

**THE ECONOMICS OF  
RUBBER PLANTATION INDUSTRY  
IN KERALA**

THESIS SUBMITTED FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY IN ECONOMICS  
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BY  
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C E R T I F I C A T E

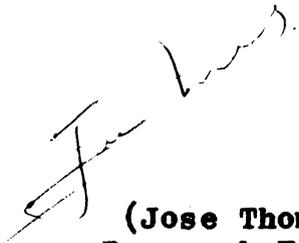
This is to certify that Sri Jose Thomas has worked under my supervision and guidance. His thesis "The Economics of Rubber Plantation Industry in Kerala" is original and is worth submitting for the award of the degree of Doctor of Philosophy in Economics.



(K. C. Sankaranarayanan)

DECLARATION

I certify that the thesis "The Economics of Rubber Plantation Industry in Kerala" is an original work done under the supervision and guidance of Dr. K. C. Sankaranarayanan, Reader, School of Management Studies, University of Cochin, Cochin-22. I further certify that this has not been previously formed the basis of the award of any degree, diploma, association-ship, fellowship or other similar title or recognition.

  
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## C O N T E N T S

Preface

Page

### PART I

#### DEVELOPMENT OF THE RUBBER PLANTATION INDUSTRY

Chapter 1	The Importance of Rubber	1
Chapter 2	Demand and Supply	20

### PART II

#### CRITICAL EVALUATION OF THE DEVELOPMENT SCHEMES

Chapter 3	Role of Rubber Board in the Development of Rubber Plantation Industry	38
Chapter 4	Rubber Marketing Co-operative Societies of Small Holders	70

### PART III

#### PROBLEMS AND PROSPECTS

Chapter 5	Processing and Marketing	98
Chapter 6	Cost of Production in Estates and Small Holdings	119
Chapter 7	Profitability Position of Estates and Small Holdings	177
Chapter 8	Conclusions and Recommendations	195

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ANNEXURES

	<u>Page</u>
1. Chart showing the area under rubber during 1950-51 - 1974-75.	204
2. Chart showing the area under estates and holdings during 1950-51 - 1974-75.	205
3. Chart showing the production, import and consumption of natural rubber during the period 1950-51 - 1974.75.	206
4. Chart showing the average yield per hectare from 1950-51 to 1974-75.	207
5. Production of natural rubber in main producing countries.	208
6. Consumption of natural rubber in main consuming countries.	209
7. World production, consumption and stock of natural rubber.	210
8. World price of natural rubber.	211
9. The Rubber Act, 1947 (As amended by the Rubber (Production and Marketing) Amendment Act of 1954 and as further amended by the Rubber (Amendment) Act of 1960.)	212
10. Rubber Rules (As amended upto 23rd October, 1976.)	227

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P R E F A C E

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This study on "The Economics of Rubber Plantation Industry in Kerala" was started in 1974 when I joined the School of Management, University of Cochin as a research fellow. The study is an objective analysis of the importance of the economics of rubber plantation industry in Kerala.

The study covers a period of 25 years ranging from 1950-51 to 1974-75. The data for the study were obtained partly from published documents such as:

- (1) The Plantation Inquiry Commission Report (for 1950s)
- (2) The Tariff Commission Reports (for 1960s)
- (3) Indian Rubber Statistics (for 1970s)

and partly from personal inquiries.

The thesis is divided into three parts consisting of eight chapters. Part I deals with the importance, growth, present position, and the scope of the industry. Part II discusses in detail the various development schemes, their

impact, the role of small holding sector in the development of the rubber plantation industry and the problems faced by small holdings. Part III analyses the problems connected with marketing, cost, profitability and the development potential of the industry.

Part I consists of two chapters:

1. The Importance of Rubber, and
2. Demand and supply.

The first chapter deals with the importance of the rubber plantation industry in the Indian economy. Kerala State accounts for 94 per cent of the area and 93 per cent of the total rubber production in India. Thus Kerala enjoys almost a monopoly in the rubber production in India. The rubber plantation industry is composed of both well organised estates and scattered small holdings and the growth of small holding sector has made rubber almost a small holders' crop. The industry is classified according to size, ownership and climatic conditions.

The formation of the Rubber Board marks a turning point in the development of the rubber plantation industry. The Board initiated manifold development programmes. The Co-operative movement was introduced in the rubber plantation industry on the basis of the recommendations of the Plantation Inquiry Commission.

The second chapter analyses the demand and supply position of the natural rubber industry. The development of the 'tyre sector' and the increase of non tyre uses such as cables, hoses, pharmaceutical and sanitary equipments paved the way for increased rubber consumption in India. In India the synthetic substitutes have not made any headway. Therefore unlike in foreign countries, in India natural rubber enjoys a vital role in satisfying the internal demand. Though Kerala enjoys almost a monopoly in production, in the case of demand it lags behind the States such as West Bengal, Tamil Nadu etc.

Part II discusses in detail the role of the Rubber Board in the development of the rubber plantation industry, the co-operative sector in rubber plantation industry and the credit structure of small holders. This part consists of two chapters, viz.

- (1) Role of the Rubber Board in the development of rubber plantation industry, and
- (2) Rubber Marketing Co-operative Societies of small holders.

The Rubber Board was constituted under the Rubber (Production and Marketing) Act, 1947 "to promote by such measures as it thinks fit the development of the rubber industry" in India. The Board initiated a number of programmes such as

financial aid schemes, effective performance of the co-operative societies of small holders, opening of nurseries, demonstration plots (to demonstrate to the growers the scientific, cultural and production practices), tapping methods, advisory services and research programmes. Steps are also being taken by the Board to expand rubber cultivation to non-traditional areas such as Andhra Pradesh, Goa, Assam, Tripura, Mizoram, Arunachal Pradesh etc. The Rubber Board also established a Research cum Development Station and a model plantation in the Andaman and Nicobar Islands. The Board designed and started 'Katchall Rubber Plantation Project' in Katchall Island of the Nicobar group, a phased programme of planting rubber in 800 hectares during the period of 1968-69 to 1979-80.

Chapter four analyses the role of the co-operative societies and the credit situation of the rubber small holders. The problem of credit is a major problem faced by the small holders. The Rubber Board's financial assistance is not sufficient. The high rate of interest prevailing in the credit market is a major difficulty faced by the small holders. Often the sources of credit are non-institutional and do not come under the Governments' or Reserve Bank's control. In fact the co-operative credit is the most important source of credit and it can solve many difficulties faced by the holders provided the co-operative societies participate actively and properly in their credit needs.

Part III comprises the following chapters:

- 1) Processing and Marketing
- 2) Cost of Production in estates and small holdings
- 3) Profitability position of estates and small holdings
- 4) Conclusions and Recommendations.

Next chapter discusses the processing and marketing of raw rubber. The processing and the quality of the product are directly related. The processing problems are of importance since the structure of the rubber plantation industry is characterised by the predominance of holdings. Most of the small holdings cannot afford to start advanced and modern means of processing. Further, 90 per cent of the holders do not have rollers, dripping yards, and smoke houses. Consequently they are forced to carry out the sheet rubber processing in a crude manner. Hence the survival and proper development of the small holders sector call for the bettering of the quality of their produce. Co-operative effort can be used to overcome this. Collection of latex, transportation of processed rubber from production centres to consumption centres, packing etc. are the important marketing functions as far as the rubber plantation industry is concerned. The various systems of marketing and the difficulties in marketing are also dealt with in this chapter.

The cost of production of rubber changes from time to time due to technical progress, scientific improvement and research and price fluctuations. Cost data for 1950s have been taken from the Report of the Plantation Inquiry Commission (1956) and Tariff Commission Report (1960); for 1960s, Tariff Commission Reports (1967 and 1969) are made use of; for 1970s, the study relied on the Rubber Board's assessment. The costs for estates and holdings are calculated with a break-up into cost of production upto latex stage, packing cost, processing cost, replantation cost, grade differential cost and transporting cost. All these components are discussed in detail. Along with this, yield accepted for cost analysis is also counted. The cost is calculated for 100 Kgs. of rubber. Replantation cost is counted as depreciation. And these form the content of the sixth chapter.

Next chapter discusses the profitability position of the rubber plantation industry. The calculation of the profit share of the estate sector and the small holding sector is made by using the 'break-even chart'. The profitability position of one hectare of rubber is calculated. Changes in variable costs, prices and production are the three major factors influencing profit. In this chapter, the size of an economic unit in rubber holdings is also analysed.

The findings and recommendations - to give a fillip to the rubber plantation industry - are given in the final chapter.

This study could not have been completed but for the guidance and co-operation of a large number of well-wishers to whom I am indebted.

I express my deep sense of gratitude to Dr.K.C.Sankaranarayanan, M.A., Ph.D., Reader in the School of Management Studies, University of Cochin under whose supervision and guidance I completed this research project.

I am greatly indebted to Dr. M.V. Pylee, Vice-Chancellor, University of Cochin and Dr. N. Parameswaran Nair, Director, School of Management Studies for their encouragement and interest in my research. My thanks are also due to Dr. Jose T. Payyappilly, School of Management Studies, University of Cochin, and Prof. Mathew Joseph of the St. Thomas College, Palai for patiently going through the draft and making valuable suggestions.

I have also benefited greatly from discussions with Prof. K.M. Chandy, formerly Chairman of the Rubber Board, Messrs. V.K. Bhaskaran Nair, Director, Rubber Research Institute; V. Bhaskara Pillai, Secretary, Rubber Board; P.K.Narayanan, Public Relations Officer, Rubber Board; R.G. Unny, Statistician, Rubber Board; T.M. Thomas, General Manager, Kerala State Co-operative Rubber Marketing Federation.

My thanks are due to the Library staff of the School of Management Studies and the Rubber Board and to my friends who showed interest in my work. Mr. Surendranatha Panicker deserves my special thanks for carefully typing the manuscript.

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JOSE THOMAS

P A R T - I

DEVELOPMENT OF THE RUBBER PLANTATION INDUSTRY

C H A P T E R - I

THE IMPORTANCE OF RUBBER

## THE IMPORTANCE OF RUBBER

1.1. The plantation sector has an important role in the economic development of India as it provides some of the basic raw materials which are necessary for industrial development. As far as natural rubber is concerned, it is a strategic raw material. It caters to a wide range of industries manufacturing a variety of products.

1.2. Rubber enjoys an important place among the commercial crops. India has only limited areas suitable for rubber plantation. The State of Kerala accounts for about 94 per cent of the land under rubber cultivation,<sup>1</sup> the balance being distributed in Tamil Nadu, Karnataka, Goa, Assam, Tripura, Andaman & Nicobar islands. Natural rubber which comes second only to coconut contributes over Rs.1,000 million to the gross income of Kerala.<sup>2</sup> Rubber latex as well as the timber and seed provide some base for industries and create opportunities for employment.

1.3. In Kerala, rubber cultivation covers a total area of 205,383 hectares. The rubber plantation industry in Kerala is composed of organised and unorganised sectors. The organised

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1. Government of India 'Report of the Rubber Small Holdings Economics Enquiry Committee', New Delhi, 1968, p.9.

2. Indian Council of Agricultural Research 'Hand-Book of Agriculture', New Delhi, 1966, p.215.

sector comprises well-organised estates and the unorganised sector represents thousands of small holders, isolated and scattered. The unorganised sector has, in comparison many disadvantages. Absence of collective bargaining power and staying capacity, prevalence of traditional and uneconomic methods of cultivation, unhealthy and dishonest practices of middlemen etc., continue to plague the unorganised sector. The size of the 'small holder sector' shows its decisive role in the development of rubber plantation industry. The growth of the 'small holders' sector' over the years has made rubber almost a small holder (small grower) crop.

1.4. The rubber plantation industry has recorded a phenomenal growth during the post independence period and is characterised by an upward trend in the production range from "import necessitating situation" to the "exportable surplus condition".

The following table gives the details:

TABLE 1.1

Year	Total area (Hectares)	Tappable area (Hectares)	Production (Tonnes)	Average yield per Hectare (Kilograms)
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
1950-51	69,001	55,800	15,830	284
1951-52	69,279 <sub>5</sub>	60,500	18,067	298
1952-53	69,924	64,400	20,496	318
1953-54	70,271	66,100	21,588	326

1	2	3	4	5
1954-55	71,487	66,800	21,774	326
1955-56	83,867	67,200	23,730	353
1956-57	94,839	72,200	24,060	333
1957-58	106,027	71,000	24,534	345
1958-59	115,970	70,300	24,169	344
1959-60	123,612	69,800	24,173	346
1960-61	129,905	70,300	25,697	365
1961-62	140,880	74,300	27,446	370
1962-63	146,149	84,000	32,239	384
1963-64	152,946	95,500	37,487	393
1964-65	155,324	108,500	45,616	420
1965-66	164,713	112,700	50,530	448
1966-67	171,260	113,500	54,818	483
1967-68	181,592	117,700	64,468	548
1968-69	187,514	123,300	71,054	576
1969-70	196,703	133,100	81,953	616
1970-71	203,098	141,200	92,171	653
1971-72	208,781	149,300	101,210	678
1972-73	211,312	154,960	112,364	725
1973-74	217,540	165,600	125,153	756
1974-75	221,265	170,900	130,143	762

**Source:** Rubber Board, Kottayam: 'Indian Rubber Statistics', Vol.15, p.24.

The graphical representation of these figures is given in Annexure-1. and Annexure-4.

From the above table it can be seen that the area under rubber increased from 69,001 hectares in 1950-1951 to 221,265 hectares in 1974-1975. This shows an increase of 220.67 per cent. The same upward trend is traceable in production too. It has increased from 15,830 metric tonnes in 1950-1951 to 130,143 metric tonnes in 1974-1975, that is an increase of 722.13 per cent. Further, productivity in terms of yield per hectare has increased from 284 Kgs. in 1950-1951 to 762 Kgs. in 1974-1975, that is an increase of 168.31 per cent. Above all, this period witnessed the stoppage of imports and the initiation of some exports.

1.5. Quantitatively, India's place in the world production of rubber is hardly significant. This can be discerned from the following table:

**TABLE 1.2**

INDIA'S PRODUCTION IN RELATION TO THE PRODUCTION OF  
RUBBER IN THE MAJOR RUBBER PRODUCING COUNTRIES  
OF THE WORLD

(In 1,000 metric tonnes)

<u>Year</u>	<u>India's Production</u>	<u>World Production</u>	<u>Percentage</u>
1965-66	50.5	2,352.5	2.15
1966-67	53.2	2,392.5	2.22
1967-68	62.3	2,522.5	2.47
1968-69	68.8	2,685.0	2.56
1969-70	80.0	2,995.0	2.67
1970-71	89.9	3,102.5	2.90
1971-72	98.9	3,085.0	3.21
1972-73	109.1	3,120.0	3.50
1973-74	123.2	3,505.0	3.51
1974-75	128.4	3,440.0	3.73

Compiled from: Indian Rubber Statistics, Volumes 13 & 15  
(p.89) (p.88)

From the table it can be seen that India contributes only 3.73 per cent to the world's production.

2.1. It may be stated here that in the early stages of production the lion's share of the rubber produced in India was exported. "In 1938 the internal consumption of rubber in India was only 5,600 tonnes out of a total annual production of about 14,000 tonnes".<sup>3</sup> Since then, with the growth and expansion of rubber manufacturing industry in India, the position has been reversed and at present the entire indigenous production is absorbed by the Indian rubber manufacturing sector.

2.2. Though the rubber plantation industry in India was started about seven or eight decades ago, the rubber manufacturing industry is comparatively of recent origin. It started only in the 1920's but has acquired power and strength within a very short time. World War II generated some favourable conditions for its growth. But substantial progress occurred only after independence. The post independent era is noted for the remarkable growth of rubber manufacturing industry. The same is the case with rubber plantation industry also. At present, the industry consumes about 130,000 tonnes of raw rubber annually and the whole lot is produced indigenously.

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3. Government of India, 'Report of the Plantation Inquiry Commission 1956 Part III Rubber', New Delhi, p.35.

2.3. Today, India produces, practically every kind of rubber goods to satisfy internal requirements. Further, India is exporting finished goods to foreign markets such as the Middle East, Burma, Shri Lanka etc. India is different from other countries in the field of rubber in the sense that she is now in the unique position of being a producer of raw rubber as well as a manufacturer of rubber goods. The rubber plantation industry has succeeded to a very great extent in increasing its production to meet the demands of the manufacturer so as to make India self-sufficient in her requirements of raw rubber.

3. Acute shortage of rubber during II World War led to the search for synthetic substitutes. The lead in this search was taken by the United States of America whose efforts have had remarkable success. Today, the output of synthetic rubber has assumed dynamic proportions. Now synthetic rubber competes with natural rubber in the crucial field of tyre manufacture. The conventional raw materials required for the manufacturing of synthetic rubber are the petro-chemicals. The cost of production of synthetic rubber in India remains the highest, because the raw materials used are not the conventional petro-chemicals but alcohol and benzene. Alcohol is produced from molasses and benzene from steel industry. The higher cost of production of synthetic rubber and the present energy crisis has, however, brightened the future of natural rubber industry.

