

## **INTRODUCTION**

Natural rubber is a stretchy, flexible and waterproof hydrocarbon polymer which is derived from latex and drawn by incising into the bark of the rubber tree. It is refined into the usable rubber. The commercial cultivation of natural rubber was introduced by the British planters. Though an attempt was made to grow natural rubber at Calcutta Botanical Gardens in 1873, the first commercial plantation was established at Thattekadu in Kerala in 1902.

In terms of area of coverage, output and productivity natural rubber has shown considerable improvements in recent decades. There has been an accelerated all-round growth and prosperity for natural rubber industry during the last 55 years. The area under rubber cultivation grew from 97339 hectares in 1956-'57 to 661980 hectares in 2008-'09 recording an increase of 580 percent.

India is the fourth largest natural rubber producing country in the world. The production of natural rubber has increased from 24060 tonnes in 1956-'57 to 831400 tonnes in 2008-'09 recording an increase of 3455 percent. The interference of Rubber Act 1947, Rubber Rules 1955 and the efforts taken by Rubber Board have a due role in this tremendous improvement. The incessant support given by International Rubber Study Group (IRSG), Association of Natural Rubber Producing Countries (ANRPC) and International Rubber Research and Development Board (IRRDB) has contributed much to the rubber sector in India.

## **FOREIGN TRADE**

Foreign trade plays a vital role in the development of a country. Rubber and rubber related products have a significant part in it. India has exported 25,090 tonnes of natural rubber during the year 2009-'10 compared to 46,926 tonnes in 2008-'09. But at the same time the country has imported 176756 tonnes of natural rubber during the year 2009-'10 compared to 77762 tonnes in 2008-'09.

The leading producers of natural rubber in the world are Thailand (2357000 tonnes), Indonesia (1543000 tonnes) , India (632000 tonnes), Malaysia (546000 tonnes) , China (451000 tonnes) Vietnam (317000 tonnes) , Liberia (109000 tonnes), Sri Lanka (86000 tonnes) , Brazil (80000 tonnes), Philippines (66000 tonnes) , Nigeria (50000 tonnes) and Cambodia

(47000 tonnes) . Among the world rubber economies, the position of India in terms of production and consumption is rather significant. In the international level India occupies fourth place in the production and consumption of natural rubber. The consumption of natural rubber has increased to 930565 tonnes in 2009-'10 from 525465 tonnes in 1995-'96.

Growth in the automobile sector is a major factor in articulating the consumption of natural rubber during the last ten years. Consumption of natural rubber in India during the year 2000 was 638000 tonnes and it increased to 905000 tonnes in 2009. Instead of the increase in domestic production, the country had to depend on imports to meet the domestic demand for natural rubber. India has imported 831208 tonnes of natural rubber during the last fifteen years. The total import of natural rubber during 2008-'09 was 77762 tonnes pricing Rs.937.20 crores, and it came to 176756 tonnes valuing Rs. 1602.11crores in the year 2009-'10. Of this nearly 79 percent was through Duty Entitlement Exemption Certificate scheme and another 15 per cent through open channel. Price fluctuation in the international market, import policy of the government, import duty, domestic market price, pressure of natural rubber cultivators and industrial consumers have its own role in gearing the import price of natural rubber.

## **SIGNIFICANCE OF THE STUDY**

The state of Kerala occupies 1.2 percent of the total area of the country and accommodates nearly 4 percent of the population in India. The state of Kerala, with 90 percent of the total production of natural rubber in India, is the largest producer of natural rubber. The spreading of the area under cultivation, adoption of innovative approaches in different operational aspects, improvements in the field of procurement and marketing, involvement of better community participation through Rubber Producer's Society etc. had a pivotal role in elevating the position of natural rubber production in Kerala. At this point a detailed study about the economic aspects of production, consumption, export and import of natural rubber, the complimentary factors like incentive schemes, community participation, technology support, financial aids, productivity aspects and the factor use efficiency in natural rubber cultivation are worth enquiring.

