CHAPTER – I

INTRODUCTION

India is an agricultural country. The majority of its population depends upon agriculture. It is the largest and the most important industry in India. It contributes 34.2 percent of the National income. The Government encourages cultivation of horticultural crops like banana, mango, flowers, vegetables etc., so as to increase the contribution of agriculture to the National Income and to augment the farmers’ own income. India is the second largest producer of bananas in the world, after Brazil.

In India, Banana ranks next only to mango in area and production, occupying 83 lakhs hectares with an annual production of 46.26 lakh tonnes. The important banana growing states in India are Maharastra, Tamil Nadu, Andhra Pradesh, Kerala, Karnataka, West Bengal, Bihar and Gujarat. India exports small quantities of bananas mostly to Bahrain, Germany, Nepal, Qatar, Saudi Arabia, and USA.

Developing economies need to understand the supply phenomena in order to implement policies for raising the output to a level which can provide for adequate human nutrition for the increasing population and also for promoting general economic development. Even in developed countries understanding of the supply phenomena is of crucial importance for controlling surplus, for raising farm income and productivity of resources. The study of supply responses in agriculture and their determinants on the one hand and constraints on the other become particularly important in the context of planning for economic development and the concomitant agricultural transformation and modernization involved.
In a country like India where agriculture constitutes the very basis of the national economy, agriculture deserves special attention while planning for development. For proper planning and policy formulation in the agricultural sector, it is of paramount importance to understand the behavior of farmer’s supply responsiveness. Heady has noted that: the subject of farmer’s responsiveness to economic variables has gained importance during the past two decades in both developed and underdeveloped economics.

The National Commission on Agriculture has also recommended that the production of horticultural commodities can be increased by 100 per cent. From these prospects of the immense potential for increasing production are evident.

Agricultural economy has witnessed a successful transition from subsistence, self-sufficient barter system to a commercial, production oriented surplus economy. For economic development of a country, an increase in production must be accompanied by increase in marketable surplus. The rate at which agricultural production expands is an index of the pace of agricultural development while the growth in marketable surplus is an index of the pace of economic development - bazaar. The mobilization of surplus resources from agriculture has come to be recognized as a mechanism of central importance for the development of agrarian economies.

Adequate importance was not given to horticultural development during the sixties. Realizing the importance of horticultural crops, the union Government has since been increasing the budgetary allocations plan after plan. From a meager Rs.5 lakhs in the fourth five-year plan, the allocation rose to Rs.2 cores in the fifth plan, Rs.8.68 crores in the sixth plan and Rs.33 crores in the seventh plan. The proposed outlay in the eleventh plan is Rs. 550 crores.
India has an array of cultivators grown throughout the country depending upon preference, resource availability and production system. Dwarf Cavendish and Robusta are widely cultivated commercial bananas owing to high yield, wide market acceptability, ability to withstand high speed wind, relatively short duration and high economic returns realized per unit area. Poovan is another important variety grown widely due to a wide range of adaptability and tolerance to many biotic and abiotic stresses. Rasthali is significant in commercial production, especially for excellent-quality fruits. Nendran is an important banana in Kerala and Tamil Nadu.

**BANANA CULTIVATION**

Banana is the oldest and commonest fruit known to mankind. It is one of the important fruits, and constitutes the second largest fruit industry in India. It is nutritious, palatable and easily digestible fruit. It is available throughout the year. Banana is rich in carbohydrates, minerals such as calcium, potassium, Magnesium, Sodium and phosphorous. Other than fresh fruits, it can be consumed as processed in various forms like chips, powder, flakes, etc. Banana pseudostem is chopped and used as cattle feed. Also, the leaves are used as plate. The botanical names of banana are Musa Cavendish and Musa paradisiacal, which belongs to the family Musaceae.

**Climate:** Being a tropical crop, banana requires warm, humid and rainy climate. The optimum temperature range is 10 to 40°C and the relative humidity is 90% or above. It is highly susceptible to frost and cannot tolerate arid conditions. Strong desiccating winds cause considerable reduction in the growth of the plant and yield and quality of fruits.
**Soil:** Banana is a heavy feeder crop. Therefore, fertility of soil is very important. Rich, well drained, fertile, free working, soils with plenty of organic matter is best suited for cultivation. The optimum range of pH of soil should be 6 to 8.