#### 4. Structure of the Industry

##### 4.1. Size:

The British planters had started rubber cultivation on a plantation scale. At a later stage a number of indigenous planters started cultivation of rubber on a small scale basis. These small holders now predominate the rubber plantation industry.

4.1.1. Indian Rubber Plantations range in size from holdings having less than 1 hectare to estates of nearly 10,000 hectares. Under the Rubber Act, rubber plantations of over 20.23 hectares (50 acres) under a single ownership is treated as estates, and those whose area range up to 20.23 hectares are treated as holdings.<sup>4</sup>

As already pointed out, today the rubber plantation industry is dominated by small holders. The table 1.3 furnishes statistics regarding the number of rubber growing units registered with the Rubber Board at the end of March 1975.

The table 1.3 shows that the number of rubber growing units registered with the Rubber Board at the end of 1974-75 was 128,428 of which 613 were estates. At the end of 1969-70 it was 647. The registered area under rubber at the end of 1974-75 increased to 221,265 hectares from 187,514 hectares at the end of 1969-70. The share of the small holding sector in the total area during the five years 1969-70 - 1974-75 increased from 65 per cent to 73 per cent.

4. The Rubber Act, 1947 (Act XXIV of 1947).

TABLE 1.3

Year	Holdings		Estates		Total	
	Units	Area	Units	Area	Units	Area
1950-51	13,472	17,826	457	19,421	13,929	69,001
1951-52	13,549	18,137	458	19,878	14,007	69,279
1952-53	13,766	18,787	464	20,520	14,230	69,924
1953-54	13,969	20,069	461	21,280	14,430	70,271
1954-55	14,169	23,441	458	22,510	14,627	71,487
1955-56	26,787	36,288	446	47,579	27,233	83,867
1956-57	35,165	46,253	449	48,586	35,614	94,839
1957-58	43,516	56,831	471	49,196	43,987	106,027
1958-59	49,785	65,705	497	50,265	50,282	115,970
1959-60	54,694	72,383	513	51,229	55,207	123,612
1960-61	57,174	76,375	547	53,530	57,721	129,905
1961-62	62,867	84,887	580	55,993	63,447	140,880
1962-63	66,362	89,329	600	56,820	66,962	146,149
1963-64	70,150	94,786	618	58,160	70,768	152,946
1964-65	71,226	96,095	626	59,229	71,852	155,324
1965-66	75,504	101,865	636	62,848	76,140	164,713
1966-67	81,688	108,004	647	63,256	82,335	171,260
1967-68	92,731	116,966	654	64,626	93,385	181,592
1968-69	99,450	122,376	640	65,138	100,090	187,514
1969-70	106,825	130,647	647	66,056	107,472	196,703
1970-71	110,929	136,425	649	66,673	111,578	203,098
1971-72	114,461	141,342	650	67,439	115,111	208,781
1972-73	119,631	146,809	632	66,303	120,263	213,112
1973-74	124,397	151,458	627	66,082	125,024	217,540
1974-75	127,815	155,434	613	65,831	128,428	221,265

Source: Rubber Board, Kottayam: Indian Rubber Statistics, Volumes 12, 13 and 15.  
The graphical representation of these figures is given in Annexure II.

#### 4.2. Ownership:

Here the classification is made on the basis of ownership. The nature of ownership is represented by the nationality of the majority of the share holders of the company. Thus the classification may be made into Indian, Foreign owned and partially foreign owned.

The following table shows the details:

TABLE 1.4

<u>Nature of ownership</u>	<u>Units</u>	<u>Area (Hectares)</u>
Indian	88	24,531
Foreign	2	9,070
Partially foreign	3	3,912
	-----	-----
TOTAL	93	37,513

Source: Rubber Board, Kottayam.

There are only two fully foreign owned companies in India. They are Malayalam Plantations with an area of 8,954 hectares and Green Ham Estates Private Limited, (Kanyakumari) with an area of 116 hectares. There are only three partially foreign owned companies in India at present. They are M/s. Pullangode Rubber & Produce Company Limited (864 hectares), Cochin Malabar Estates Limited; (2,379 hectares) and Thiruvampady Rubber Company Limited, (669 hectares).

#### 4.3. Climatic and other conditions:

"Rubber grows in the tropical belt lying within 15° North and 10° South of the Equator and generally at elevations below 1,000 ft."<sup>5</sup> A stiff loamy soil of good texture to land laterite soils are often preferred. Besides, rubber requires:--

(i) a warm tropical temperature about 21°C - 35°C without much variation during the different seasons of the year.

(ii) an annual rainfall ranging from 200cms. to 300cms. distributed throughout the year.

4.3.1. A study of the list of the rubber growing countries in the world and their locations, in fact, shows that world's rubber plantations are limited only to a land roughly 15° North and South of the Equator. The main rubber growing regions in India also come mostly within the world's rubber belt. In India conditions approximate to these are obtained in Andaman Islands and in Kerala in the hills of western ghats. These rubber growing regions are confined to the South Western region of India consisting of Karnataka, Tamil Nadu and Kerala. The rainfall in these regions is not as well distributed as in the case of the other rubber growing countries such as Indonesia and Shri Lanka. Further, a long spell of dry hot season followed by heavy

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5. Report of the Plantation Inquiry Commission 1956, op. cit., p.22.

monsoon is found in the rubber growing regions of India, and to that extent it affects the growth and yield of rubber trees.

Rubber plantations in India are concentrated, to a large extent, in Kerala State and, to a smaller extent, in Tamil Nadu, Karnataka and Andamans. In the South, it extends from the Kanyakumari District of Tamil Nadu State to the Coorg District of Karnataka State in the North and, in general, lies west of the western ghats. The rubber growing area may be divided into three categories:-

1. The High land region.
  2. The Middle land region.
  3. The Low land region.
- 1) The High land region is mostly mountainous and consists of reserve forests and other plantation crops.
  - 2) The middle or lower upland region consists of small hilly areas of varying heights and sizes and the resultant valleys.
  - 3) The low land region denotes the flat alluvial and sandy tracts along the Arabian sea coasts.

Of these three divisions of land, the middle land region is a narrow belt of nearly 400kms. length contains most of the rubber plantations. The land in this belt is generally hilly in nature. From south to north, the climatic conditions

prevailing in this belt varies especially in the case of annual rainfall and distribution.

The variation in the climatic and soil conditions in the main rubber growing belt shown above leads to a classification of the belt into different agro-climatic regions. This classification is useful for offering recommendations regarding planting and the management of the plantations.

5. Rubber is one of the commodities controlled by the Union Government. The formation of the Rubber Board has been a turning point in the development of the Rubber Plantation Industry.<sup>6</sup> The Rubber Act (Production and Marketing) was passed in 1947. The Rubber Board was constituted under this Act. One of the important functions of the Board as defined in the Act is to promote the interests of the rubber industry by such measures as it thinks fit for its development so far as the production and marketing of rubber are concerned.

5.1. A major task before the Rubber Board at the time of its constitution was to increase the production of natural rubber as a sizable quantity of rubber was imported then to feed the internal manufacturing industries. Therefore, the emphasis was placed on the modernisation of the rubber plantation industry. In 1957 the replanting subsidy scheme was initiated to help the farmers in replacing the old low yielding

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6. Jacob K. T., 'Incentives for Rubber Production in India', (Reprinted from Rubber Board Bulletin, Vol.9 No.1) Rubber Board, Kottayam.

trees with high yielding varieties. In 1965 an ambitious target of an annual replanting of 2,000 hectares was fixed. Further, the Board opened a Central Nursery and four regional nurseries to ensure regular supply of high yielding planting materials. Since the requirements were greater than the Board's supply, certain private nurseries were approved of to supplement the needs.

5.2. In the Rubber Act, the provisions regarding marketing and the prices are contained in Sections 11, 13, 14, 15, 16 and 21.

The Act vests with the Government powers for prohibiting, restricting or otherwise controlling the import or export of rubber either generally or in specified classes of cases. The Act also empowers the Central Government to notify prices. Minimum and maximum prices are fixed and notified so that growers may know what minimum prices they are entitled to and the rubber users may know what prices have to be paid by them.

6. The co-operative movement was introduced into the rubber plantation industry a decade ago, on the basis of the recommendation of the Plantation Inquiry Commission (1956). The Commission made comprehensive recommendations for stabilising the small holding sector through the media of co-operatives and the Rubber Board started the implementation of the

recommendations in 1962-63. Since then the movement has made rapid progress in the rubber plantation industry.

6.1. To attract the rubber growers to the co-operative movement, the Rubber Board chalked out some schemes for implementation through co-operatives with the motive of making the benefits under these schemes available only to the members of the co-operatives. This arrangement was made to ensure the effective involvement of the entire small holding community into the development of the Rubber Plantation Industry.<sup>7</sup>

6.2. The vital need for developing co-operatives in the small holding sector is evident from the fact that about 90 per cent of small holders own less than 5 acres of rubber area.<sup>8</sup> Co-operative organisations have the advantage of combining the benefits of individual initiative and small scale pattern with those of large scale organisations and management. In view of the innumerable number of small holders, co-operatives are the best media for the Government or the Rubber Board or any other agency to reach the individual small growers and render them any assistance. Co-operatives of small growers, in this context, assume importance and only through a net work of co-operatives can any scheme intended for the uplift of the small growers be successfully implemented.

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7. Narayanan P. K., 'Rubber Growers' Co-operatives in India. An ideal Case of group action', paper presented at the MRELB International Marketing Conference, 1975, p.3.

8. Ibid.

6.3. At present the co-operatives form the media for channelising the assistance rendered by the Rubber Board to small growers, such as manure, subsidy, spraying subsidy etc. The Board also uses co-operatives offering technically sound processing facilities. Most of the small holders were not able to make full-fledged smoke houses of their own. The Rubber Board came to the field by offering to subsidise (75%) the construction of smoke houses built by co-operatives so that these smoke houses could serve as group processing centres. In addition to this, Co-operative Societies were encouraged to construct crepe mills by giving them financial assistance.

6.4. The co-operatives have played a very important role in the price support operations of the Government which were introduced with a view to ensuring the minimum notified prices to the small growers and implemented through the State Trading Corporation of India and the Kerala State Co-operative Rubber Marketing Federation.

7. Almost all the developing economies are dominated by the agricultural sector. Plantations form an important sub-sector of the agricultural sector in many developing countries.

7.1. Plantation industries are generally labour intensive and rubber plantation industry is no exception to this.

Generally manufacturing industries are capital intensive and hence they cannot absorb the excess labour power available, especially during the initial stages of development.

7.1.1. In this context rubber plantation industry has a vital role to play in the economy in providing large scale employment opportunities for the people in India.<sup>9</sup> It is estimated that the rubber plantations employ about 150,000 workers - a major portion of the total work force in the whole plantation industry in India. The significance of the rubber plantation industry in Kerala is that it is mainly confined to this State.<sup>10</sup> In the rubber plantation, men, women and even children are absorbed as workers. Another advantage of this industry is that it provides employment opportunities for the unskilled labourers also. Indigenous labour can effectively contribute to the development of the rubber plantation industry. To quote the Tariff Commission "If labour in other countries like Malaya can show better productivity there is no reason why indigenous labour which does not lack the skill or capacity should lag behind".<sup>11</sup>

The table No.1.5 shows the average daily employment in rubber plantations.

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9. George Jacob, 'Labour Conditions in Rubber Estates', Rubber Board, Kottayam, 1974, p.5.
  10. Government of India, National Commission on Labour, Report of the Study Group on Plantations (Coffee & Rubber), 1969, p.9.
  11. Government of India, 'Tariff Commission Report on the Revision of Raw Rubber Prices', New Delhi, 1960, p.98.

**TABLE 1.5****EMPLOYMENT IN RUBBER PLANTATIONS**

<u>YEAR</u>	<u>NUMBER</u>
1950-51	46,585 <sup>12</sup>
1951-52	47,354
1952-53	48,229
1953-54	48,647
1954-55	49,432
1955-56	56,540
1956-57	63,444
1957-58	71,032
1958-59	83,846
1959-60	88,721
1960-61	93,754
1961-62	101,776
1962-63	106,363
1963-64	113,528
1964-65	115,595
1965-66	122,481
1966-67	126,958
1967-68	135,104
1968-69	139,795
1969-70	144,423
1970-71	146,591
1971-72	147,902
1972-73	148,040
1973-74	149,635
1974-75	151,357

Source: Rubber Board, Kottayam, Indian Rubber Statistics, Vol.13 & Vol.16.

12. Figures for 1950-51 to 1956-57 are estimated.

7.1.2. There are three kinds of workers who are engaged in Rubber plantations.

- (a) Landless Labourers:- they contribute the highest percentage.
- (b) Labourers who own land:- In addition to wages they get some income from farming also.
- (c) Part time artisans or village workers:- Those who work as agricultural labourers also such as village blacksmiths, carpenters, etc.

7.1.3. A water-tight division is not possible here. However, we can broadly divide workers into two groups.<sup>13</sup>

- (a) Those who get the major share of their income from their employment in rubber plantations; and
- (b) Those who supplement their income by their employment in the rubber plantations.

7.1.4. While considering the employment strength in the rubber plantation industry, one should take into account both workers who are engaged in tapping and other field operations such as weeding, pruning, manuring, spraying, fencing and those who work at the managerial level.

7.2. A statistical study of the rubber plantations of Malaysia as an employment providing sector is interesting. It

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13. Indian Council of Agricultural Research, 'Handbook of Agriculture', New Delhi, 1966, p.698.

is stated in the 1957 Federation of Malaya population census that 616,589 of the economically active population are directly employed in the rubber industry.<sup>14</sup>

According to Lester R. Brown, it is estimated that the level of unemployment in India has increased from 11 per cent of the labour force in 1951 to 15 per cent in 1961. Indian labour force is expected to increase from 210 to 273 million during 1970s - an increment of 60 million.<sup>15</sup>

7.3. In addition to the direct employment provided in the rubber plantation industry, there are so many indirect openings for employment facilities. The development of the rubber plantation industry paves the way for the expansion and growth of the rubber based industries, development of transport and communications, house building industry and other related social overheads, which, in turn, provide employment channels and generate income.

8. The close co-relation between, the expansion of exports and economic growth means that the developing economies or the under-developed countries such as India have to gain greater access to export markets. Labour intensive products such as farm products and agricultural commodities such as rubber, coffee, etc., which suit the Indian conditions, must be exported in increasing quantities since they represent an 'export of labour' and in turn the necessary foreign exchange for economic growth.

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14. Brown Lester. R., 'World Without Borders', Affiliated East West Press Pvt.Ltd., New Delhi (Indian Reprint) 1973, p.59.

15. Ibid.

C H A P T E R - I I

DEMAND AND SUPPLY

DEMAND AND SUPPLY POSITION

1. The importance of rubber can be studied also from the perspective of its commercial aspect. The demand for rubber, internally and externally, has been rising steadily and rapidly since its first commercial production in the early years of the century. The flourishing development of the rubber consuming industries gave great stimulus to increased commercial production of rubber. The development of the 'Tyre Sector' as well as the increase of non-tyre uses such as cables, hoses, shoes, pharmaceutical and sanitary equipments paved the way for increased rubber consumption in India. The world rubber consumption rose from an annual average of 1.8 million tonnes during the early part of 1950s to an annual average of 7 million tonnes during the early years of 1970s.<sup>1</sup> It shows an increase of 260 per cent or an average annual increase at the rate of 10.4 per cent. Though there has been a progressive increase in world consumption of rubber, synthetic rubber accounts for the lion's share in the expanding market when compared to that of natural rubber. Among the consuming nations, the United States of America stands as the

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1. Department of Statistics, Rubber Board, Kottayam.

largest single user though consumption has been growing faster in other developed countries such as Southern Europe, Japan, Italy etc.

2. In India, rubber consumption has increased rapidly over the last twentyfive years. The rubber consumption shot up from 19,854 metric tonnes in 1950-51 to 175,076 metric tonnes in 1974-75 i.e. a 10 fold rise within a period of two and a half decades. Natural rubber comes to about 132,604 metric tonnes out of the total consumption (Indian) of rubber in 1974-75.

The table 2.1 reveals the details of the consumption of rubber in India.

