

# C H A P T E R - I V

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### Research Design.

#### 1. Introduction :-

Agriculture, horticulture,, forest sectors - provide certain basic raw-materials to industries. Farmers prosperity is linked with the growth of industries based on above sectors. The cost of production in - horticulture is comparatively less. In-spite of the several facilities provided by the Government, the - progress of horticulture based units is comparatively slow. In country like India where the population is growing in geometrical progression, the food processing and preservation has definetly special significance. The present micro level study will be focussed in indentifying the problems faced by these units in the light of different functional areas.

#### 2. Objectives of the Study :-

The present study has been undertaken with the following objectives spelled bellow.

- a) To examine the conditions of horticulture production in Sirsi Taluk.
- b) To study the management process adopted -

by horticulture based units in Sirsi Taluk.

- c) To study the managerial problems existing in this units.
- d) To examine the facilities provided to horticulture units by the government.
- e) To find out the opportunities to set-up new units.
- f) To suggest suitable measures for the improvement of existing units.

### **3. Methodology Adopted :-**

The survey method and observation method is followed to identify the working conditions of the horticulture based units. The information procured through this specific direct and indirect survey, is analysed with the help of simple statistical tools for description and explanation of phenomena.

### **4. Scope of the Study :-**

The study is confined to only those manufacturing units which are based on horticulture. The area coverage is limited to Sirsi Taluk of Uttar-Kannada district in -

Karnataka State. The study is focussed on problems and prospects and processing of fruits and other identified horticulture products.

**5. Significance of the Study :-**

Population growth is directly linked with food production, processing and preservation. The study of the food processing industry helps to indentify and analyse the problems and find out suitable solutions.

The data base in the Agro-processing sector in general and fruit processing in particular is very weak. The present study will provide primary data at the - micro-level. It improves data base.

The study assumes special local significance from the point of view of discovery of new business opportunities in the field of Agro-industries in general and horticulture in particular.

Analysis of the manufacturing units in the light of established theories and principles and preservation helps to identify the deviations from the best, if any.

The study reveals the horticulture production trend in the taluk and also raw-material supply position from neighbouring taluks to feed industrial units in respect of certain goods like mango, cashew, co-conut etc.

**6. Sources of Data :-**

Data is procured from two sources.

- 1) Primary Source.
- 2) Secondary Source.

Primary data is collected from owners of industrial units, private centres of horticulture, by administering schedules and conducting unstructured interviews of various entrepreneurs and managers representing different departments. A pilot study was conducted to test the questionnaire. Before administering the schedule a detailed comprehensive schedule was prepared, which was pre-tested by conducting a pilot study having visited five different organisations.

Secondary data is procured from the following sources.

- a) Office records of industrial units. -

- b) Visits to following libraries.
  - i) Library of M.M. Arts and Science College Sirsi.
  - ii) M.E.S. Commerce College Library Sirsi.
  - iii) Karnatak University Library Dharwad.
  - iv) Library of College of Agriculture Kolhapur.
  - v) Personal Library of the district Horticulture Officer Sirsi.
  - vi) Shivaji University Library Kolhapur.
  - vii) Library of Shahu Central Institute of Business Education and Research Kolhapur.
- c) Local Magazines.
- d) Local News Paper.
- e) Annual Reports Published.
- f) State Government Department Records.

**7. Sample Design :-**

Census survey of all horticulture based units in the Sirsi taluk of Karnataka State is carried to collect the necessary information. This comprises of 17 Agro-based industries and 15 horticulture based industries. That is 32 units in all.

**8. Survey of past Literature :-**

Edmond, Senn, Andrews<sup>1</sup> in their book have given a very clear idea of scope and importance of horticulture. They have classified the crops based on their properties and uses. Medical, Nutritional, Decorative value of horticulture is emphasised. Careers in production trading, research is identified.

Giridharlal, G.S. Siddappa, and G.L. Tandon<sup>2</sup> in their book have clearly explained principles of preservation, commercial canning, preparation of different fruit products like jams, jelleys, beverages etc. It embodies the results of the research conducted on various aspects of preservation of fruits and vegetable and aims at providing practical guidance both to the cottage worker and the large scale producer.

