Chapter 1

INTRODUCTION

Statement of the Problem
Objectives
Hypotheses
Research Methodology
Sample Design
Tools of Analysis
Scope of the Study
Variables
Limitations
Period of Study
Chapter Scheme
INTRODUCTION

Spices constitute an important group of agricultural produce. They are used in the manufacture of medicine, cosmetics, condiments, sweets, beverages and preservatives. Many value added products such as oils and oleoresins, curry powder, beverages, pickles, etc. are also produced from spices. Almost all countries in the world including those which do not produce, consume spices or spices’ products. Thus, spices have an important place in the world market.

India is one of the largest producers and exporters of spices. According to Spices Board, there are fifty two varieties of spices cultivated in India. Pepper, cardamom, ginger, turmeric, nutmeg, clove, tamarind, etc. are important among them. There is a total area of 2.3 million hectares of land under spices cultivation in India. Its annual production is estimated at 27 lakh tonnes valued at ₹1300 crores. More than 2.5lakh farmers in rural areas in India are dependent on spices for livelihood and employment. It has a share of about 44 per cent in quantity and 36 per cent in value in world spices trade (Spices Board, 2010).

The state of Kerala, situated on the south western tip of India, is also noted for the cultivation of spices. A large variety of spices such as pepper, cardamom, turmeric, ginger, tamarind, clove, cinnamon, vanilla etc. is grown in most of the
districts of the state. Among the spices grown in Kerala, black pepper popularly
known as ‘black gold’ and cardamom, the ‘queen of spices’ are the two major
crops. Kerala accounted for 82 per cent of the total pepper production in India in
the year 2009-10 and its share in the cardamom production of the country during
this period was 77 per cent. Although there is cultivation of spices in most of the
districts of Kerala, Idukki and Wyanad are the two districts where they are heavily
concentrated.

Considering the importance of spices as a big foreign exchange earner of the
country and as a source of livelihood for a good number of rural people, the
Government of India has set up the Spices Board of India in the year 1987. It is the
apex institution for the development of spices sector in the country. Its functions
consist of overall development of cardamom, post harvest improvement of all spices
as well as their export promotion. For the benefit of cultivators other than
cardamom, apart from post harvest improvement, the Board undertakes adaptive
research, organizes planters’ meet, imparts training on better production methods,
encourages organic farming, conducts policy makers’ workshops, etc.

1.1 Statement of the Problem

The Spices Board has been in the field serving cultivators and exporters since
1987. For the benefit of cultivators spread across the country, the Board is reported
to have undertaken decentralization of its operations by establishing Regional,
Zonal and Field offices as well as Marketing offices. The publications of the Board
indicate its expansion both infrastructure wise and activity wise like setting up
Biotechnology division, Spices clinic, Quality Evaluation Laboratories, Spices Parks, conducting World Spices Congress, imparting training on Good Agricultural Practices, commencement of e-auction for cardamom, arranging subsidy to farmers through e-payment, etc. However, problems still persist both in respect of cultivation and export.

Low productivity of many of the spices in India compared to that of other producing countries is a serious issue confronting the farmers of spices. For instance, yield per hectare for pepper in Tailand is eleven times larger than that in India. Like wise, productivity of cardamom is only 174 kgs per hectare in India while for Guatemala, it is 315 kgs per hectare (Singh, 2007). Low productivity makes Indian spices costlier as well as less competitive in international market. Further, incidence of diseases and attack of pests, low input efficiency, senility of plants, non-popularization of elite cultivars and depletion of soil fertility continue to plague spices plantations. It is also reported that this sector experiences lack of sufficient skilled labour and there is no long term investment for improving productivity (Jaimol, 2007).

In the sphere of international trade, entry of Vietnam, Indonesia, Malaysia, Brazil, Mexico, Sri Lanka, Tailand and Madagaskar in pepper trade and Guatemala in cardamom has caused stiff competition to India since such countries can offer them at lower prices (Radhakrishnan, 1993). The new regulations imposed by the importing countries regarding quality cause headache to cultivators and exporters.
In the light of the above revelations, it has been proposed to conduct a detailed study on the working of the Spices Board of India and evaluate its role in the cultivation and export of spices. The problems faced by spices growers in marketing the produce have also been included in the study. The study is titled “Role of Spices Board in the cultivation and export of spices: A study with particular reference to Kerala”.