TABLE 2.1  
CONSUMPTION

(Metric Tonnes)

Year	Natural Rubber	Synthetic Rubber	Reclaimed Rubber	Total
1	2	3	4	5
1950-51	19,854	-	N.A.	19,854
1951-52	23,202	-	N.A.	23,202
1952-53	20,344	18	2,023	22,385
1953-54	24,142	15	2,336	26,493
1954-55	26,332	21	2,267	28,620
1955-56	28,445	461	2,647	31,553
1956-57	29,998	2,866	3,543	36,407

1	2	3	4	5
1957-58	33,074	3,161	4,131	40,366
1958-59	35,767	3,477	4,102	43,346
1959-60	40,491	4,964	4,969	50,424
1960-61	48,148	7,397	5,453	60,998
1961-62	48,410	10,186	6,046	64,642
1962-63	53,553	10,723	6,850	71,126
1963-64	61,155	11,959	7,982	81,096
1964-65	61,057	15,285	9,369	85,711
1965-66	63,765	21,553	9,774	95,092
1966-67	68,685	23,592	10,913	103,190
1967-68	74,518	23,324	11,862	109,704
1968-69	86,615	27,238	14,169	128,022
1969-70	86,213	30,636	14,255	131,104
1970-71	87,237	33,160	14,348	134,745
1971-72	96,454	37,209	15,772	149,435
1972-73	104,028	33,913	14,666	152,607
1973-74	130,302	23,921	17,784	172,007
1974-75	132,604	24,376	18,096	175,076

Source: Indian Rubber Statistics, Volumes 13 (p.51) and 15 (p.45), Rubber Board, Kottayam.

2.1. It can be seen from table 2.1 that the consumption of natural rubber increased by 112,750 tonnes between 1950-51 and 1974-75. Natural rubber has not been able to meet

the total consumption requirements. The volume of consumption of synthetic and reclaimed rubber is also on the increase except for the years 1967-68, 1972-73 and 1973-74 in the case of synthetic rubber and for 1958-59 and 1972-73 in the case of reclaimed rubber. But the total volume of annual consumption has always been increasing except for the year 1952-53.

2.2. The statewise consumption of all kinds of rubber can be seen from the table No.2.2.

TABLE 2.2

STATEWISE CONSUMPTION OF ALL KINDS OF RUBBER

(Metric Tonnes)

Year	Natural Rubber	Synthetic Rubber	Reclaimed Rubber	Total
1	2	3	4	5
<u>WEST BENGAL</u>				
1965-66	27,091	10,234	6,290	43,615
1966-67	28,477	11,277	6,901	46,655
1967-68	31,633	10,638	7,122	49,393
1968-69	35,088	11,720	8,042	54,850
1969-70	31,686	12,198	7,507	51,391
1970-71	30,988	11,634	7,015	49,637
1971-72	29,825	11,206	7,139	48,170
1972-73	30,090	10,157	7,442	47,689
1973-74	31,535	15,058	5,925	42,518

1	2	3	4	5
<b><u>MAHARASHTRA</u></b>				
1965-66	16,018	5,886	1,809	23,713
1966-67	16,292	6,511	1,866	24,669
1967-68	15,105	5,335	1,841	22,281
1968-69	20,181	7,415	3,089	30,685
1969-70	20,823	9,272	3,064	33,159
1970-71	19,696	9,897	3,231	32,824
1971-72	24,351	12,648	3,660	40,659
1972-73	26,381	11,493	3,426	41,300
1973-74	29,302	6,341	3,891	39,534
1974-75	31,832	8,370	4,349	44,551
<b><u>TAMIL NADU</u></b>				
1965-66	9,889	2,768	1,188	13,845
1966-67	10,323	3,258	1,544	15,125
1967-68	12,243	3,105	1,806	17,154
1968-69	14,179	3,558	1,860	19,597
1969-70	15,754	3,922	2,235	21,911
1970-71	17,548	5,966	2,628	26,142
1971-72	19,346	5,541	2,885	2,7772
1972-73	18,972	5,215	2,029	26,216
1973-74	30,098	5,728	5,262	41,088
1974-75	25,835	4,166	3,537	33,538

1	2	3	4	5
<b><u>PUNJAB</u></b>				
1965-66	-	-	-	-
1966-67	1,497	212	81	1,790
1967-68	1,654	109	75	1,838
1968-69	1,745	100	120	1,965
1969-70	2,226	160	238	2,624
1970-71	2,277	206	269	2,752
1971-72	2,258	244	182	2,684
1972-73	3,485	195	189	3,869
1973-74	4,880	301	206	5,387
1974-75	4,881	236	139	5,256
<b><u>HARYANA</u></b>				
1965-66	4,555	1,901	95	6,551
1966-67	4,245	1,246	37	5,528
1967-68	4,538	2,469	103	7,110
1968-69	5,578	2,909	162	8,649
1969-70	5,668	3,126	187	8,981
1970-71	4,475	2,439	193	7,107
1971-72	6,422	3,488	597	10,507
1972-73	9,977	3,552	567	14,096
1973-74	11,949	2,962	1,036	15,947
1974-75	13,588	1,477	710	15,775

1	2	3	4	5
<u>KERALA</u>				
1965-66	3,353	517	293	4,163
1966-67	4,794	807	381	5,982
1967-68	5,443	1,148	434	7,025
1968-69	5,374	973	428	6,775
1969-70	4,922	1,034	491	6,447
1970-71	6,739	1,798	380	8,917
1971-72	7,868	2,115	560	10,543
1972-73	7,913	1,547	526	9,986
1973-74	9,035	1,423	610	11,068
1974-75	9,690	1,380	977	12,047
<u>DELHI</u>				
1965-66	1,076	66	25	1,167
1966-67	1,202	66	10	1,278
1967-68	1,513	93	9	1,615
1968-69	2,165	67	16	2,248
1969-70	2,043	125	31	2,199
1970-71	1,956	199	96	2,251
1971-72	1,811	420	130	2,361
1972-73	2,554	337	98	2,989
1973-74	3,837	390	92	4,319
1974-75	3,255	437	128	3,820

1	2	3	4	5
<u>GUJARAT</u>				
1965-66	882	70	5	957
1966-67	749	62	11	822
1967-68	797	100	25	922
1968-69	794	77	20	891
1969-70	1,117	119	30	1,266
1970-71	1,192	161	45	1,398
1971-72	1,515	282	65	1,862
1972-73	1,582	232	57	1,871
1973-74	2,185	198	94	2,477
1974-75	2,218	240	170	2,628
<u>UTTAR PRADESH</u>				
1965-66	444	32	17	493
1966-67	522	73	27	622
1967-68	678	96	34	808
1968-69	593	50	27	670
1969-70	917	83	51	1,051
1970-71	1,160	153	59	1,372
1971-72	1,401	189	43	1,633
1972-73	1,743	250	50	2,043
1973-74	2,100	372	82	2,554
1974-75	3,960	644	227	4,831

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
<u>KARNATAKA</u>				
1965-66	242	72	52	366
1966-67	343	75	55	473
1967-68	604	218	413	1,235
1968-69	532	332	378	1,242
1969-70	548	543	391	1,482
1970-71	631	609	358	1,598
1971-72	935	935	377	2,247
1972-73	484	737	220	1,441
1973-74	1,677	828	317	2,822
1974-75	1,570	975	443	2,988
<u>OTHERS</u>				
1965-66	215	7	-	222
1966-67	241	5	-	246
1967-68	310	13	-	323
1968-69	386	37	27	450
1969-70	509	54	30	593
1970-71	575	98	74	747
1971-72	722	141	134	997
1972-73	847	198	62	1,107
1973-74	3,704	320	269	4,293
1974-75	4,134	509	132	4,775

1	2	3	4	5
<b><u>TOTAL</u></b>				
1965-66	63,765	21,553	9,774	95,092
1966-67	68,685	23,592	10,913	103,190
1967-68	74,518	23,324	11,862	109,704
1968-69	86,615	27,238	14,169	128,022
1969-70	86,213	30,636	14,255	131,104
1970-71	87,237	33,160	14,348	134,745
1971-72	96,454	37,209	15,772	149,435
1972-73	104,028	33,913	14,666	152,607
1973-74	130,302	23,921	17,784	172,007
1974-75	132,604	24,376	18,096	175,076

**Source:** Indian Rubber Statistics, Volumes 13 (p.54, 55, 56) & 15 (p.48, 49 & 50), Rubber Board, Kottayam.

The relative share of natural and synthetic rubber in the total consumption is generally believed to depend upon the following factors:

- (a) Domestic supply
- (b) Competitive position of the product
- (c) Economy situation in production and consumption
- (d) Suitability or fitness of the product for the uses, and
- (e) Quality considerations.

2.3. In India, natural rubber enjoys a vital role in satisfying the internal consumption demand since the threat

posed by the synthetic substitute is not serious due to its restricted availability or supply. In India, the direct competition between the natural and synthetic rubber for a greater share in the market is absent. Further, in India, natural rubber enjoys better position both in quality and in cost. But the case with the foreign markets is different since synthetic rubber has drastically changed the demand and supply condition there, and it may be partly due to its abundant supply.

3. Natural rubber has reached high consumption levels in India in spite of the many inhibiting factors present in the Indian economy. Indian economy had to face recurring crises such as poor harvests, industrial recession, investment slowdown resulting from plan holidays and the chronic inflation which had depressing effects on all sectors of the economy. Even in the midst of these difficulties rubber consumption advanced steadily thanks to the spectacular progress of the tyre as well as non-tyre sectors. The growth of 'tyre-tube-sector' registers an annual growth rate of 14 per cent. For consumption purposes the demand for rubber, tends to be inelastic over a short period. The demand for rubber is technically related to the production programmes of the automobile industry. Thus the level of demand for raw rubber is free from affecting temporary market disturbances.

4. But the consumption uses of raw rubber in the non-tyre sector such as belts, hoses etc. are sensitive to the short-term changes. There are certain factors which govern demand elasticity. In the production corners where rubber is to be consumed, rubber constitutes a large proportion of the total costs and to that extent, the retail prices of the final products are influenced. Hence large variations in consumption create price deviations in the raw rubber.

4.1. In the total consumption, overall aggregate elasticity is of relative importance to the tyre as well as the non-tyre sectors. But there is every possibility of over play of demand elasticity when the non-automobile tyre sector is the major rubber absorbing sector. If the other uses of rubber develop, demand will become more elastic. The tyre sector was the dominant partner in the early fifties, but gradually the situation is changing in India. Table 2.3 shows the details.

5. The expansion of demand for rubber has been at a rapid rate. The fast growing tyre sector is the largest consumer of raw rubber in India. The increased number and capacity of non tyre sector also absorbs a significant volume of the rubber produced in India.

The actual production and consumption of natural rubber from 1950-51 to 1974-75 is given in table No.2.4. and production, import, export and consumption of all kinds of rubber in table No.2.5.

TABLE 2.3

(Metric Tonnes)

Year	Automobile & Tubes	Cycle tyres & Tubes	Total	Others	Grand Total
1965-66	N.A.	N.A.	N.A.	N.A.	95092
1966-67	44238	12509	56747	46443	103190
1967-68	44448	14602	59650	50654	109704
1968-69	55739	16636	72375	55647	128022
1969-70	59169	16168	75337	55767	131104
1970-71	61574	17014	78588	56157	134745
1971-72	70934	18723	89657	59778	149435
1972-73	73175	18808	91983	60624	152607
1973-74	81419	22578	103997	68010	172007
1974-75	85696	22925	108621	66455	175076

Source: Department of Statistics, Rubber Board, Kottayam.

TABLE 2.4

<u>Year</u>	<u>Production</u>	<u>Consumption</u>	<u>Difference(+&amp;-)<sup>2</sup></u>
1950-51	15,830	19,854	+ 4,024
1951-52	18,067	23,202	+ 5,135
1952-53	20,496	20,344	- 152
1953-54	21,588	24,142	+ 2,554
1954-55	21,774	26,332	+ 4,558
1955-56	23,730	28,445	+ 4,715
1956-57	24,060	29,998	+ 5,938
1957-58	24,534	33,074	+ 8,540
1958-59	24,169	35,767	+11,598
1959-60	24,173	40,491	+16,318
1960-61	25,697	48,148	+22,451
1961-62	27,446	48,410	+20,964
1962-63	32,239	53,553	+21,314
1963-64	37,487	61,155	+23,668
1964-65	45,616	61,057	+15,441
1965-66	50,530	63,765	+13,235
1966-67	54,818	68,685	+13,867
1967-68	64,468	74,518	+10,050
1968-69	71,054	86,615	+15,561
1969-70	81,953	86,213	+ 4,260
1970-71	92,171	87,237	- 4,934
1971-72	101,210	96,454	- 4,756
1972-73	112,364	104,028	- 8,336
1973-74	125,153	130,302	+ 5,149
1974-75	130,143	132,604	+ 2,461

Source: Compiled from Indian Rubber Statistics, Volumes 12, 13, 14 and 15, Rubber Board, Kottayam.

(2) +denotes greater consumption and  
-stands for lower consumption.

TABLE 2.5

## PRODUCTION, IMPORT, EXPORT AND CONSUMPTION OF ALL KINDS OF RUBBER

(Metric Tonnes)

Year	PRODUCTION			IMPORT			EXPORT			CONSUMPTION			
	Natu- ral	Synthe- tic	Total	Natu- ral	Synthe- tic	Total	Import/ Produc- tion Re- claimed	Natu- ral	Synthe- tic	Natu- ral	Synthe- tic	Recla- imed Total	
1950-51	15830	-	15830	4170	-	4170	N.A.	964	-	19854	-	N.A.	19854
1951-52	18067	-	18067	4853	-	4853	N.A.	158	-	23202	-	N.A.	23202
1952-53	20496	-	20496	2841	14	2855	1864	93	18	20344	18	2023	22385
1953-54	21588	-	21588	25	19	44	2224	59	15	24142	15	2336	26493
1954-55	21774	-	21774	3425	22	3447	2399	21	21	26332	21	2267	28620
1955-56	23730	-	23730	4428	1201	5629	2853	12	461	28445	461	2647	31553
1956-57	24060	-	24060	7341	3134	10475	3774	81	2866	29998	2866	3543	36407
1957-58	24534	-	24534	11357	3014	14371	4287	-	3161	33074	3161	4131	40366
1958-59	24169	-	24169	12538	4229	16767	3973	-	3477	35767	3477	4102	43346
1959-60	24173	-	24173	15287	5718	21005	5177	-	4964	40491	4964	4969	50424
1960-61	25697	-	25697	23125	8097	31222	5183	-	48148	48148	7397	5453	60998
1961-62	26446	-	27446	22528	10121	32649	6422	-	48410	48410	10186	6046	64642
1962-63	32239	-	32239	23360	10297	33657	6839	-	53553	53553	10723	6850	71126
1963-64	37487	8075	45562	26275	8812	35087	8251	-	61155	61155	11959	7982	81096
1964-65	45616	11633	57249	15003	3315	18318	9349	-	61057	61057	15285	9369	85711
1965-66	50530	14741	65271	16357	2735	19092	9764	-	63765	63765	21553	9774	95092
1966-67	54818	22358	77176	23544	5606	29150	11635	-	68685	68685	23592	10913	103190
1967-68	64468	19942	84410	9551	3127	12678	12215	-	74518	74518	23324	11862	109704
1968-69	71054	25868	96922	8548	2909	11457	13733	-	86615	86615	27238	14169	128022
1969-70	81953	28689	110642	17821	4736	22557	14440	-	86213	86213	30636	14255	131104
1970-71	92171	29791	121962	2469	5014	7483	15486	-	87237	87237	33160	14348	134745
1971-72	101210	32911	134121	437	5627	6064	16140	-	96454	96454	37209	15772	149435
1972-73	112364	21832	134196	380	6044	6424	14048	-	104028	104028	33913	14666	152607
1973-74	125153	23542	148695	52	5609	5661	16977	2700	130302	130302	23921	17784	172007
1974-75	130143	17535	147678	--	6939	6939	17531	350	132604	132604	24376	18096	175076

Source: Compiled from Indian Rubber Statistics, Volumes 12, 13 and 15; Rubber Board, Kottayam. The graphical representation of these figures is given in Annexure III.

6. Before analysing the demand and supply position of natural rubber in Kerala, it is important to study the roles of both estate sector and small holding sector in the production of raw rubber in India.

TABLE 2.6  
PRODUCTION OF HOLDINGS AND ESTATES

(Metric Tonnes)			
Year	Holdings	Estates	Total
1950-51	3387	12,443	15,830
1955-56	5316	18,414	23,730
1960-61	6528	19,169	25,697
1965-66	20424	31,006	51,430
1970-71	51538	40,633	92,171
1974-75	79260	50,883	130,143

Source: Department of Statistics, Rubber Board, Kottayam.

7. Quantitatively Kerala's place in the total Indian production is significant. It can be seen from table 2.7 that Kerala has 93.40 per cent of India's production in the year 1974-75.