Dr. Badar A. Iqbal<sup>3</sup>, Aliger Muslim University in his article "Agro-based Industries Performance and Prospects" has analysed the production and processing of identified horticulture products like arecanut. India accounts for 60% of total world production. Alcohol extraction, preparing chewing gum, use for tanning leather, producing packing cases, preparing cushion materials out of arecanut husk are some of the processed products of arecanut. It is an important foreign exchange earner. India ranks first in arecanut production. Shrilanka and Bangla Desh comes second and third.

Jules, Janick<sup>4</sup> Puridue University U.S.A., in his book has dealt with the origin, and growth of horticulture and the conceptual analysis. He has distinguished horticulture from agriculture in the sense, the former includes only the "Garden Crops". Esthetic use of plants is the unique feature distinguishing from other agriclutural activities. It excludes "Agronomy" and Forestry. He has made use of the terms pomology, olericulture, and floriculture and land-scape horticulture.

Dr. R.P. Shrivatsva<sup>5</sup> has given a brief history of food preservation and canning industry. It is noted that -



the beginning was at the time of world wars. He has also analysed the scope of fruits and vegetable preservation in India. He opines, many fruits which are very cheap in season are being wasted to an extent of crores of rupees annually. Time has come to think of processing and preserving.

Dr.R.D. Shrivatsva<sup>6</sup> in his book has beautifully explained the waste utilisation plans. It proves to be a matter of great importance for a man engaged in this industry to make use of the waste. Several - by-products can be prepared while preparing fancy - products. By-products in respect of 12 identified fruits has been explained in Chapter I.

In industrial researcher<sup>7</sup> the article fruits and vegetable industry in India deals with the present - production, current status of processing industry in India. Current consumption and future prospects are also analysed. Export of fresh fruits and vegetables and also processed fruits and vegetables during one decade is analysed. The proposed plans to set-up processing units in India is also considered.

The key-note paper presented in the national seminar at I.I.M. Ahmedabad on "Agro-processing Industries" by Dr. U.K. Shrivatsava<sup>8</sup> deals with four parts. The first part deals with ways of assessing the available agro-processing potential. Part two presents the profile of agro-processing industry and the recent trends in India. Part three analyses the constraints on acceleration of production and exports of agro-based products. Part four, sums-up the analysis and presents certain basic issues for study and research, Particularly organisational pattern, technology up-gradation, market development, tax incidence, strengthening data base etc.

The Hindu<sup>9</sup> survey of Indian industries has identified the untapped potential in the agro-processing sector. Innovation in packing and packaging for added value is also analysed. Several constraints in the expansion of the food-processing industry is analysed.

The seminar<sup>10</sup> organised by Maharashtra Economic Development Council on 18th March, 1989 at Bombay considered "Food Processing and allied Industries in India-Challenges and Opportunities".

The seminar emphasised the adoption of multi-disciplinary approach by our scientists, farmers, policy makers and industrialists have to collectively marshall all efforts to increase availability of raw-materials and to improve quality, to form co-operatives for production, and - marketing of food-products. Lack of strong horticulture base and also low yield per unit of finished product in the country is noted.

#### 9. Chapter Scheme :-

The scheme of the present study is devided in to six chapters. These chapters are listed below.

##### **Chapter I :- Introduction to Conceptual Back-ground.**

In this chapter certain basic concepts are explained. Agro-industry, agriculture, Horticulture, preservation and processing principles, By-products, spoilage, marketing concept, Marketing mix, Marketing process and functions are critically highlighted.

##### **Chapter II :- Horticulture production and food Processing.**

This chapter includes part 'A', and Part 'B'. -

In part 'A' profile of food processing industry in India is given. And in part 'B' horticulture production in Sirsi taluk is analysed in brief.

**Chapter III :- Profile of Sirsi Taluka.**

A historical prospective and the present profile of Sirsi taluk is explained in this chapter. A brief account of economic activities in general and industrial in particular is given under this chapter.

**Chapter IV :- Research Design.**

This chapter contains detailed note on the research design adopted to collect data from primary and secondary source and also the methodology followed.

**Chapter V :- Data Presentation and Analysis.**

Emphirical findings of the survey has been presented in this chapter. Analysis and interpretation of data is made to locate the problems and find out possible solutions.

**Chapter VI :- Conclusions and Suggestions.**

In the light of the major findings of the work, and the conclusions reached, an attempt is made to suggest suitable remedies to the problems in the horticulture based manufacturing units in Sirsi taluk.



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