**Propagation:** Commercial edible bananas do not produce viable seeds. So, the banana is commonly propagated by suckers and sword suckers with narrow leaves. Rhizomes whole or in bits from fruited and non-fruiting plants with at least one sound bud can be successfully used as propagating material.

**Planting:** Planting of banana is done by two methods viz. Pit method and furrow method. Planting is done from February to May whereas in North India, it is done during July-August. In South India, it can be done any time except summer. Tall varieties should be planted at 3x3 m whereas dwarf ones at 2x2 m apart.

**Manuring:** Banana is a heavy feeder and responds well to manuring. Banana is a quick growing and short-lived plant. Therefore, it is more beneficial, if quick growing fertilizers are applied. In Tamil Nadu, application of 100 g of N, 30 g of P₂O₅ and 300 g of K₂O per plant to be supplied in three doses during the second, third and fifth months is recommended. In Maharashtra, 100 g N, 40 g P₂O₅ and 100 g K₂O per plant is recommended. Out of these, P₂O₅ and K₂O are applied at the time of planting and N is given in three split doses: third, fourth and fifth month after planting.

Bananas are sometimes grown under coconuts in the Caribbean, and in Australia, Israel and in the Canary Islands with avocados. In the last case bananas are used as the interplant crop and they are removed as the avocado trees increase in size. Since the fertilizer needs of avocados are relatively small, the banana fertilizer programme in such cases need not be changed.
Banana is a very rich food with high caloric content. The fruit is mainly composed of water and carbohydrates and has almost negligible content of protein and fat. Fruits contain different sugar organic and are fair to good sources of ascorbic acid. A few of them are fair sources of B-Vitamins. Fruits are good sources of potassium and protein. In view of the pleasant taste and flavour, fruit juices help to stimulate appetite.

Productivity improvement by supply of improved seeds and planting materials, promotion of better management practices, extending the area under fruit cultivation, organization of appropriate services both at the production and post harvest phases, promotion of a system approach to production, storage, processing, transport and marketing are some of the steps taken by the government for increasing the production of horticultural crops.

MARKETING

Marketing requires the orchestration of everyone who plays a part in the common goal of pleasing the consumer. For a small business owner who has no employees, this means that he needs to mentally tear down the walls between varied business functions and think holistically when it comes to marketing strategies.

Marketing is the social process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others. Marketing is the management process that identifies, anticipates and satisfies customer requirements profitably.

Marketing is essentially about marshalling the resources of an organization so that they meet the changing needs of the customer on whom the organization depends. This is a more recent and very realistic definition that looks at matching capabilities with needs.
Marketing is the process whereby society, to supply its consumption needs, evolves distributive systems composed of participants, who, interacting under constraints - technical (economic) and ethical (social) - create the transactions or flows which resolve market separations and result in exchange and consumption.

The marketing concept is a philosophy. It makes the customer, and the satisfaction of his or her needs, the focal point of all business activities. It is driven by senior managers, passionate about delighting their customers.

Marketing is much broader than selling, it encompasses the entire business. It is the whole business seen from the point of view of the final result, that is, from the customer’s point of view. Concern and responsibility for marketing must therefore permeate all areas of the enterprise. This customer focused philosophy is known as the ‘marketing concept’. The marketing concept is a philosophy, not a system of marketing or an organizational structure. It is founded on the belief that profitable sales and satisfactory returns on investment can only be achieved by identifying, anticipating and satisfying customer needs and desires.

1. Marketing focuses on the satisfaction of customer needs, wants and requirements;
2. The philosophy of marketing needs to be owned by everyone;
3. Future needs have to be identified and anticipated;
4. There is normally a focus upon profitability, especially in the corporate sector. However, as public sector organizations and not-for-profit organizations adopt the concept of marketing, this need not always be the case.
The marketing environment surrounds and has impact upon the organization. There are three key perspectives on the marketing environment, namely the ‘macro-environment,’ the ‘micro-environment’ and the ‘internal environment’.