7.1. But the demand position of natural rubber in Kerala is more significant since the state of Kerala plays a very vital role in the supply (90%) of natural rubber in India. The importance of Kerala from (the perspective of) its supply position reveals the scope of the development of the rubber

TABLE 2.7KERALA'S PLACE IN THE TOTAL INDIAN PRODUCTION

(Metric Tonnes)

Year	Kerala's Production	Indian Production	Percentage
1950-51	14,750	15,830	93.18
1951-52	16,683	18,067	92.34
1952-53	18,766	20,496	91.56
1953-54	19,759	21,588	91.53
1954-55	19,889	21,774	91.34
1955-56	21,680	23,730	91.36
1956-57	21,853	24,060	90.83
1957-58	22,196	24,534	90.47
1958-59	22,062	24,169	91.28
1959-60	21,890	24,173	90.56
1960-61	23,175	25,697	90.19
1961-62	24,954	27,446	90.92
1962-63	29,057	32,239	90.13
1963-64	33,792	37,487	90.14
1964-65	41,391	45,616	90.74
1965-66	46,953	50,530	92.92
1966-67	50,495	54,818	92.11
1967-68	59,978	64,468	93.04
1968-69	66,473	71,054	93.55
1969-70	76,897	81,953	93.83
1970-71	86,773	92,171	94.14
1971-72	95,499	101,210	94.36
1972-73	105,934	112,364	94.28
1973-74	117,221	125,153	93.66
1974-75	121,558	130,143	93.40

Source: Compiled from Indian Rubber Statistics, Volumes 12, 13, 14 and 15; Rubber Board, Kottayam.

plantation industry in Kerala. Kerala alone provides 91.66 per cent of the total consumption of the natural rubber in India in the manufacturing sector. In Kerala alone 121,558 metric tonnes of natural rubber are being produced.

7.2. As far as the economy of Kerala is concerned the supply side of raw rubber is more important than the demand side since Kerala enjoys in effect almost a monopoly in production, when compared to the other states in India. But in the case of demand aspect Kerala lags much behind the states such as West Bengal, Tamil Nadu etc. It seems a paradox. Kerala can go much further in the consumption of rubber provided conditions are created for the same.

P A R T - I I

CRITICAL EVALUATION OF THE DEVELOPMENT SCHEMES

C H A P T E R - I I I

ROLE OF RUBBER BOARD

IN THE DEVELOPMENT OF

RUBBER PLANTATION INDUSTRY

ROLE OF THE RUBBER BOARD IN THE DEVELOPMENT OF  
RUBBER PLANTATION INDUSTRY

1. The Rubber Board was constituted in 1947 under an Act of the Indian Parliament. This marked the dawn of an organised development scheme for rubber plantations in India.<sup>1</sup> Till 1967 the Board's development projects were concentrated in the distribution of high yielding varieties of planting materials and in the imparting of cultivation and production know-how on a limited scale to the cultivators. The Rubber Board got a new shape when the Rubber Rules were framed in 1955. These rules provided the Rubber Board with the appropriate powers for implementing various developmental schemes. Under the shade of the Rubber Rules (1955), the Board launched a major development scheme. The Government approved this scheme in 1956 and the Board implemented it in 1957. This scheme was popularly known as the replanting subsidy scheme. In 1962 another scheme was started with the aim of providing interest-free loans to small scale growers to enable them to expand their holdings to economic units by new planting. Along with these two schemes, the Board also

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1. Agenda and Notes of the 81st Meeting of the Rubber Board, 1975.

introduced several other new schemes to help the small farmers to meet their various needs. Under these schemes assistance was given to the farmers for the maintenance of existing immature areas, manuring, control of abnormal leaf fall diseases, demonstration and training in correct methods of planting, tapping, co-operative processing and marketing. Reviews of the schemes showed that the replanting subsidy was inadequate. But this aspect was taken care of in 1960.

#### DEVELOPMENTAL SCHEMES IN OPERATION

##### 2. Replanting Subsidy Scheme:

Section 9A (2) (d) of the Rubber Act, 1947, provides that general fund shall be applied for making such grants to rubber estates or for meeting the cost of such other assistance to rubber estates as the Board may think necessary for the development of the estates. Under this section of the Act, the replanting subsidy scheme was started in 1957. The aim of the scheme was to help farmers to replace the old low yielding un-economic rubber plantations with high yielding hybrid varieties on scientific lines of cultivation.<sup>2</sup> The Scheme, after a thorough review, was revised in 1960, providing more financial help to the farmers. The subsidy was raised from Rs.2,471/- per hectare to Rs.7,500/- which is given in 7 yearly

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2. Menon Mukundan, P., Financial Aid Schemes of the Rubber Board to Rubber Planters; Rubber Board, Kottayam; 1975, p.4.

instalments. From 1975 onwards the farmers were divided into three strata and different subsidy rates were declared for growers belonging to the different strata. The mode of payment of subsidy to replanters is given in table 3.1.

TABLE 3.1

Year	Amount of Subsidy Instalment		
	For growers owning 2 hectares of rubber Rs.	For growers owning 2 hectares & upto 20 hectares of rubber Rs.	For growers owning above 20 hectares of rubber Rs.
First	2,000	1,500	1,000
Second	1,500	1,000	500
Third	800	500	300
Fourth	800	500	300
Fifth	800	500	300
Sixth	800	500	300
Seventh	800	500	300
<b>TOTAL</b>	<b>7,500</b>	<b>5,000</b>	<b>3,000</b>

Source: Rubber Growers' Companion, Rubber Board, Kottayam, 1978, p.97.

2.1. Eligibility for getting subsidy was restricted by various conditions. Some of them are mentioned below:

- (1) Eligibility for subsidy was restricted to those plantations which were planted not later than 1956 and registered before 1st April 1958.
- (2) A minimum of 0.40 hectare or 1 acre should be replanted.
- (3) The subsidy is limited to those areas which had formerly at least 30 trees per acre or 74 per hectare. The aim of this was to discourage the conversion of areas having other crops or abandoned land for rubber cultivation.
- (4) In the case of intercropping also there are certain limitations. Seasonal intercrops are allowed only in the first year. After that leguminous cover crops are to be planted.
- (5) Retaining of non-rubber trees in the planting area is also limited by certain rules. These rules are meant to give the rubber trees an unhindered growth. Small holders with less than 6.07 hectares of planted area, are allowed to have 40 coconut trees per hectare.

2.2. The Board lags far behind the targets fixed for replanting. The targets fixed during 1957 to 1964 varied from 2,833 hectares to 3,848 hectares. From 1965 onwards, annual target was fixed at 4,047 hectares. In the year 1974-75 it was 5,000 hectares. But available figures show that the target achieved was only about 33.12 per cent i.e., 1,656 hectares only. Table 3.2 furnishes the details.

TABLE 3.2

STATEMENT SHOWING REPLANTING SUBSIDY SANCTIONED SINCE THE INCEPTION OF THE SCHEME

Year	Target	Small Growers			Large Growers			Total		
		No. of per- mits	Area in hec- tares	Amount sanc- tioned	No. of per- mits	Area in hec- tares	Amount sanc- tioned	No. of per- mits	Area in hec- tares	Amount sanc- tioned (Rs.)
1957-58	2833	406	595	931728	45	553	778969	451	1148	1710697
1958-59	2833	643	848	1455197	56	843	1371414	699	1691	2826611
1959-60	2833	725	876	1664397	56	728	1265310	781	1604	2929707
1960-61	3035	572	687	1655486	48	590	1433696	620	1277	3089182
1961-62	3237	919	1094	2640302	88	1178	2923800	1007	2272	5564102
1962-63	3440	908	1083	2647045	83	1191	3012037	991	2274	5659082
1963-64	3642	906	832	2106659	89	1295	3142848	995	2127	5249507
1964-65	3848	752	805	2003839	94	1815	4387360	846	2620	6391199
1965-66	4047	980	1172	2970556	112	2362	5635441	1092	3534	8605997
1966-67	4047	1183	1301	3364974	98	1954	4688237	1281	3255	8053211
1967-68	4047	760	869	2182233	74	1553	3528020	834	2422	5710253
1968-69	4047	552	749	1638184	62	1080	2585961	614	1829	4224145
1969-70	4047	888	767	2166567	67	933	2184334	955	1700	4350901
1970-71	4047	976	915	1968760	65	1074	2281326	1041	1989	4250086
1971-72	4047	588	571	1099549	43	816	1619788	631	1387	2719337
1972-73	4047	660	623	1094987	59	972	1586648	719	1595	2681635
1973-74	4047	856	769	1284998	35	637	956882	891	1406	2241880
1974-75	5000	1261	1077	2023118	31	579	845795	1293	1656	2868913

Source: Rubber and Its Cultivation, Rubber Board, Kottayam; 1977, p.82.

### 2.3. Replanting Subsidy Scheme: (Review)

This is the most important development scheme in operation. But, the scheme has not been making any satisfactory performance. The annual targets fixed for replanting during the years from 1957 to 1964 were varying from 2,833 hectares till 1973 and in 1974, it was 5,000. From 1965 onwards it was fixed at 4,047 hectares per year. Thus the total target alone seems materialised.

2.3.1. Further, details furnished in the table 3.3 show that the large growers had taken advantage of the scheme's benefit when compared to the small growers.

TABLE 3.3

Particulars	Large Growers	Small Growers	Total
Number of effective permits	1,174	14,535	15,709
Extent replanted (Hectares)	19,574	15,633	35,207
Percentage of the above to the total	55.6	44.4	100
Amount of subsidy paid (in Rs.)	4,42,27,866	3,48,98,579	7,91,26,445
Percentage of the above to the total	55.9	44.1	100

Source: Rubber Board, Kottayam.

The table shows that large growers are benefited to a larger extent (55.6%) than the small growers (44.4%) by the scheme.

2.3.2. The estimations show that a total extent of 70,000 hectares require immediate replanting. Of this 56,000 hectares, i.e. about 80 per cent is in the small holding sector. The response of the small growers has been comparatively lower when compared to the estates. To that extent the Rubber Board faces a problem. The Board has to convince the small growers.

### 3. Loan Schemes:

The existing Loan Scheme of the Board was introduced in 1966 in replacement of the two loan schemes implemented earlier. In spite of the liberal concessions granted in respect of the payable interest on the loans the scheme has failed to make a performance up to the expectations.<sup>3</sup> The annual target fixed under the scheme has been for new planting and maintaining 2,425 hectares upto 1973-74 and 1,000 hectares in 1974-75 i.e. a total of about 20,425 hectares over a period from 1966-67 to 1974-75. As against this, the loans actually granted was for only 3,698 hectares (applications to cover only 11,540 hectares were received during the period). 447 applications are still pending disposal out of the total 2,747 applications received. The total loan disbursed so far under the three schemes amounts to Rs.78.25 lakhs.

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3. Menon Mukundan, P., Problems in the Implementation of Rubber Development Schemes, Rubber Board, Kottayam, 1974, p.8.

Under Section 9 (B) (2) of the Rubber Act 1947, the Pool Fund shall be applied only for rehabilitation of small growers. The Board had implemented two loan schemes for new planting and up keep of immature rubber trees in 1962 and 1964 respectively. A new loan scheme was introduced in 1966 replacing the two schemes explained above.

3.1. The New Planting Loan Scheme (1962) aimed at raising the registered small grower's existing holding to 5 - 15 acres (2.02 - 6.07 hectares). The amount of this loan was limited to Rs.750 per acre<sup>4</sup> (0.40 hectare) which was expected to be paid in six annual instalments. This loan was free of interest. In 1964 the Immature Area Upkeep Loan Scheme was launched with the idea of giving interest free loans to small growers. The eligibility of the loan was restricted to registered small growers who had an area between 0.40 and 6.07 hectares. The area should have been planted in 1957 and subsequent years. The maximum loan was limited to Rs.475 per 0.40 hectare which was payable in six instalments.

3.2. It is under this Scheme that the Rubber Board is now operating the New Loan Scheme. Under this Scheme, loans are paid to small growers for both new planting and upkeep. The scheme envisages to assist registered small growers to expand their holdings to a minimum of 2.02 hectares and upto a maximum of 20.23 hectares by new planting. The scheme is also meant to

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4. 1 acre is equal to 0.4046859 hectare.

maintain immature areas which are not less than 0.40 hectares. These stipulations are made for assuring the holdings to be economic holdings.

The amount of loan in the case of new planting is limited to Rs.3,460 per hectare which is payable in 7 instalments. The first instalment is Rs.500 per 0.40 hectares, the second Rs.240 per 0.40 hectares and the subsequent five annual instalments at Rs.130 per 0.40 hectares. The maintenance loan is granted from the year in which they apply till the end of the seventh year of planting. Loan will be granted only after the first year. The first instalment, irrespective of the year in which they apply, is at the rate of Rs.250 per 0.40 hectares, and the remaining instalments at the rate of Rs.130 per 0.40 hectares. The loans are interest-free upto the end of the 9th year of planting. From the 10th year a five per cent interest is charged per annum. Repayment of interest and capital is also due from 10th year. The repayment is to be made in equal annual instalments, the number of instalments in the case of new planting being seven. Maintenance loan is to be repaid in equal amounts in the same number of years as it is paid.

These loans are given against security. The security stipulated for new planting loan is Rs.1,800 per acre (Rs.4,450 per hectare). In the case of maintenance loans security is fixed at Rs.2,470 per hectare (Rs.1,000 per acre). The area

newly planted or maintained under the scheme is considered to be primary security. If this is found inadequate collateral securities are to be furnished.

3.3. The Board also provided some other additional assistance, such as assistance for using high yielding planting materials and fertilisers. The rules in respect of retention of non-rubber trees and intercropping with seasonal crops are more or less the same as in the replanting subsidy scheme.

3.4. The result of the loan scheme was not encouraging. Consequently, the Board allowed certain concessions regarding the payment of interest.<sup>5</sup> The scheme envisaged new planting at the rate of 2,428 hectares during 1966 to 1972. During the seven year period the applications received for new planting came to 11,350 hectares only and the Board granted loans for only 2,900 hectares.

The reasons for the unsatisfactory performance are the following:--

- (a) The amount of the loan was insufficient with reference to the expenses for new planting.
- (b) The Land Reforms Acts and Kerala Private Forests Vesting and Assignment) Act. These Acts created uncertainties in land ownership.<sup>6</sup>

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5. Rubber and Its Cultivation, Rubber Board, Kottayam, 1977, p. 83.

6. The Land Reforms Acts fixed the ceiling on possession of land in Kerala and Tamil Nadu. The land available over and above the ceiling is to be surrendered to the Government

- (c) Non availability of land for expanding existing uneconomic holdings.
- (d) Encumbrances of the lands of the small holders.
- (e) Unwillingness on the part of the small growers to keep their land mortgaged for a long period of time.
- (f) The unbearable expenditure on stamp duty and registration charges when registering mortgage deeds.
- (g) The delay in processing the loan applications and in the granting of loans.

3.5. Considering the high cost of new planting, under the Fifth Five Year Plan, the loan rate was raised to Rs.5,000/- per hectare and for maintenance Rs.3,500/- per hectare after six years of planting.

3.6. It is difficult for the small growers to expand their holding to a minimum of 2.02 hectares which is stipulated under the rules of the loan scheme. This is because of the dearth of land for expansion. A recommendation is made to the Government to revise the rule for limiting the minimum to 1.20 hectares.

3.7. Most of the lands of the small growers are already encumbered and therefore it is not possible for them to avail

...under the statute. Uncertainty continues over the claim on the possession of land. Some categories of land are exempted from the ceiling. But it is risky for the Board to accept land offered as security for loans. The Kerala Private Forests (Vesting and Assignment) Act, 1971 also raises similar problems to the Board.

themselves of the loans from the Board. Another interesting thing is that those small growers who have unencumbered land in most cases dislike to mortgage them for a loan from the Board. A mortgage for new planting loan with the Board means the denial of owner's freedom for participation and other transactions for about seventeen years. Socially and economically such a long period is unviable to a small grower in India.

3.8. The Board failed in giving concessions regarding stamp duty and registration charges. But it may be recalled here that people get such concessions from State Governments and Co-operative Societies for loans.

3.9. Much time is elapsed between the receipt of loan application by the Board and the granting of loan. The application has to undergo certain formalities such as making of a correct survey plan, title deeds, certified abstracts, 'Thanda-pper' account, encumbrance certificate and land tax receipts by the applicant and a keen checking of these documents by the Board and the lawyers of the Board. Most of the documents produced by the applicants were found to be unacceptable and they were requested to furnish fresh documents. Sometimes years pass when all these formalities are finished. The Board has not yet put forward any suggestion to eliminate the delay. In the case of dealing with defaulters in repayment there is no provision to proceed with action similar to revenue recovery.