1.2 Objectives

The general objective of the study is to examine the contribution made by the Spices Board towards the development of spices sector in the country with reference to Kerala. In specific terms, the study brings to light:-

1. the origin and growth of Spices Board as well as evolution of its functions over the years;

2. areas of cultivation, cultivating and marketing practices, progress of organic farming, progress of value addition and trends in exports;

3. the problems faced by growers in cultivation and marketing of spices; and

4. the role played by the Spices Board in the development of the two segments of spices sector such as cultivation and exporting.

1.3 Hypotheses

I. Majority of the farmers in spices still follow traditional and unscientific methods of cultivation resulting in lower productivity and poor earnings.
II. Low level of wages for workers in spices cultivation as well as strenuous work involved relative to those in other areas of economic activities in the vicinity as well as better working conditions there, fails to attract workers to the field of spices and thus the farmers are faced with labour scarcity.

III. Marketing of produce by the farmers in spices is unscientific and the chain of distribution between the farmers and ultimate consumers is characterized by the existence of a number of middlemen and this coupled with the undesirable practices followed by traders deprive the farmers of a major part of the price, the consumer pays.

IV. The Spices Board has been implementing schemes for the improvement of cultivation, post harvest processing and export of spices, but majority of cultivators and exporters have not been benefited by the schemes due to their defective implementation.

1.4 Research Methodology

The study is a descriptive one. It makes use of both primary data and secondary data. The secondary data for the study have been collected from the annual reports of Spices Board, various journals, bulletins, books, periodicals and reports published by the Spices Board, websites, IPSTA, Chamber of Commerce, Directorate of Economics and Statistics and from other trade journals, newspapers, internet and published works. In addition to above, elaborate discussions with officials of Spices Board Kochi, research centre of Spices Board at Myladumpara, Idukki, IPSTA, and Market fed have been held.
The primary data were collected from the cultivators and exporters by using structured interview schedules (Appendix I and II). The schedules have been revised on the basis of the pilot study conducted to check the adequacy of questions included.

1.5 Sample Design

Although Kerala cultivates a variety of spices, pepper and cardamom are its major crops. They together account for about 50 per cent of total spices production in the state (Spices Statistics, 2008). In Kerala, the bulk of the output of these two crops comes from Idukki and Wyanad districts and their total shares in pepper and cardamom are 70 per cent and 95 per cent respectively of the state output. Besides, 70 per cent of the cardamom and pepper cultivators in Kerala belong to these two districts. Hence, for primary data collection these two districts were selected purposely. Further, from each of these two districts three Taluks were identified randomly and data were collected from systematically selected respondents of these Taluks. Hence a multistage systematic sampling was adopted for sample design.

According to Spices Board, there are 19585 cardamom cultivators in Idukki and Wayanad districts among whom 195 cultivators were chosen as sample for study by using the above stated statistical method. Directorate of Economics and Statistics estimates the total number of pepper growers in the two districts at 43030. A total of 408 cultivators were chosen from them for study by following the same method of sampling.
Primary data covers exporters in cardamom and pepper also. According to Spices Board, there are 60 such exporters in Kerala. From the total population of 60, alternative people were selected starting one at random thus making their number in the sample 30. The total number of respondents in the sample for study is 633 (603 cultivators and 30 exporters) and they comprise growers in pepper and cardamom as well as exporters. A detailed presentation of sample design made below:-

**Table 1.1**

**Sample Design**

<table>
<thead>
<tr>
<th>Category</th>
<th>District</th>
<th>Taluk</th>
<th>Total cultivators</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pepper</td>
<td>Idukki</td>
<td>Udumpanchola</td>
<td>18072</td>
<td>177</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peerumedu</td>
<td>4518</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Devikulam</td>
<td>7530</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>30121</td>
<td>285(18:4:7)</td>
</tr>
<tr>
<td>Wyanad</td>
<td>Manathavady</td>
<td>Sulthanbathy</td>
<td>3227</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vythiri</td>
<td>2528</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>12909</td>
<td>123(3:2:7)</td>
</tr>
<tr>
<td>Cardamom</td>
<td>Idukki</td>
<td>Udumpanchola</td>
<td>11986</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peerumedu</td>
<td>2115</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Devikulam</td>
<td>3525</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>17626</td>
<td>175(11:2:3)</td>
</tr>
<tr>
<td>Wyanad</td>
<td>Manathavady</td>
<td>Sulthanbathy</td>
<td>490</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vythiri</td>
<td>392</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1959</td>
<td>20(4:3:10)</td>
</tr>
<tr>
<td>Exporters</td>
<td>Kerala</td>
<td>Total</td>
<td>60(total)</td>
<td>30</td>
</tr>
<tr>
<td>Exporters</td>
<td>Kerala</td>
<td>Total</td>
<td>633</td>
<td></td>
</tr>
</tbody>
</table>
1.6 Tools of Analysis

The data collected were appropriately classified and analyzed keeping in view the objectives of the study. The researcher has used statistical software for analysis of data. Various findings were summarized by proportions (population). The proportion of utilization of various schemes is given in percentage with 95 per cent confidence level for the true value (population value). The differences in proportions were tested by using chi-square test and a p value $\leq 0.05$ is taken as the level of statistical significance. If the value of ‘p’ is going to be $\geq 0.05$ the conclusion would be that the difference may be by chance. On the other hand, if ‘p’ is $\leq 0.05$, it means the difference would be taken as real.