Micro environment influences the organization directly. It includes suppliers that deal directly or indirectly with consumers and customers, and other local stakeholders. Micro tends to suggest small, but this can be misleading. In this context, micro describes the relationship between firms and the driving forces that control this relationship. It is a more local relationship, and the firm may exercise a degree of influence.

Macro environment includes all factors that can influence organization, but are out of their direct control. A company does not generally influence any law (although it is accepted that they could lobby or be part of a trade organization). It is continuously changing, and the company needs to be flexible to adapt. There may be aggressive competition and rivalry in a market. Globalization means that there is always the threat of substitute products and new entrants. The wider environment is also ever changing, and the marketer needs to compensate for changes in culture, politics, economics and technology.

All factors that are internal to the organization are known as the ‘internal environment’. They are generally audited by applying the ‘Five Ms’ which are Men, Money, Machinery, Materials and Markets. The internal environment is as important for managing change as the external. Marketers call the process of managing internal change as ‘internal marketing.’ Essentially marketing approaches are used to aid communication and change management.
The marketing mix is probably the most famous phrase in marketing. The elements are the marketing ‘tactics’. Also known as the ‘four Ps’, the marketing mix elements are price, place, product, and promotion.

**STATEMENT OF THE PROBLEM**

Non availability of pest resistant quality suckers, unawareness of the different diseases that affect banana plant and of the pesticides to be used to control the diseases, lack of knowledge about crop insurance scheme and its usefulness, inadequate finance to meet the cost of production are some of the problems faced by the growers during cultivation. Unless adequate steps are taken to minimize these problems, the production of banana may be severely affected.

According to trade sources, during the months of March to May, supply exceeds demand in market which leads to decline in prices. Because of the excess supply, traders and farmers search for new markets for banana. Kerala is the nearest market, compared to Maharastra. This action led to higher price in 2008-09 compared to the previous year prices. Similarly natural calamities like wind with high velocity’ lead to drop in supply of banana during June to September and hence upward trend in price of banana is witnessed.

The fluctuation in price creates havoc among the banana growers in Tamil Nadu, The Domestic and Export market intelligence cell functioning in the Centre for Agricultural and Rural Development Studies of Tamil Nadu Agricultural University analyzed the scenario of banana prices.
Absence of a large number of organized markets, dependence on pre-harvest contractors for marketing their bunches, inadequate transport facilities at reasonable cost, increased dependence on internal demand etc., are some of the marketing problems faced by the growers that necessitated this study.

The problem of growers in marketing the product is very high. They have to cultivate, harvest, transport and market. The intermediaries have to make payments before or after harvest, transport and market the products. There may be many problems in these different stages. The problems may relate to production or transportation, preservation, price, area, transportation and other related aspects.

Banana is a perishable product. The product might need some tweaking by the person who grows the product to respond to customer complaints. The person who handles human resource issues might be asked to develop compensation plans that reward sales people who build significant relationships that have tremendous potential but are slow to close. The present study covering the problems of both production and marketing provides a purposeful area for useful analysis. The natural calamities like flood, cyclone, etc., may affect the production of banana. With all these limitations, the growers have to cultivate and earn profit. Moreover financial constraints and lack of adequate infrastructure for marketing of banana are the problem areas, which are to be studied at length.
OBJECTIVES

The following are the prime objectives of this study:

1. To document the concept of various cultivation and utilization practices in relation to banana;
2. To analyze the different types of growers of bananas and their strategies and problems in marketing their products.
3. To study the different types of marketing practices existing in banana marketing in relation of growers of banana crop;
4. To examine the role of intermediaries in banana marketing process;
5. To identify and analyze the problems and perception of intermediaries in marketing of bananas; and
6. To suggest the measures to improve the marketing efficiency of growers and intermediaries.

HYPOTHESES

H₀ = Educational qualification of sample growers does not significantly differ with regard to their type of cultivation
H₀ = Experience in banana cultivation of sample growers does not significantly differ with regard to their type of cultivation
H₀ = Area of banana cultivation of sample growers does not significantly differ with regard to their type of cultivation
H₀ = Marketing of banana leaves by sample growers does not significantly differ with regard to their type of cultivation
H₀ = Age of sample agents does not significantly differ with regard to their type of agency
H₀ = Method of selling banana by sample agents does not significantly differ with regard to their type of agency
METHODOLOGY

The study requires both primary and secondary data. Secondary data were collected from publications of agricultural departments, websites, libraries, educational institutions, agent manuals etc. Primary data were collected from growers and intermediaries with the help of a well structured questionnaire.