3.10. In the discussion of the loan scheme, mention may be made of the schemes implemented by the Agricultural Refinance Corporation through scheduled banks. Chief among them is the scheme of the Central Ministry of Supply and Rehabilitation under the programme for rehabilitation of Indian repatriates from other countries. The Rubber Plantation Industry has benefited only very little by the loan scheme of Agricultural Refinance Corporation implemented through scheduled banks. The reasons for the little impact of the scheme were the high rate of interest charged by the banks and the bank's preference for schemes involving substantial outlay due to the small commission the banks were offered. The Corporation is now offering refinance facilities for smaller schemes through land mortgage banks. Large scale departmental and public sector rubber plantations are getting assistance from loan schemes under the repatriate rehabilitation programme. No loan is granted to a private party under this programme.

#### 4. Distribution of High Yielding Varieties of Planting Materials:

At the very inception of the Rubber Board it realised that the immediate problem faced by the rubber plantation industry is the dearth of improved planting materials.<sup>7</sup> Due to the non-availability of better yielding varieties of planting materials, unselected materials were used by almost all small

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7. Menon Mukundan, P., Problems in the Implementation of Rubber Development Schemes; Rubber Board, Kottayam, 1974, p.12.

growers and even to a certain extent by the large planters. This was uprooting the very basis of the purpose for which the Board was started. As an immediate solution to the problem, the Board started distributing improved materials. The Board then undertook procurement and distribution of selected TJIR-1 Clonal seeds and seedlings . From 1947 to 1970, the Board distributed 63 million TJIR-1 Clonal seeds and 3 million TJIR-1 indigeneous polyclonal and imported PBIG/GG seedlings. Budded stumps and budwood distribution during the period 1947-1970 was one million numbers and 26,000 metres respectively. In 1963, the Board banned the use of unselected materials by not granting licences to the growers who were using unselected materials. This particular step was unique in the sense that there is no parallel in the history of any other crop in the country. The Board made lists of banned materials from time to time. From 1971 onwards the use of TJIR-1 Clonal seeds and seedlings was also banned.

4.1. This particular situation makes it obligatory on the Board to ensure the distribution of high yielding planting materials at reasonable prices to the growers. Under the control of the Board, there is a Central nursery at Karikkattoor near Erumely covering an extent of 20.23 hectares. There are also four regional nurseries with a total area of 15 hectares. Besides, there are also small nurseries attached to the two experimental stations at Puthuppally and Chethackal meant for multiplication of nucleus material of latest high yielding varieties.

The current demand for budded stumps is about 2 million in numbers and the demand for budwood is about 20,000 metres. There is every possibility of increase in demand when the Board accelerates its developmental schemes in the future. The capacity of the Board's nurseries to distribute materials is far from actual demand for materials. As a remedy for this the Board gave sanction to about 140 commercial nurseries to sell budded stumps and budwood under the strict control of the Board. During the four years of 1971 to 1974 the share of the Board in the distribution of planting materials was less than that of the approved private nurseries.

4.2. The present system of distribution of planting materials by the Board is far from satisfactory. The inadequacy of nursery capacity is one of the major problems faced by the Board in the programme. Another impediment in the working of the programme is the inadequate transport facilities for the highly perishable planting materials. Due to unpredictable changes in climatic conditions, the planting materials delivered to the growers may be wasted. Most of the materials distributed may not sprout due to these reasons and the growers may take it for the poor quality of the materials. The need for establishing more nurseries is self evident. A proper system should be introduced to distribute the materials on the spot on cash payment.

5. Subsidy for Construction of Smoke Houses by Individual Small Growers:

This scheme is to subsidise construction of smoke houses of 90kg. capacity by small growers owning a minimum of 1.21 hectares and upto 6.07 hectares of registered rubber area. The subsidy is limited to Rs.750/- for smoke house and Rs.75/- for providing temperature guage. The scheme was implemented in 1974-75. The target fixed for 1975-76 was 120 smoke houses. So far 31 smoke houses have been constructed under the scheme and an amount of Rs.18,000 disbursed as subsidy.

6. Aid Programmes through Co-operatives:

The rubber plantation industry in India is composed of small growers and big estates and the share of small growers is about 63 per cent. The small growers usually do not have sufficient knowledge and means to follow scientific methods of cultivation and processing. To give helps to each and every individual grower is not feasible. The possible way in which the Board could extend assistance to growers is through Co-operatives of small growers.<sup>8</sup>

The two major problems faced by the small growers are:--

- (a) Lack of proper processing facilities to produce good quality sheets. Construction of efficient smoke houses is costly and is beyond the capacity of individual growers.

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8. Report of the Rubber Small Holdings Economics Inquiry Committee, Government of India, Ministry of Commerce, 1968, p.61.

(b) The small grower is forced to sell his produce as soon as it is processed due to the lack of funds to meet the domestic requirements. The rubber dealers take undue advantage of demand and supply position of rubber and the bargaining power of small holders is, indeed, very poor. This particular situation has necessitated the organisation of an agency of the growers themselves to market their rubber at reasonable prices.

6.1. Subsidy Scheme for Control of Abnormal Leaf Fall Disease:

Abnormal leaf fall disease is caused by the fungus phytophthora during the South West Monsoon. This disease can be controlled through effective prophylactic spraying of foliage with copper fungicides immediately before the starting of monsoon. Bordeaux Mixture is sprayed using high volume sprayer or oil based Copper Oxychloride in diluent spray oil using either low volume air blast sprayers from the ground or aerial spraying from aircrafts. The high cost of spraying discourages most small growers from taking such precautions against the disease. Taking into consideration of this particular situation the Board started the subsidy scheme as an incentive for small growers. The rates of subsidy at present per hectare for mature areas is about Rs.175/- for Bordeaux Mixture spraying, Rs.94/- for low volume oil based spraying from ground and Rs.110/- for aerial spraying. For immature areas

the rates per hectare are Rs.89/-, Rs.63/- and Rs.65/- respectively. The eligibility for getting this subsidy is based on membership in co-operative societies. The growers have to purchase the fungicides or diluent oil from their respective Co-operatives. The subsidy is given only through the Co-operative Societies. The Board incurred an expenditure of Rs.12,39,682/- during 1974-75 on this scheme.

The performance of this scheme is far from satisfactory due to various reasons. Only about 25 per cent of the eligible small growers are availing themselves of this aid. The reason for the failure of this aid scheme is that the small growers often find it difficult to finance the rest of the spraying cost. On the part of the Board the main problem is concerned with the timely sanctioning of funds. Often funds are sanctioned and given to the growers after the starting of monsoon. Most of the co-operative societies function inefficiently which affects the operation of the scheme.

#### 6.2. Subsidy for Manuring Immature Areas:

The eligibility for this aid is limited to those growers who have membership in a co-operative society. The grower should not have more than 6.07 hectares and the area should be planted with high yielding varieties of rubber. The Board provides a 50 per cent subsidy for the purchase of fertilisers from the co-operative society by the grower.

This subsidy scheme is restricted to the exclusive rubber plantations, i.e. no subsidy is given to interplanted areas. Another condition is that cover crops should be established at least within a year of the date of application.

But these restrictive conditions denied the benefits of the subsidy scheme to the vast majority of small holders. Considering these difficulties the Board has relaxed the conditions of the scheme with effect from 1974. Interplanting is now allowed under replanting subsidy scheme and loan scheme is extended to manure subsidy scheme also. Under this scheme from 1965 onwards about 500 manure subsidy permits were given. The amount distributed as half-cost of fertilizer is about Rs.80,000/-.

### 6.3. Subsidy to Co-operative Societies towards the Cost of Construction of Smoke Houses:

A subsidy is paid to the co-operative societies which undertake the construction of smoke houses. The maximum amount of the subsidy is limited to Rs.7,500/- or 75 per cent of the cost of construction whichever is less. The cost of the site is not included in the cost of the smoke house but it will include the cost of rollers, weighing machine and other equipments required for a smoke house. Subsidy is paid in three stages, the first on completion of the entire basement, the second on completion of superstructure and the last on completion of the entire work. Before the last instalment is paid

the final valuation and completion certificate of the officer has to be obtained and sent by the society.

**6.4. Supply of Rollers on Hire Purchase Basis to Small Holders Through Co-operative Societies:**

Registered small holders who own 5 to 15 acres of tapping area are eligible for getting one double set rubber roller on hire purchase basis. The applicant must be a member of a co-operative society. The first instalment of the roller is Rs.250/- and is to be paid on intimation. The person concerned can take delivery of the roller from the Regional office at Kottayam after executing a mortgage bond in favour of the Board on a stamp paper of the value of Rs.2.25. Repayment of the balance cost of the roller is to be paid back to the Board in the succeeding three years in equal instalments. The roller will remain mortgaged to the Board and will be the property of the Board until the final instalment is repaid. The Board has spent Rs.76,910/- during 1974-75 on this scheme.

**6.5. Working Capital Loan to Societies:**

Several Marketing Societies dealing in rubber and rubber marketing societies, registered under the Co-operative Societies Act are eligible to get working capital loan of Rs.50,000/- from the Board. The co-operative society should have not less than 200 individual members, and should have a

paid up capital of not less than Rs.10,000/- raised from the members. The interest of the loan is stipulated at 5%. In the first year, the society has just to pay the interest and thereafter principal and interest have to be repaid in 9 equal annual instalments.

**6.6. Share Capital Contribution to Societies:**

Co-operative Societies with smoke houses are eligible for a share capital contribution of Rs.10,000/- from the Board. For eligibility each society should at least have 100 individual members with a paid up share capital of at least Rs.5,000/-. General marketing societies dealing in rubber and rubber marketing societies are also eligible for a share capital contribution of Rs.25,000/- each from the Board provided each society has at least 200 individual members with a paid up share capital of Rs.12,500/-.

During the first five years from the date of receipt of share capital contribution, the society need not refund the amount. But the whole amount is to be repaid in equal annual instalments in the next five years. The Board is eligible to get dividend from the society at rates declared to the regular members of the society in the general body.

The aim of organizing co-operative societies was to simplify the Board's task of extending various forms of

assistance individually to each grower. At present there are more than 200 co-operative societies in this field. These societies extend various kinds of services to the growers: supplying of planting materials and other estate requirements, group processing of rubber, marketing and giving short term credit facilities. Now more than 75 per cent of the rubber growers have become members of co-operative societies.

In future, more number of societies are required to bring the whole of the small growers under the fold of co-operative movement. The Board has to see that the activities of the Societies are widened in order to cater to the growing variety of needs by the growers. Adequate supply of finance is also a problem to the growers.

#### 7. Demonstration Plots:

The object of this scheme is to demonstrate to the growers the modern scientific methods of rubber cultivation. The land selected will be on the side of a public road and it should be owned by a registered grower. There will be one or two plots in the jurisdiction of each junior field officer. During 1965, 20 plots and in 1966, 12 plots were started. Each plot will be maintained for a 10 year period commencing from the year of planting.

Free technical assistance is given to the grower by the Board from the selection of site to the starting of

tapping. Planting materials required for the selected plot is given by the Board free of cost. During the 10 year period fungicides are supplied at half the cost. For fencing and for soil conservation too aid is extended. For fencing the rate is Rs.100/- per acre and Re. 1 per chain length for soil conservation. During 1974-75 Board has spent Rs.17,918/- under this head.

8. Tapping Demonstrators:

12 Tapping demonstrators are appointed by the Board attached to various offices. The demonstrators are meant to mark and open trees for tapping at newly planted and replanted areas. Periodically the Board is arranging tapping training classes. The services of tapping demonstrators are primarily meant for the small growers.

9. Tapping Training School:

Attached to the Rubber Research Institute of India, a Tappers' Training School was started by the Board in 1965. Five training courses are conducted in every year with a duration of eight weeks for every course. The Board has spent a sum of Rs.9,098 till 1974-75 under this head.

The scheme aims at imparting training to the sons of small growers or their dependants who intend to take up tapping as a profession. During the training period each candidate will be given Rs.15/- per week.

10. Training and Advisory Services:

The Board has the obligation to educate the small growers on scientific lines. Various schemes have been established by the Board for imparting scientific training to growers in cultivation, tapping etc. The Board gives advisory services to the growers. It establishes and maintains demonstration plots. Demonstration and training of correct methods of tapping is another task taken up by the Board. It also publishes journals, magazines and leaflets. Periodically seminars and study classes are also conducted by the Board. The Board has established a small growers' training school and a number of regional tappers training schools (as stated in paragraph 9).

11. Regional and Sub Offices of the Board:

The Rubber Board has decentralised its executive powers for administrative convenience and for speedy and efficient implementation of works relating to development which includes licensing and registration of rubber estates and co-operative societies, research and extension, market intelligence etc. The Board has five regional offices at Trivandrum, Kottayam, Palai, Ernakulam and Calicut. There are 18 sub offices functioning at important rubber growing centres such as Kulasekharam, Chadayamangalam, Punalur, Pathanamthitta, Tiruvella, Karukachal, Kanjirappally, Trichur, Palghat, Thaliparamba, Puthur, Agarthala (Tripura), New Delhi, and Calcutta. The sub-offices at New Delhi

and Calcutta are mainly dealing with work relating to market intelligence. The sub-office at New Delhi helps to maintaining liaison between the Board and the Central Government.

#### 11.1. Regional Offices:

Each regional office is under the charge of an Assistant Development Officer. He is assisted by a Field Officer (Development) and two more Junior Field Officers. The Field Officer (Extension) will help the Assistant Development Officer in matters relating to extension work.

The main functions of the regional office are the following:

It has all the functions assigned to a sub-office in so far as they relate to the area under the direct charge of the regional office. The regional office sanctions payment of the 1st year replanting subsidy instalments for areas not exceeding 10 acres\* and subsequent years' instalments for areas not exceeding 20 acres.\*\* The office issues tapping certificates and supervises the work of the sub-offices and regional nurseries within its jurisdiction. It has the power to receive application for registration of estates on behalf of the Board. The regional office issues licences for new planting and replanting and it can extend or revoke the period of the licences. It also receive application for replanting subsidy, new planting and maintenance loans, and for supply of planting materials from the region concerned.

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\*4.04 hectares

\*\*8.08 hectares

### 11.2. Sub Offices:

Each sub-office is in charge of a Field Officer. He can seek the help of Junior Field Officers depending on the work in the sub-office.

The sub-office has various functions. It has the duty to inspect the estates in connection with payment of replanting subsidy, manure and fungicides subsidy, loans, grant of rollers on hire-purchase basis, registration etc. Areas upto 5 acres get the replanting subsidy payment from the sub-office. The distribution of planting materials, fertilisers at subsidised rates, and plant protection equipments either directly or through co-operatives is under the jurisdiction of the sub-offices.

### 12. Research and Development:

The Research Wing:-- In June 1954 the Government of India gave official approval to the scheme for the establishment of a Rubber Research Institute and Experiment Station. At Puthuppally 33 hectares of land was acquired and a pathologist and an Agronomist were appointed. In the laboratories of this station at the Rubber Board Buildings Puthuppally researches on basic and applied problems of rubber culture and rubber technology are being conducted. The department has Agronomy, Botany, Plant pathology and Chemistry/Rubber Technology division. Experiments on manuring, clonal performances

and plant protection methods are carried out at different zones with the co-operation of private estate owners due to lack of adequate area at Puthuppally station.

There are two experiment stations for the Rubber Research Institute of India. The Central Experiment Station is at Chethakkal (Ranni) and the Experiment Station is at Puthuppally. At each station there is a library which is under the charge of a Librarian assisted by an Assistant Librarian.

13. Extension Wing:

The extension wing of the Research Department is functioning under the Rubber Production Commissioner who is also the Director of Research. The primary duty of the Extension wing is to keep growers up-to-date with new ideas. The Extension wing can be considered the most important connecting link between grower and the Board.

The Extension Wing does a liaison work by giving technical assistance to rubber growers and advisory work. Aiming at maximum production the Wing encouraged growers to adopt modern techniques at the intensive and extensive levels. Immediate attention is given by the Wing on plant protection problems. The Wing arranges courses and demonstrations on tapping etc., approves private nurseries, seed collection areas and collects and distributes seeds and planting materials. The Wing is in charge of nurseries, demonstration trials and

plots, fertiliser allotment to firms and import and allotment of laboratory equipments, chemicals and other items required by rubber growers and estates. There are two Assistant Development Officers, six Field Officers and twentythree Junior Field Officers in the Extension Wing.

14. Rubber Research Cum Development Station, S. Andaman:

A project with an estimated cost of about Rs.40 lakhs extending a period of 11 years from 1964-65 to 1974-75 was sanctioned by the Ministry of Rehabilitation. This project is meant to encourage rubber cultivation in the Andaman and Nikobar Islands. The project will serve as a pilot project to serve as a model plantation-cum-demonstration centre in the Andaman Islands. The project will provide technical knowhow and high yielding planting materials to the entrepreneurs. Studies relating to the growth and performance of "Hevea brasiliensis" in this region are also conducted.

About 508 acres\* of the Andaman Rubber Plantations have been temporarily handed over to the Rubber Board by the Andaman Administration.