## **STATEMENT OF THE PROBLEM**

Natural rubber accounts for a major share in the revenue earnings of India. A detailed study about the ongoing open market system, government policies, foreign trade agreements, movements in the quantity and value of export and import, determinants of domestic price of natural rubber etc. are found reasonable. The linkage of natural rubber cultivation with cultivators, intermediaries, importers and exporters, societies and other functionaries in the field are also worth enquiring. The study is intended to portray the present position of natural rubber, cultivation in general and the matters relating to the foreign trade in natural rubber.

## **OBJECTIVES**

1. To narrate the progress made in the field of natural rubber cultivation in Kerala.
2. To make a review about the foreign trade policies relating to natural rubber.
3. To assess whether the support given by the government to promote natural rubber production is adequate or not.
4. To evaluate various export promotion measures taken by the government to encourage export of natural rubber.
5. To examine the impact of foreign trade in natural rubber on the economy of Kerala.

## **RESEARCH METHODOLOGY**

The purpose of the study is to assess the present position, problems and prospects faced by foreign trade of natural rubber in Kerala. This study is both descriptive and analytical in nature and both primary and secondary data are used in this study. Rubber cultivators, rubber dealers, officials of Rubber Producer's Society and rubber exporters constitute the population of primary data and reasonable representation is given to each of the above category while selecting the sample.

The sample selection was made on a stratified random method. The required amount of data was collected through interviews, field studies and questionnaire. The primary data is analysed with the help of simple statistical tools like percentages, averages and Compound Growth Rates. A sample size of 200 respondents is selected from rubber cultivators, 75

persons from intermediaries like rubber dealers and Rubber Producer's Society officials and another 25 numbers from exporters. The responses gathered from primary sources will be analyzed by using various statistical and financial tools. Correlation, Regression and Time series analysis applied appropriately to evolve meaningful conclusion from the data.

The secondary data for this work is gathered from various publications of the Rubber Board, International Rubber Study Group (IRSG), Economic Review, Indian Rubber Journal, Rubber Asia, related websites, and authentic sources available in Rubber Research Institute. The period of study is fifteen years from 1995- '96 to 2009-'10 and the study is with particular reference to the state of Kerala.

### **LIMITATIONS OF THE STUDY**

- The time period and the duration for the collection of primary data is limited.
- Possibility of hiding of certain facts by the respondents is not be ruled out; accordingly the findings may have its own limitations.
- The chances of respondents being influenced by the moods and cognitive limitations of the respondents are not ruled out.
- The large scale of natural rubber import will affect our domestic market and its price. The future import needs to be controlled according to the government policies.

### **CHAPTER SCHEME**

The first chapter deals with Preface, introduction, theoretical frame work and methodology of the study. The second chapter is to give the summary of the reviews of various studies related to the topic of research. The third chapter describes natural rubber cultivation of Kerala. Various foreign trade policies related to natural rubber is discussed in chapter four. The fifth chapter consists of analysis and interpretation of foreign trade of natural rubber. The sixth chapter states the impact of foreign trade in natural rubber on the economy of Kerala. The seventh chapter provide major findings, suggestions and recommendations based on the study.

## MAJOR FINDINGS OF THE STUDY

1. Yield in terms of output and productivity from natural rubber has increased considerably, but the surplus domestic consumption resulted in import of natural rubber.
2. The higher growth rate observed in automobile and industrial sector activated the domestic consumption of natural rubber.
3. Better linkage is identified between domestic prices and international prices of natural rubber. Though the foreign exchange earnings could be adversely affected, the present market trend is congenial for importers of natural rubber.
4. Lack of awareness regarding commodity exchange prices at national and international level, wider range of international market fluctuations, prevailing price difference in domestic and international market, low access to the data base relating to trends and forecasts, in terms of time and quantity, still remain as a major block to the common working force in the natural rubber producing sector.
5. Insufficiency of the amount of subsidy, shortage of trained and efficient labour, unskilled low quality tapping, irregular climate changes, Lack of awareness about systematic grading, decline in the size of individual rubber holdings are identified as major problems faced by natural rubber producers in Kerala.
6. Functionally operative protective clauses, availability of appropriate technological assistance in sufficient quantity, encouragement and recognition for innovative practices in natural rubber cultivation, tapping, processing and distribution, appropriate interference and adequate support are expected by the natural rubber growers.