First, a pilot study was conducted. Data were collected from 10 growers and 10 intermediaries. The changes and modifications suggested were helpful in revising and restructuring a comprehensive questionnaire to collect reliable and adequate data.

SAMPLING DESIGN

This study concentrates on marketing of banana and the role of intermediaries in marketing aspects. The area of study selected for this research is Kanyakumari District. Banana is grown only in all areas of Kanyakumari District. There are 4 taluks which are prominently engaged in cultivating banana crop. The sample taluks are Agastheeswaram, Kalkulam, Thovalai and Vilavancode. A sample of 300 growers and 160 intermediaries are considered from the sample taluks. Multistage Stratified random sampling method is followed for this study.

**TABLE 1.1**

GROWERS SAMPLE STRUCTURE

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Growers</th>
<th>Sample Data Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agastheeswaram</td>
<td>2100</td>
<td>78</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>1840</td>
<td>66</td>
</tr>
<tr>
<td>Thovalai</td>
<td>1870</td>
<td>74</td>
</tr>
<tr>
<td>Vilavancode</td>
<td>1910</td>
<td>82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7720</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>
TABLE 1.2
INTERMEDIARIES SAMPLE STRUCTURE

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Intermediaries</th>
<th>Sample Data Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agastheeswaram</td>
<td>830</td>
<td>36</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>956</td>
<td>46</td>
</tr>
<tr>
<td>Thovalai</td>
<td>836</td>
<td>38</td>
</tr>
<tr>
<td>Vilavancode</td>
<td>882</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3504</strong></td>
<td><strong>160</strong></td>
</tr>
</tbody>
</table>

STATISTICAL TOOLS USED

The collected data have been processed both manually and with the help of computers. Suitable statistical tools have been used to draw inferences using Statistical Package for Social Sciences (SPSS).

Descriptive and summary statistics is done for the primary and secondary data collected. Correlation analysis is done to find out the relationship between variables in primary and secondary data. Chi-square analysis is done to test the hypotheses framed in analyzing the strategies followed by growers and intermediaries. Five point scaling technique used to analyze the perception of growers and intermediaries in different aspects of marketing. Factor analysis and discriminant function analysis are carried out to find out the factors influencing the selection of marketing methods and to compute the discriminant function. All the tests are carried out at 5 percent level of significance.

The primary data collected from the respondents and the secondary data compiled from the publications and records of agricultural department regulated market were analyzed using appropriate techniques.
AREA OF STUDY

The study area for the research study is Kanyakumari District in the State of Tamil Nadu.

PERIOD OF STUDY

The secondary and Primary data relating to various production aspects were collected for a period of 5 years i.e. from 2006-2010.

LIMITATIONS

Majority of growers and intermediaries are not in the practice of maintaining standardized books of accounts. Hence the information furnished by the respondents is only from their memory. Similarly most of the marketing functionaries are hesitant to divulge the actual quantity and value of sales. Moreover the study is more related to marketing of perishable banana fruit and their related products. The income and expenditure are considered on the basis of the figures provided by the sample respondents. The study area contains both river irrigation and other types of irrigation. Hence, the study may be made applicable only to identical or similar geographical location areas.

CHAPTER SCHEME

The study contains six chapters. In the first chapter, introduction, importance of the study, scope of the study, statement of problems, objectives, methodology, statistical tools used and period of study and limitations are given.

The second chapter deals with review of previous studies in the areas of marketing, agricultural methods, fertilizer use and related areas. Further this chapter shows how the present study differs from previous studies and the uniqueness of the present study.
The third chapter analysis the profile of the study area.

The fourth chapter analysis the socio economic conditions of growers, their marketing strategies, perceptions and opinion on various marketing methods.

The fifth chapter is concerned with the analysis of socio economic aspects of intermediaries, the strategies followed in marketing banana products, opinion as to various marketing practices and the factors influencing the selection of marketing strategy.

Findings, suggestions and conclusions are given in the final chapter.