15. Development of Rubber Cultivation in Other States:

To attain the production targets the Rubber Board tries to expand rubber cultivation in other states. Orissa,

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\* 205 hectares

Goa, Assam, Tripura and Karnataka have now started rubber plantations on an experimental basis.

TABLE 3.4.

EXPENDITURE OF THE RUBBER BOARD UNDER VARIOUS SCHEMES FOR HOLDINGS EXCLUSIVELY FOR THE YEAR 1974-75.

	Rs.
<b>I. <u>Loan Schemes</u></b>	
New Planting and Maintenance Loan Scheme:	- 4,81,773
Rubber Rollers higher purchase Scheme:	- 76,910
Share Capital Contribution to Co-operatives:	- 3,00,000
Working Capital Loan to Co-operatives:	- 9,99,000
<b>II. <u>Subsidy Schemes:</u></b>	
Free supply of Planting Materials	- 2,13,063
Subsidy for fertilisers	- 12,25,053
Soil Conservation grant	- 6,265
Distribution of Planting materials at concessional rate	- 49,421
Distribution of fertilisers at the half cost through co-operatives	- 12,39,682
<b>III. <u>Other Schemes:</u></b>	
Publication of Malayalam Magazine	- 18,514
Demonstration Plots	- 17,918
Tappers Training School	- 7,259
Purchase of Sprayers and Dusters	- 1,139
Other items (Schemes)	- <u>38,839</u>
<b>IV. Total</b>	<b>46,86,436</b> =====

Source: Rubber Board, Kottayam.

S U G G E S T I O N S

1. Though the Rubber Board has been introducing so many developmental schemes to develop the rubber plantation industry with special reference to the small growers, the Board failed to a great extent in exploring the economic impact of these schemes. The Board has to go a long way in this field. It is found that the Board has chalked out many study programmes for analysing and assessing the responses of the growers towards the Board's various schemes. These include studies covering net income of growers, credit structure of small growers, the responses of growers towards the aid schemes of the Rubber Board etc.

2. At present the Rubber Board recommends that, in the case of buddings 400 to 445 plants could be initially planted per hectare and 445 to 520 in the case of seedlings. Another recommendation is to reduce, by the 10th year, the number of plants to 310 by successful 'Thinning out'. But, generally, this recommendation has been followed by estates alone, and the standing is rather high in holdings. The reason for this is that a small grower, who is also a tapper, prefers to have a higher standing so that he gets higher income by tapping a few more trees. But in effect, these marginal income does not compensate for the expenditure incurred in the maintenance and raising of the same. The operation of the law of diminishing returns also shows that he cannot have unlimited standing.

3. Spraying is necessary to prevent the abnormal leaf-fall during the monsoon period. But the cost of spraying materials such as copper sulphate, oil based copper fungicide and spray oil has considerably increased. The cost increase has been much higher during the period 1973-75. An estimated additional yield is necessary to compensate for the increase in cost of spraying. A commercial study of the economics of spraying is useful in this regard.

4. There are different systems of tapping in practise. It is useful to evaluate the net income obtained from the same planting material of the same age adopting different methods of tapping. Thus, the Board will be in a position to recommend the most economic system of tapping. Further, it is of importance to find out the optimum task. Tapping cost forms an important portion of the cost of production of rubber. If it is possible to reduce tapping cost it is advantageous. The study may help to formulate new methods in the planting and spacing of rubber trees.

5. The growers who undertake replanting are allowed to raise other crops during the immaturity period, under the Replanting subsidy scheme of the Rubber Board. This intercropping is allowed with a view to providing the grower with a means of living, during the immaturity period. A detailed study of the economics of intercropping will be effective to convince the replanting growers of the most advantageous combination of crops that could be grown in rubber areas.

6. The Rubber Board is recommending fertilisers to the growers in certain proportion. It is advantageous to study fertiliser utilisation, groupwise and region-wise. The quantity used by the growers are not scientific.

7. The Rubber Board has been providing various aid schemes for the benefit of small growers through the co-operatives. It is necessary to make reviews of the rubber marketing societies at regular intervals. This will be useful in making timely improvements and modifications from the view point of small growers' benefit.

CHAPTER - IV

RUBBER MARKETING CO-OPERATIVE SOCIETIES OF

SMALL HOLDERS

**A. CO-OPERATIVE SECTOR IN THE RUBBER PLANTATION**

**INDUSTRY**

1. The Rubber Board paid attention to the promotion of co-operative rubber marketing societies with a view to safeguarding the interests of small holders and to remove the difficulties faced by them. The Tariff Board in their report of 1951 stated that the Rubber Board should take suitable steps for improving marketing.<sup>1</sup> The Rubber Board observed<sup>2</sup> that the schemes of the co-operative marketing could not be implemented due to the reluctance of the small growers in joining the societies. The Rubber Board noticed that even the educated holders were sceptical of the scope of co-operatives;<sup>3</sup> they did not find any use in it since there was good demand for rubber. Further the Board pointed out that, the presence of rubber dealing middlemen who discouraged the small growers from joining the Co-operative societies was one of the reasons in this regard. And even many of the small holders were pessimistic about the possibilities of setting up societies. The

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1. Report of the Indian Tariff Board on the prices for Raw Rubber and Protection and Assistance to the Rubber Plantation Industry, Government of India, Delhi, 1951.
  2. 15th meeting of the Rubber Board.
  3. The holders were not convinced by the Co-operative Services and their prospects. Further, it was a period of high demand for rubber and consequently high prices. Therefore, there was no problem of marketing.

Board took the attitude, that the small growers themselves initiate the formation of societies; but this initiative was absent among them. The Plantation Inquiry Commission 1956 made a detailed study on this question and came to the conclusion that co-operative marketing societies should be formed with co-operative supply and banking societies. The Commission formulated the functions of the marketing societies. Central marketing societies were necessary to collect latex directly and process it or collect the smoked sheets where primary multipurpose societies undertook processing. Further the marketing societies were expected to purchase rubber outright and collect a charge with a view to meeting administrative expenses and losses in marketing. In 1958 the Government of India adopted the recommendations of the Commission. As a result, for the purpose of promoting the development of co-operative societies in rubber plantation industry, the Rubber Board, in 1960, obtained from the Kerala Government the services of a Deputy Registrar of Co-operative Societies. Since then, a number of co-operative marketing societies have been organised by the Rubber Board.

## 2. RUBBER BOARD'S SCHEMES FOR ORGANISING AND FINANCING MARKETING SOCIETIES

The Rubber Board has various schemes to finance the societies in addition to organising and giving technical assistance to the marketing societies.

### 2.1. Share Capital Loan:

The Rubber Board undertakes share capital participation in rubber marketing co-operative societies of small growers and societies which constructed smoke houses and started processing of rubber. The participation was limited to the extent of Rs.25,000 and Rs.10,000 each to a marketing society and a society with a smoke house respectively, till the year 1971-72. At present the Board participates in the share capital of primary marketing co-operative societies dealing in rubber, and the maximum amount that can be given by way of share capital to a society is Rs.50,000. The share capital granted to the co-operative societies from the Board is refundable. For availing this, the societies have to satisfy certain maximum requirements. Only marketing societies with not less than 200 members and a paid up share capital of Rs.12,500 are eligible for this loan, and for societies with smoke houses, the minimum requirement is a membership of 100 and a share capital of Rs.10,000. The share capital is to be repaid in 5 annual instalments, the first instalment falling due on the expiry of the fifth year from the date of disbursement of share contribution. This scheme was implemented in 1965-66. Twenty-four societies for marketing and 7 societies for smoke houses have made use of this share participation scheme till the end of 1974-75, and the total amount comes to Rs.13,35,000.

## 2.2. Working Capital Loan:

The Scheme for granting working capital loan was introduced in 1963-64. Under this scheme small growers societies which are engaged in the marketing of rubber produced by the members are given working capital loan to assist them to effectively and more efficiently undertake their activities. Originally, Rs.30,000 was the maximum loan payable to any society. But in 1965 it was raised to Rs.50,000 since the earlier loan was insufficient to serve the purpose. Five per cent interest was charged by the Board on the loan. The loan is to be repaid in 9 equal annual instalments, the first instalment falling due on the second anniversary of the payment date of the loan. Societies with a membership of 200 and a paid up share capital of Rs.10,000 alone are eligible for the loan. Till the end of 1974-75, 23 societies availed themselves of this loan and the total amount to this effect was Rs.15,84,000.

## 2.3. Subsidy to Co-operatives for Constructing Smoke Houses:

This scheme was initiated in 1962-63. It was meant for assisting the co-operative societies of small growers to construct smoke houses in order to process the latex produced by their members. The subsidy granted under the scheme was 50 per cent of the cost of construction of smoke house, subject to a maximum of Rs.5,000 till the year 1966-67. But from 1966-67 onwards the rate was raised to 75 per cent of the cost of

construction or Rs.7,500 whichever is less. During the period from the introduction of this scheme in 1962-63 to the year 1974-75 a sum of Rs.82,068 was granted as subsidy to 14 societies for the construction of 15 smoke houses.

#### 2.4. Assistance for Modern Processing:

The Central Government sanctioned the programme of giving a share capital of Rs.2,00,000 to the Palai Marketing Co-operative Society for undertaking modern processing activities. Thus a sum of Rs.2,00,000 was granted to the Palai Marketing Society by the Rubber Board.

In addition to the above mentioned schemes the Board has been implementing various schemes for the benefit of small growers through co-operatives such as subsidised supply of fertilisers, supply of rubber rollers on hire purchase, grant of subsidy on the cost of fungicides used for spraying and distribution of sprayers.

### 3. MEMBERSHIP STRENGTH

Membership strength is of vital importance in the efficient functioning of a marketing co-operative society. The underlying principle of the co-operative spirit is freedom from exploitation, i.e. to safeguard the interests of the members from the exploitation of profit oriented dealers, middlemen etc. There are general marketing societies as well as rubber

marketing societies which are engaged in the marketing of rubber produced by their small grower members. Of the sixty societies, the Ranni Marketing Co-operative Society, the Palai Marketing Co-operative Society, the Ponkunnam Marketing Society and the Monippally Marketing Co-operative Society are general marketing societies and the rest are rubber marketing societies. Only small rubber growers owning 20.23 hectares (50 acres) and below are admitted as members. In addition to the growers membership is rarely given to co-operative institutions, merchants, trades commission agents etc. under special circumstances. But merchants and traders or members of that category are not permitted to participate in the management and are not given the voting right. In rubber marketing societies, generally of small growers of rubber, Rubber Board and State Government are admitted as members.

Table 4.1 furnishes the details regarding the membership strength of the Societies.

The table shows that the membership strength of the societies was increasing steadily. During the years 1970-71 and 1971-72 there was a substantial increase in the membership and this increase was due to the entering of the State Trading Corporation and the Kerala State Government in rubber marketing with their rubber purchasing scheme from small growers through co-operative societies. Though the societies accounted for only less than 4 per cent of the total strength

TABLE 4.1PROGRESS OF CO-OPERATIVE MARKETING SOCIETIES DEALINGIN RUBBER

<u>Year</u>	<u>No. of Societies</u>	<u>No. of Members</u>	<u>Paid up share capital (in thousand Rs.)</u>	<u>Rubber Marketed (in tonnes)</u>	<u>% of small holders production.</u>
1963-64	6	1,423	115	275	2.1
1964-65	11	2,185	210	660	3.9
1965-66	16	6,461	414	1,778	8.7
1966-67	18	9,108	733	3,027	12.5
1967-68	23	17,953	1,180	5,990	19.5
1968-69	23	19,317	1,388	3,978	11.0
1969-70	25	20,606	1,857	4,284	9.8
1970-71	37	32,977	2,655	10,651	21.3
1971-72	58	84,918	5,009	14,510	25.4
1972-73	58	89,691	5,800	18,513	28.5
1973-74	60	93,880	6,900	7,045	9.4
1974-75	60	96,484	7,100	4,350	5.49

Source: Compiled from Indian Rubber Statistics, Volumes 12, 13, 14 and 15, Rubber Board, Kottayam.

during 1972-73, they handled 28.5% of the total volume of trade. But in later years due to the prevalence of remunerative prices, such intensive involvement was not effected.<sup>4</sup>

4. The main objectives of the rubber marketing societies as stated in their bye-laws are:

1. To arrange the sale of rubber produced by the members.
2. To procure and distribute planting materials, manure, important implements etc. to the members of the society;
3. To advance money on mortgage of the produce of members sent for sale;
4. To facilitate storage and sales of rubber open rent for own godowns or depots;
5. To arrange for the transport of goods;
6. To render knowledge of the latest improvement in the cultivation of rubber and processing of the latex; and
7. To act as Government's or Rubber Board's agent for implementing expansion programmes.

4.1. In addition to these functions, societies' byelaws state, the objectives of processing of the raw rubber produced by the members and purchased by the societies and the manufacturing of the rubber goods.

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4. Narayanan. P. K., Rubber Growers' Co-operatives in India - An Ideal Case of Group Action, p.7&8.

5. The Trivandrum District Rubber Planters' Society was the first society to start rubber marketing. This establishment marketed 33 tonnes of rubber in the year 1962-63. In 1963-64 five more societies started dealing in rubber, and by 1967-68, 23 societies were engaged in rubber marketing. During 1967-68 the total quantity marketed by the societies was 5,990 tonnes of rubber. The quantity marketed in 1968-69 declined to 3,978 tonnes but in 1969-70 it slightly improved to 4,284 tonnes. The wide fluctuations in the prices of rubber during 1968-69 and 1969-70 was the main reason for the fall in business. In 1969-70, due to the liberalisation of import, there was a steep fall in the price of rubber. It was extremely difficult for the societies to purchase and sell rubber in the fluctuating market. The State Trading Corporation supported the co-operatives to perform effectively to face the difficulties. The State Trading Corporation entered the market to purchase rubber at notified prices, through co-operative societies in Kerala.<sup>5</sup> As a result of the State Trading Corporation Rubber purchase scheme, the total quantity marketed by the Societies in 1970-71 increased to 10,651 tonnes. In 1972-73 the quantity marketed increased to 18,513 as against 14,510 tonnes in 1971-72. But the period 1972-73 and 1973-74 saw a decline in the quantity marketed. This period also saw some export of rubber. (The details are furnished in the above table. Table No.4.1.)

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5. State Trading Corporation entered the market in connection with the Government's price support operation.

6. In addition to the marketing of raw rubber the societies were also engaged in the distribution of various estate requisites like spray oil, fertilisers, fungicides, acid etc. among the members. There are societies which run consumer/ration depots. Further, societies provide some high yielding planting materials to rubber growers. Some of these societies have also been maintaining nurseries for distributing high yielding materials among the members.

7. Profit:

A study conducted by the Rubber Board revealed that:

"Only 5 societies namely Venjaramood society, Kaduthuruthy society, Alwaye-Kunnathunad society, Palghat District Society and Pandalam Society had obtained profit for all the years after the commencement of rubber marketing. Out of the above societies Pandalam society started rubber marketing only in 1970-71. Moovattupuzha Taluk Society, Thodupuzha Taluk Society and Arakunnam Society had incurred loss only once. While Kunnathur Taluk Society had never earned profit since it started rubber marketing (similarly the Kottayam Taluk Rubber Marketing Society, which is not included in the study, had also been running at a loss, ever since it started rubber marketing. As already stated the society is in the process of official liquidation). From 1968-69 onwards Kanyakumari District Society and Trivandrum District Society were also incurring losses. Pathanapuram Society had incurred heavy losses during the last 3 years. Meenachil Taluk Rubber Growers Society was also running on loss since 1966-67. It may be noted that during the period, this society had diverted substantial amount for establishing a crepe mill, constructing smoke house, etc. In order to find the reasons for the continuous losses in certain societies, a comparative study of trading, establishment and contingent expenses of societies and certain rubber dealers has been made. It is found that the average expenditure for marketing one tonne of rubber in the case of societies which had incurred continuous losses was more than 50% and in some cases even more than 100% compared to that of private dealers. A good number of societies were found to

be overstaffed. The average expenditure per tonne was appreciably less in Moovattupuzha, Thodupuzha, Kaduthuruthy and Arakunnam societies. During the period under study 8 societies namely Venjaramood, Chadayamangalam, Thodupuzha, Palghat, Thiruvella, Kaduthuruthy, Pandalam and Palai had declared dividend for certain years".<sup>6</sup>

8. Rubber is a perennial crop and has a long fruition lag. Selection of proper planting materials is important in the context of improving productivity. The Rubber Board has taken some steps to supply high yielding planting materials to the growers every year. But a great number of growers are disappointed and are forced to postpone planting due to the non-availability of planting materials of their choice. The planting materials available from the private sector are often found defective.