1.7 Scope of the study

The present study has been undertaken to evaluate the role of the Spices Board in the cultivation and export of spices with particular reference to Kerala. The utilization of schemes being implemented by the Spices Board for the benefit of cultivators and exporters has been made the most important part of the study. In this effort, the researcher tries to trace the inadequacies in the implementation of schemes by the Spices Board. The study also covers cultivation and marketing practices of farmers, their problems as well as trends in earnings. Although there is cultivation of about ten varieties of spices, cultivators of pepper and cardamom have been selected for collection of primary data in the light of the importance of these two crops to the state in terms of export earnings and employment generation.
1.8 Variables used for the study

I. To assess the spices cultivation and marketing in Kerala

i. Areas of Cultivation

ii. Productivity of spices

iii. Cost of production

iv. Pepper production

v. Cardamom production

vi. Organic farming

vii. Value addition of spices

viii. Marketing of spices

ix. Export of spices

x. Import of spices

II. To examine the constraints in cultivation and marketing of spices

i. Level of education

ii. Age group

iii. Size of holdings

iv. Type of cultivation

v. Pests and diseases

vi. Climate

vii. Agricultural finance

viii. Labour

ix. Sale of output

x. Price instability
III. To evaluate the role of the Spices Board in the cultivation and export of spices

i. Schemes for improvement of production and productivity

ii. Schemes for organic cultivation

iii. Training and advisory schemes

iv. Schemes for post harvest improvement

v. Schemes for market development

vi. Schemes for trade promotion

vii. Schemes for product development

viii. Amount of subsidies

ix. Utilization of schemes

x. Constraints in utilization of schemes

1.9 Limitations

1. Primary data covers only two crops which are prominent in Kerala.

2. Data have been collected from Idukki and Wyanad districts only where, the cultivation of cardamom and pepper is heavily concentrated.

3. There can be some small differences in the confidence limits of exporters because of small sample size.

4. In the preliminary investigation conducted by the researcher, it has been understood that there have been no regional variation between Idukki and Wyanad in matters such as climatic conditions, cultivation practices and educational level of farmers and utilization of various schemes of the Board etc. Hence, analysis of data on regional basis has been avoided.
1.10 Period of Study

The data for the study is collected for a period of five years from 2005-06 to 2009-10.

1.11 Chapter Scheme

The study is divided into seven chapters:

Chapter I deals with introduction of the topic, statement of the problem, objectives, hypotheses, research methodology, sample design, tools of analysis, scope of the study, variables used, limitations, period of study and chapterization.

Chapter II deals with the available literature on spices.

Chapter III is concerned with the profile of Spices Board. Its emergence, constitution of the Board of Directors, staffing, day to day management, committee for discharge of duties, departmentalization, de-centralization efforts such as starting of regional offices, zonal offices, marketing offices and field offices, etc. are covered here. This chapter also discusses evolution of the functions of the Spices Board over the years.

Chapter IV is concerned with the identification of areas of cultivation as well as state wise and district wise production. This chapter makes a comparison between the productivity of spices in India and those of other countries. Global trade in spices, changing trends in spices cultivation, Value addition of spices,
channels of distribution, export of spices, import of spices, etc. are also included here.

Chapter V deals with the constraints in cultivation and marketing of spices in Kerala. Cultivation practices, progress of organic cultivation, prevalence of scientific practices, incidence of diseases and pests attack, adequacy of institutional finance, labour problems, trends in area of cultivation, trends in earnings, role played by middlemen and unfair trade practices followed by traders are mainly discussed in this chapter.

Chapter VI evaluates the role of Spices Board in the cultivation and export of spices. Various schemes of the Board, amounts of subsidy, progress of utilization and constraints in utilization are included in this chapter.

Chapter VII is the last and it deals with the summary of findings and recommendations.
References

Annual Report of Spices Board. (2010). Kochi: Published by Spices Board of India.


