S ORGANIZATIONS needs to regard the fresh produce industry in a far more serious light and need to know how valuable farmers and vendors are to the economy of the country.
- The CAPM Project unfortunately ran out of time and could not round off the project properly.

Personally I am not very optimistic that the co-ops will survive for long after CAPM pulls out. The future for them it would seem, is to join forces with Encabeni and act as depots for the market. A co-operative agency should then come into being at Encabeni or stalls should be provided for farmers from where they could sell their own produce.

Encabeni Market would urgently have to change to consignment sales only and more realistic prices will result as the market forces of supply and demand take over. Auction sales - even the electronic Dutch system - is time consuming and subject to price manipulation.

S. Conclusion

- Finding buyers for fresh produce from Swaziland was not difficult as many opportunities presented itself.
- There are however many constraints which my colleagues and I had to try and overcome in order to compete in a highly professional marketing world.
- Indifferent farming practices and post harvest handling resulted in poor quality produce reaching the market.
- Inconsistent supplies, inaccuracy of statistical information, lack of communication, transportation and finances all added up to a difficult but interesting experience.
- However, there was never a lack of buyers for quality produce. In the final analysis, Father Time was the ultimate winner.
- I wish to express my appreciation to Doyle Grenoble and the remainder of my colleagues in the CAPM Project team for their assistance and respect.
- To my colleagues at Chemonics International in Washington, thank you for giving me this wonderful opportunity, I thoroughly enjoyed the experience.