8.1. The procedure-oriented system of supply of planting materials followed in the Rubber Board and the inability of the growers to reach the Board to obtain the materials in time necessitate the co-operatives to take up the role. The Kerala State Co-operative Rubber Marketing Federation can effectively help and assist the small growers in solving the problem. The Federation must establish regional nurseries for growing high-yielding planting materials. The primary societies have to distribute these planting materials to their members according to their requirements.

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6. Unny, R.G. and Haridasan. V., "A Study of Co-operative Rubber Marketing Societies", Rubber Board, Kottayam, 1974, p.15.

### 9. Cultural Practices:

The small growers are now following the general recommendations made by the Rubber Board for fertiliser application without taking into consideration the fertiliser requirements of individual plots. This leads to wastage of money, scarce fertiliser and efforts. To avoid this, the primary societies should arrange for the testing of the soil samples collected from the holdings. They should thereafter, place their requirements for fertiliser to the Federation. The Federation has to establish fertiliser mixing units and meet the requirements of the primary society. It will be effective if all fertilisers mixing units be brought under the co-operative fold for the following reasons:

- (1) to regularise the timely supply of fertiliser to agriculturists;
- (2) to avoid market manipulations; and
- (3) to ensure the quality of the fertiliser mixture supplied.

In the co-operative field, this is in service rather than a business.<sup>7</sup>

### 10. Plant Protection Measures:

The marketing co-operative have played a significant role in popularising the plant protection methods among

7. Hand Book of Agriculture, Indian Council of Agricultural Research, New Delhi, 1966, p.697.

small growers. The societies own microne sprayers, hand-operated sprayers etc., and are being made available to the growers on nominal rent. The purchases of fungicides by the societies are made so far from private agencies. But since the formation of the Kerala State Co-operative Rubber Marketing Federation, some of the primary societies have used to purchase the fungicides, from the Federation and in turn it enabled the primaries to supply quality fungicides at reasonable prices. All the primary societies must follow this practice.

#### 11. Marketing and Processing:

The important function assigned to co-operatives in the Rubber Plantation industry is the marketing of rubber produced by the small growers. The term marketing denotes the following functions too i.e., to provide the credit facilities to members on the security of their produce, to arrange for the storage of members' produce; to provide necessary facilities for the granting of the members' produce; to introduce the system of pooling for better bargaining to act as agents of Government for procurement and implementation of price support policy and to arrange the distribution of estate requisites for better production.

The small growers are at the mercy of private rubber dealers and their evil influence on the market. The co-operative marketing system was introduced to remedy this.

But in the initial stages the co-operative marketing societies failed to achieve these objectives on account of various factors, the prominent among them being lack of adequate funds, lack of interest on the part of the consuming industry to deal with the co-operatives, inability of the societies to obtain the confidence of the members.

In the subsequent years they have improved their performance and when the price support operations of the Government were introduced the societies played a very significant role. And, now again when the price support operations have ceased, their performance is not up to the expectations. The general feeling is that the societies can function satisfactorily only in a protected market. Their performance shows that there is some truth in this. This must be changed. In many cases the administrative set-up and machinery fail to satisfy their goals not because the structure of the co-operative set-up is defective, but because the people who work with the machinery lack initiative and vision. "The net results of a co-operative way of living may not admit of statistical evaluation but its effects, tangible or intangible, enrich the life of the cultivator and lead to a widening of his horizon—social, ethical, economic and intellectual".<sup>8</sup>

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8. Hate M. V., Administrative Machinery for The Economic Reconstruction of Rural Areas, The Indian Journal of Agricultural Economics, Vol.VI, 1951, p.18.

**B. CREDIT STRUCTURE OF SMALL HOLDERS:**

1. One of the major problems faced by the small growers is that of credit shortage.<sup>9</sup> Here we propose to discuss this matter in some detail.

1.1. It was observed that though the scheme of replanting was started in 1957 the progress of the scheme in the small holding sector has not been very encouraging. At the end of 1974-75, 16,000 hectares were replanted in the small holding sector and 20,700 hectares in the estate sector. The area remaining for replanting was 55,000 hectares in the small holding and 15,000 hectares in the large holding sector. The major reason for this was the scarcity of sufficient funds for undertaking replanting and also for sustaining the family during the immaturity period, viz., the first seven years. In this context, it is obvious that to accelerate the tempo of replanting in the small holdings sector, it would be necessary to study the extent of the problem of shortage of funds. Here it is attempted to find out the credit needs of rubber small holders. It may also be mentioned here that the Rubber Board's financial assistance is not sufficient to meet the increased cost of replanting, though the Board has been granting the subsidy to the extent of Rs.2,471 per hectare till the replanting year of 1974, and a differential rate ranging from Rs.3,000

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9. Hand Book of Agriculture - Indian Council of Agricultural Research, 1966, Chapt.14, p.698.

to Rs.7,500 during 1975. For the present analysis we rely on the study made by the Rubber Board on the credit structure of rubber small holders.

## 2. CREDIT REQUIREMENTS OF SMALL GROWERS

2.1. Since rubber has got a rather longer fruition lag growers are in need of credit for agricultural operations during immaturity period as well as maturity period of the crop for different purposes. Long term loans are preferred predominantly by growers during immaturity period of rubber trees, whereas during maturity period usually the loans required are medium and short term.<sup>10</sup>

2.1.1. The study made by the Rubber Board discloses the importance of the various types of loans in the different stages of the growth of the rubber trees in the small growing sector. According to Rubber Board's survey Rs.2,230 was found to be the sum required as credit by a family exclusively for rubber cultivation per year. The credit requirement for cultivation and maintenance for one hectare of rubber area for any year was estimated to be Rs.1,084. Further, 4.03% was treated for purchase of planting and 18.30% for the purchase of spraying materials from the total requirement for credit. The corresponding percentages of sum required for purchasing sprayer and the construction plans were 11.62 and 24.38 respectively.

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10. Hand Book of Agriculture, Indian Council of Agricultural Research, New Delhi, 1965, Chapt.14, p.698.

**Short Term Loans:**

2.1.2. Payment of wages and purchase of spraying materials constitute the important requirements of short-term loans. It was estimated that short-term loans formed 18.64 per cent of the total credit requirements.

**Medium Term Loans:**

2.1.3. Medium term loans are mainly required for the purpose of purchasing spraying materials and fertilisers in the rubber plantation of small growers. Usually borrowings for a period within the range of 1 to 5 years are treated as medium term loans. The medium term loan requirements constituted 23.27% of the total of the credit required by the small holders.

**Long Term Loans:**

2.1.4. Loans shared for the periods which range beyond 5 years are usually counted as long term loans. The long term loans were required by the growers usually for purchasing rollers, constructing smoke houses, soil conservation works etc. It is found that long term loans are preferred by the growers to other types of loans. Requirements in the form of long-term loan constitute 58.09% of the total credit.

2.2. Generally, it is found that the majority of growers prefer Rubber Board as the agent for channelising the credit,

though the growers have been making use of the credit facilities from a number of institutions such as the Land Mortgage banks, Co-operative banks etc.

2.3. The most common method of classifying credit is to categorise it into credit from institutional sources and non-institutional sources. The primary distinction between institutional sources and non-institutional sources is that the private individuals and their loans are usually not subjected to Government interference or control while institutional sources are either Government owned or owned by authorised agencies which are under Government control.

2.4. The sources of borrowing for the small rubber growers, according to the Rubber Board study<sup>11</sup> were mainly relatives, friends, nationalised banks, other banks, money lenders, chitty/kury and co-operative societies. Further, the study reveals that in terms of the amount borrowed, co-operative institutions provided the largest amount (38.92%) among the rubber small growers.

Table 4.2 furnishes the details regarding the various sources of credit which provide the funds among the rubber small holders.

2.4.1. Borrowing from relatives constitutes 22.18% of the credit and 52.61% of the money obtained by way of

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11. An enquiry into the credit structure of Rubber Small Grower Families who have undertaken, Replanting or New Planting. Rubber Board, Kottayam, 1975. (Unpublished.)

TABLE 4.2

BORROWINGS FROM VARIOUS SOURCES

(In Rupees)

Units	Relatives	Friends	Nationalised Banks	Other Banks	Money Lenders	Chitty/Mury	Co-operative Institutions.	Others	Total
200	236190	132152	83061	21511	42702	96372	368661	84232	1064880
	(22.18%)	(12.41%)	(7.8%)	(2.02%)	(4.01%)	(9.05%)	(34.62%)	(7.91%)	(100%)

Source: Rubber Board, Kottayam.

borrowing from this source was found utilised for agricultural purposes. It was also noticed that interest was paid for 51% of the total amount borrowed from this source and the interest rate ranged from 10% to 16%.

2.4.2. The source of borrowing from friends provided 12.41% of the total credit. Out of the amount availed of from this source 93.57% was spent for agricultural purposes. Interest was paid for 52% of the amount borrowed from this source.

2.4.3. The nationalised banks provided 7.8% of the credit. The purpose of the loan obtained from this source was mainly agricultural. 93.82% of the amount from this source was spent for agricultural purposes. The other banks also provided an insignificant portion of the credit, i.e. 2.02% and the entire amount was spent on agricultural operations.

2.4.4. The borrowing from money lenders constitutes 4.01% of the total amount borrowed. Out of the amount availed of from this source of credit 52.32% was spent on agricultural purposes, 45.05% on construction works and 2.53% for purchasing land.

2.4.5. The borrowing from chitty/kurry stood 4th in importance as far as the amount contributed is concerned. This source forms 9.05% of the total credit availed. Almost all the amount realised in this way was spent on agricultural purposes. It constituted 94.69%.

2.4.6. The loans from the co-operative societies were the most important source of credit for the growers. This constitutes 34.62% of the entire amount availed of in the form of credit. Out of the amount realized from the source of credit, 80.99% was spent for agricultural purposes. In terms of amount provided and spent for agricultural purposes, this source stands first in importance.

2.4.7. Other sources of credit include the borrowings from Life Insurance Corporation of India, Provident Fund, Hire Purchase agencies and Rubber dealers. This source provides 7.91% of the total credit. 84.19% of the amount from this source was spent on agricultural purposes.

3. The problem of providing adequate credit services to the growers assumed special significance in recent years with the adoption of economic development programmes. Most of the studies revealed that there is a certain relationship between availability of credit and the adoption of modern techniques of cultivation. The opinion of growers about the present credit facilities is important. The most important reason for dissatisfaction is the high rate of interest. The absence of any check or control from either the Government or any other agency such as the Reserve Bank etc. is the important reason for the high interest rate imposed by the sources of credit on rubber growers. Further, there is no uniformity for these interest rates. Often this is found much greater

than the growers' capacity to pay. Inadequacy of facilities and the delay in obtaining the loan are also found to be other important reasons for the dissatisfaction on the part of growers.

3.1. The absence of the active presence and participation of the institutional sources of credit in the rural credit market is the major cause of the credit problem of small growers. The non-institutional sources are practically the only source of credit accessible to the small growers. Because of 'monopoly effect' the small growers are now at the mercy of these sources. If the institutional sources extend their services to the growers by increasing their share of the rural credit market this problem can be solved to a great extent. "The noninstitutional sources were supplying about 82% of the total rural credit in 1961-62 and institutional sources were supplying 18%. Of this 18%, 15.5% come from co-operatives. This has resulted in the co-operatives increasing their share of the credit market and it is estimated that they claimed about 25% in 1970".

3.2. Before nationalisation, commercial banks were not playing any serious role in the development of agriculture. "The all India rural credit survey found that out of the 77 districts surveyed 44 reported no borrowings by cultivators from commercial banks, less than 1% of the total borrowings were from banks in 15 other districts. In only 3 districts

did the commercial banks supply more than 5% of the total agricultural credit directly to the cultivator. In the decade ending 1962 the commercial banks fell from their insignificant position of supplying 0.9% of total agricultural credit to a more insignificant level of 0.6%. The Committee of Direction all but dismissed from consideration the Commercial banks as a source of direct agricultural credit for the cultivator. Since nationalisation, commercial banks have been financing agriculture on a large scale.\*

3.2.1. There has been some criticism that relatively affluent and large scale growers are getting financial assistance from commercial banks. This was attributed to factors such as early adoption of modern techniques, title of property, economic position, financial background, and realisation possibility of the growers. In short, the banks must adopt a policy of result oriented instead of procedure oriented in financing the agricultural sector.

3.3. In almost all of the developing countries, money lenders are found to be the most important source of credit in terms of the amount of the fund loaned to the growers. Generally, the concept of money lender is termed to include all private sources of credit. Thus the money lenders may be professional private money lenders, traders, merchants or commission agents or landlords or even a combination of all

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\*See foot note 11.

these. In India in the plantation sector also they are playing a significant role.<sup>12</sup> These financiers who lend money on promissory notes, gold etc. at a very high rate of interest almost created a parallel economy even by challenging the banks in some respect. They are canvassing money as deposits by offering attractive interest rates and lending the same money at higher rates. They pose a threat to the other banks by competing with them in deposit campaign. Since they have better controls, local background, easy accessibility, procedural simplicity etc., these local financiers can command better confidence. It is found that the growth of these local financiers is a characteristic feature of the decade. Unless the Government is in a position to control or check, these local financiers will pose a serious threat to the developmental policies. The growers must be freed from the hold of these local financiers who act as money lenders and extract exorbitant interest from the growers.<sup>13</sup>

3.4. As far as the growers are concerned, the co-operative credit is the most important sources of credit. An important advantage of this credit is that the co-operative set-up handles short term and medium term agricultural credit by adopting a three-tier system. The state co-operative apex bank, the district co-operative central banks and primary agricultural credit co-operatives at the village level are the

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12. Hand-Book of Agriculture, Indian Council of Agricultural Research, New Delhi, Chapt. 14 (1966), p.698.

13. Agarwal, G. D., Administrative Machinery for the Economic Reconstruction of Rural Areas, Indian Journal of Agricultural Economics, Vol.VI, 1951.

components of the short term credit structure. The co-operatives with governmental patronage have established a well-knit set-up covering the entire rural economy. Several factors have prevented the set-up from actively participating in the credit market. The dissatisfaction of the growers, and the corrupt practices by the higher-ups in the co-operative set-up paved the way for this.<sup>14</sup> Enough checks are not exerted on the secretaries of these co-operatives by the Government. They can make discriminations, patronisation and exploit the office at their discretion since they are practically all in all in these institutions. Further, they can be the king makers, to an extent, in the election of the board of directors. Almost all the director boards are acting as a ratification board since the growers who become the directors are unaware of the rules, regulations, formalities etc.

3.4.1. Another defect of the present co-operatives is the growing political influence in the election of co-operatives. Often political rivalry and the consequent in fight spoil the proposed economic significance of the co-operatives. This will lead to the co-operatives being treated as 'power centres' rather than as media for the economic development of the rural agricultural sectors.

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14. Available data shows that more than 65% of the co-operative societies have had to undergo some enquiries from the co-operative department on the allegation of corrupt practices.

Source: Collected from the Office of the Registrar of co-operative societies.

3.5. The rubber growers need money for different purposes in the process of raw rubber production. While analysing the various heads of expenditure in the process the growers' capacity for raising funds is practically poor since the cost of funds is heavy. Due to the absence of a rational scheme of credit for the grower either from the side of the Rubber Board or from any other agency to meet the actual cost incurred by the grower in this task of production, he will be forced to raise money to fill the gap at any cost. This will put him at a precarious situation and often at the mercy of the source of fund.

3.6. There is no separate treatment for the growers since the assumptions and operations or implementation of various schemes on the basis of these assumptions initiated by the Government or Rubber Board or any other agency are general and not individual. There are differences in units on the basis of transportation facilities, availability of cheaper labour, regional differences, climatic differences and fertility position of the soil. But there is no separate treatment considering these differences. Instead of the present macro system in decision making and operations, a micro system must be developed. This will be more useful to the growers.

3.7. The systems of financing from the Rubber Board or from the agencies such as Land Mortgage Bank etc., are

procedure-oriented. The growers are not aware of the various technicalities and the consequent delay in obtaining the funds. Redtapism also contributes its share for the delay. At present the inspecting officials can block the funds by raising some objection. For instance subsidy can be blocked at the will and pleasure of the inspecting official by saying that the trees are not upto the mark. Since there is no scientific method of measurement, he resorts to random assessment. In short, all these technicalities some of which are unnecessary, still stand in the way of getting the proposed funds on time.

3.8. The nonavailability of funds may lead the grower to abstain from purchasing good quality planting and spraying materials which will ultimately affect the quality and quantity of the product.

3.9. The growers have to pay the wages daily to the workers and raise the money to meet the expenses of spraying and buying fertilisers irrespective of the returns from the work done since there is a long fruition lag.

3.10. The small grower has not the land solely reserved for rubber estates. He has to meet the expenses simultaneously for paddy, coffee, coconut etc., and the source for all these expenses are practically the same. These crops give returns at different seasons and the grower has always

to adjust his credit situation, by adjusting these returns and this will make him always a debtor. This will lead either to the pledging of the land or crop at the price the master of the source of credit dictates or to yielding to the bargaining of the buyer to sell at a lower price at an early stage, i.e., before the product is ripe. This prevents the grower from sharing the benefits from price rise or favourable market conditions.

3.11. Above all the growers are not strict to practise soil conservation works, constructing smoke houses, adopting better techniques of processing etc. which are beneficial to the crop due to their inability.

3.12. These obstacles show that the present credit system is not proper or fit to serve the interests of the rubber plantation industry.

P A R T - I I I

PROBLEMS AND PROSPECTS

CHAPTER - V

PROCESSING AND MARKETING

## PROCESSING AND MARKETING OF NATURAL RUBBER

### 1. PROCESSING

Processing and presentation of agricultural products in an attractive form is becoming more and more important. Unlike in food crops where the steps involved in processing are comparatively simple and a general standard is maintained in cash crops like tea, coffee, rubber etc., the quality of the finished product depends very much on the care exercised at the processing stage. There was a time, especially when rubber was a scarce raw material, when the quality did not affect its marketing. But the situation is now totally different and even the consumers have become enlightened on this aspect.

#### 1.1. Structure and Composition of the Rubber Plantation Industry in India

For a discussion of the processing problems, it is essential to have a clear understanding of the distribution of the plantations in different locations of the planted area. The district-wise area under rubber at the end of 1974-75 is given in table 5.1.

TABLE 5.1

DISTRICT-WISE AREA UNDER RUBBER AT THE END OF 1974-'75.

Name of District/ Taluk/State/ Territory	Holdings		Estates		Total	
	No. of Units	Area in Hecta- res	No. of Units	Area in Hec- tares	No. of Units	Area in Hec- tares
1	2	3	4	5	6	7
Trivandrum	4405	6397	29	1335	4434	7732
Quilon	18282	20604	85	12008	18367	32612
Alleppey	4451	3755	2	60	4453	3815
Kottayam	53196	47066	77	6096	53273	53162
Idikki	10077	10107	30	5250	10107	15357
Ernakulam	14194	16289	29	3773	14223	20062
Trichur	1425	3552	28	5400	1453	8952
Palghat	1482	5734	42	2343	1524	8077
Malappuram	3285	10859	87	6082	3372	16941
Kozhikode	4969	10190	75	6195	5044	16385
Cannanore	8774	15579	59	3644	8833	19223
<b>KERALA</b>	<b>124540</b>	<b>150132</b>	<b>543</b>	<b>52186</b>	<b>125083</b>	<b>202318</b>
Kanyakumari	3018	4618	41	6160	3059	10778
Madurai	1	10	2	142	3	152
Nilgiris	18	92	2	161	20	253
Coimbatore	-	-	2	221	2	221
Salem	2	23	-	-	2	23

1	2	3	4	5	6	7
Tirunelveli	5	28	-	-	5	28
<b>TAMIL NADU</b>	<b>3044</b>	<b>4771</b>	<b>47</b>	<b>6684</b>	<b>3091</b>	<b>11455</b>
Karnataka	221	491	18	6053	239	6544
Andaman and Nicobar Islands	-	-	4	878	4	878
Andhra Pradesh	2	2	1	30	3	32
Tripura	1	8	-	--	1	8
Maharashtra	1	4	-	--	1	4
Goa	6	26	-	--	6	26
<b>GRAND TOTAL</b>	<b>127815</b>	<b>155434</b>	<b>613</b>	<b>65831</b>	<b>128428</b>	<b>221265</b>

Source: Indian Rubber Statistics, Rubber Board, Kottayam, Vol.15, p.7.

The number of small holdings is 99.52 per cent of the total holdings and the area under small holdings is 70.25 per cent of the total area under rubber. Although the holdings with an area of 20 hectares and below are classified as small holdings, the average area of a small holding in our country comes to only 1.22 hectares. In certain districts such as Kottayam and Alleppey the average area of small holdings is even below one hectare, as may be seen from the table 5.1.

It follows from the above table that the small holdings sector is more predominant in the rubber plantation industry of our country.

## 1.2. . Processing Methods Employed in Rubber Plantation Industry

The crop from rubber plantation industry consists of 80 to 85 per cent latex rubber and 15 to 20 per cent scrap rubber. In high yielding varieties the percentage of scrap rubber is generally around 20 per cent. Latex derived from rubber plantations can be processed resorting to any one of the following methods.

### 1.2.1. Ribbed Smoked Sheets

This is the simplest form of processing rubber latex and it is the form in which the latex from most rubber holdings is marketed. The advantages of this method are that the machinery involvement is limited and comparatively little technical know-how is needed for this. Practically 60 per cent of rubber produced in our country is consumed by the tyre and tube manufacturing units and the major portion of their consumption is in the form of sheet rubber.<sup>1</sup> The important steps in sheet production are coagulation, roller pressing and smoke drying. Extreme care has to be exercised at every stage to obtain uniformly smoked pale amber coloured sheets without

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1. Rubber Growers' Companion, Rubber Board, Kottayam, 1978, p.50.

bubbles and blisters. The quality of ribbed smoked sheets depends on the colour and uniformity of size and thickness and visual appearance. Very often the sheets produced by small holdings will not conform to the rigorous visual standards prescribed for top quality ribbed smoked sheets. The net result is that this sector of producers will always realise a lower sale value for the rubber produced by them.

#### 1.2.2. Pale Latex Crepe

The total production of Pale Latex Crepe in our country during 1974-75 was 1,318 tonnes. This is a premium grade of rubber and the mechanisation and the technical care required for its production are very much on the high side when compared to sheet rubber processing.<sup>2</sup> Generally production of pale latex crepe is concentrated among the estate sector, although there are two co-operative societies producing this type of rubber. For producing top quality pale latex crepe, care has to be taken in the selection of plantations from where latex is collected, as there are certain types of rubber trees, the lattices of which can cause discolouration in the crepe. This type of rubber is required only in small quantities by some special sectors of the industry.

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2. Rubber Growers' Companion, Rubber Board, Kottayam, 1978, p.55.

### 1.2.3. Concentrated Latex

Production of concentrated latex in India during the year 1974-75 is 6,500 tonnes of d.r.c. This quantity of concentrated latex is produced by 11 producing units. This also is a machine-oriented and capital-intensive type of processing and requires advanced technical knowledge for successful operation. Since the capital involvement is high, concentration factories are established by estate sector, although there is one unit functioning in the co-operative sector. Concentrated latex is consumed by the latex goods manufacturing industry, and, at present, this sector consumes only 5 per cent of the total rubber produced in the country.

### 1.2.4. Solid Block Rubber

Unlike concentrated latex and pale latex crepe, solid block rubber is of recent origin and is slowly replacing sheet rubber from many of its applications. Sheet rubber, although simpler in processing, have several drawbacks such as the visual grading system, clumsy bare back packing, non-uniformity in production and unwieldy bale dimensions. These drawbacks were not felt seriously until the competition from scientifically processed synthetic rubber industry turned a threat to the natural product. The rubber manufacturers started demanding improvement in the specifications and presentation of natural rubber and as a result of this, modern

processing methods have been introduced in almost all the natural rubber producing countries.<sup>3</sup> In India we are also taking steps to introduce the recent development in rubber processing in a phased manner.

In modern processing methods there are four important steps viz.

- (i) coagulation,
- (ii) size reduction,
- (iii) drying, and
- (iv) bailing, packing and grading.

These different steps ensure the production of natural rubber in standard bale dimensions of uniform quality with minimum dirt content and assured specifications. The packing of solid block rubber also is in attractive polythene sheets.

The capital requirement for the establishment of a processing unit to produce 10 tonnes of solid block rubber in a day in three shifts is Rs.12 lakhs. At present in India we have only seven units to produce solid block rubber, one of which is in the co-operative sector.

### 1.3. Processing of Scrap Rubber

About 20 per cent of the crop from an estate is in scrap rubber form. At present these scrap rubber are mostly

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3. Rubber Growers' Companion, Rubber Board, Kottayam, 1978, p.56.

converted into different grades of Estate Brown Crepes (E.B.C.) using crepe rollers similar to those used in pale latex crepe production. Solid block rubber producing units can also process scrap rubber into a cleaner form of specified rubber. For the processing of scrap rubber also costly machinery is required.

1.4. Need for Organised Processing of the Small Holder's Produce

It may be seen from the above discussion that, most of the small holdings cannot afford to start a satisfactory type of processing system for all the crops produced by them. The simplest and cheapest type of processing method which they can adopt is the sheet rubber processing and this method can process only latex rubber of 80 per cent of the crop from an estate. Even here, for the production of good quality sheet rubber a processing unit should have adequate facility such as different types of sieves, bulking tanks, coagulation vessels, smooth and grooved rollers, dripping yard and smoke houses. The capital required for this facility is obviously beyond the reach of 90 per cent of the small growers and what they generally do at present is to carry out the sheet rubber processing in a very crude manner. This involves the coagulum in a neighbour's roller and drying of it partly under the sun and partly over the kitchen hearth. It is obvious that this type of

processing will not only result in production of low grade sheet rubber but also create serious hygienic problems.

The crop from small holdings is therefore always realising lower prices, owing to their lack of processing facilities.<sup>4</sup> A small producer cannot establish costly machinery or appoint technically skilled personnel for ensuring production of good quality processed material and the rubber manufacturing industry, which consumes this raw material, also has to conform to certain standards for the rubber products they manufacture. This quality consciousness in all sectors of the consumers will necessitate improvement in the quality of basic raw materials. Materials of inferior quality can be sold out only in periods of shortages. When favourable industrial climate prevails and also when all the industries utilise their full capacity, the artificial shortage will vanish and the consumers will start demanding quality products. It can be stated that our country is moving towards such a stage and so quality improvement of raw rubber will soon become a necessity. Even under the present situation the visual classification system, followed for the sheet and crepe rubber, provides ample opportunities for the middlemen as well as the consumers to exploit the weaker sections of rubber producers. So, for the survival and proper development of the small holder's sector, it is necessary to organise their processing on a co-operative basis.

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4. Mohd. Isa. B. Ibrahim Shah & Salim b. Abdul Wahid, 'Towards Improving the Small-holder Sector', R.I.S.D.A., Kuala Lumpur, 1973, p.1.

## 2. MARKETING

The first step in the marketing of rubber is the collection of surplus goods in the case of a consumer good or the whole production in the case of an industrial raw material from the individual growers. Rubber is first obtained in the form of latex. Usually it is made into sheets. The next function in the marketing of rubber is its transportation from production centres to consumption centres. Though Kerala accounts for more than 90 per cent of the rubber produced in India, only less than 10 per cent is consumed in the State. The remaining quantity has to be transported to other States by ship, rail or road. Packing is another important marketing function. Rubber sheets are generally packed in rubber itself; for top quality rubber such as pale latex crepe and crepe, plywood cartons are also used; for solid block rubber polythene sheets are used.

2.1. Rubber passes from the production centre through different channels to the manufacturer. For the estate sector, there is no difficulty in selling the rubber when compared to the small holding sector. The estates are able to sell this rubber direct to the manufacturers. They deliver their rubber at the godowns of the manufacturers at Cochin or send them direct to their factories in Calcutta or other centres. Before

they despatch their rubber, they sort, grade and pack them in standard bundles in the estates itself. They are sound enough in holding their produce for any duration at their interest. The estate sector produces mostly top grade rubber<sup>5</sup> and their produce is therefore in high demand. Generally, the estates follow a systematic way of processing and marketing. But the case of holdings are different.

2.1.1. The small holders generally market their rubber through dealers and co-operative societies. Often they do not hold any stock. When they accumulate a week's production, they take it to the nearest market and sell it off. Sometimes rubber is even sold to petty merchants who visit the holdings and collect rubber at periodical intervals. There are some dealers and merchants who advance loans to small holders free of interest, on condition that the growers should market their rubber only through them.<sup>6</sup> All their purchases and sales are generally in lots. When the market is dull and large accumulation of stocks are in the hands of producers, the dealers will insist to purchase only after grading. When the market is active they readily make purchases in lots. The small holders' output also is generally of inferior quality. Therefore, they are forced to accept whatever the prices, the dealers are inclined to give. When the sales and purchases of rubber take place in this way, through the intermediary of

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5. Government of India, Plantation Inquiry Commission Report, 1956, Delhi, p.44.

6. Ibid. p.44.

dealers, the prices received by the small holders are usually below the minimum notified prices. The big producers have sufficient bargaining strength and are able to sell their output direct to the manufacturers by securing the notified price. The small growers are not so fortunately placed as the estate owners. The lack of small holders' holding capacity is the major weakness which affects the sales.

2.1.2. The big manufacturers have their own arrangements for the purchase of rubber. They have either opened purchase depots in important producing centres or appointed agencies (firms) for making purchases on their behalf. These agency firms have a group of dealers under them and so they (agencies firms) purchase from these dealers only. Since the few big manufacturers consume the major share of natural rubber produced in India their purchase policies have a direct impact on the market.<sup>7</sup> These big manufacturers enjoy continuous supply of rubber, whereas the small manufacturing units working far away from the producing centres face the problem of getting continuous supply of rubber at reasonable prices. They are at the mercy of a few big rubber dealers, who have opened sales depots in the consuming centres. These small units are forced to pay a high price for rubber and very often they do not get the required grades of rubber.

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7. Kerala State Co-operative Rubber Marketing Federation - Notes on the Marketing Operations, Cochin, 1978.

2.2. The Rubber Act, 1947 regulated the activities of the rubber dealers in India. According to the Act, rubber dealers have to take out a licence from the Rubber Board for dealing in rubber. The number of licensed dealers in India at the end of March 1975 comes to 1,901 of which 1,638 is from Kerala. The rubber dealers can be broadly divided into two:-

- (1) primary dealers, and
- (2) dealers selling directly to manufacturers.<sup>8</sup>

Primary dealers operate at village level and market bulk of the small holders' produce.

Unlicensed dealings are found to be prevalent to some extent in India, though it is abolished under the Rubber Act, 1947. Unlicensed dealers usually operate at interior places. They collect rubber from small holders by visiting them periodically.

#### 2.2.2. Co-operative Marketing

The Co-operative Marketing Societies have entered the field of rubber marketing with the main objective of helping the small holders to secure a reasonable price for their produce. The co-operative societies dealing in rubber have to compete with private dealers who have adequate capital and a sound system of functioning to control the market. If properly

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8. Unny R. G. and Jacob George, Rubber Small Holdings in India, Rubber Board, Kottayam, 1972, p.35.

organized, designed and financed these primary marketing co-operative societies can do much for solving the small holders' marketing problems.

2.2.2.1. The primary rubber marketing co-operative societies are situated in the various rubber producing centres in Kerala. They are not in a position to satisfy the needs of the rubber manufacturing industry effectively due to the organisational set up and inadequate financial resources, since majority of the manufacturing units are functioning outside the Kerala State. The Kerala State Co-operative Rubber Marketing Federation was registered with an objective of effectively marketing the natural rubber purchased by the primary marketing co-operative societies.

### 2.3. Problems Faced by Small Growers in Marketing

Though the small holders occupy a very dominant position in rubber, in area and in production in the rubber plantation industry in India, their problems related to marketing are complex.

#### 2.3.1. Difficulties in Regular Disposal of Stock

Timely and regular disposal of rubber at reasonable prices is very important to the small holders. But accumulation of very high stocks with growers is a regular feature

in the peak production period in September - January. Generally, the stocks are left at normal level only from the month of April and the small holders are affected by this.<sup>9</sup> Because of their lack of holding capacity they are forced to sell the rubber at low prices, otherwise, they will not be able to work on their holdings.

### 2.3.2. Difficulties in Grading

Visual grading is the system vogue in India. Visual grading invariably leads to the unhealthy trading practice of downgrading because the system is subjective in nature. Down grading exists during periods of slackening demand when the buyer is less anxious to buy and the seller is more anxious to sell. In such situation the price and grade will be fixed at the buyer's choice. "No grading agency at present functions to confirm or contradict grading which is usually done by the buyer."<sup>10</sup> The small holders whose holdings capacity is poor are in the midst of this unhealthy practice.

### 2.3.3. Lack of Certainty in the Market

This is also a problem incidental to accumulation of stock with growers and lack of demand. Wide fluctuations in

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9. Unny R. G. and Jacob George, Rubber Small Holdings in India, Rubber Board, Kottayam, 1972, p.35.

10. Notes on Marketing Operation of the Kerala State Co-operative Rubber Marketing Federation, 1978, p.8.

the market prices of rubber indicate that the market is, in fact, guided by the conditions of demand and supply created by the various interests in the trade. Under such conditions there is no guarantee that the small holders are assured of at least the minimum notified prices. The uncertainty in the market leads to the exploitation of the small holders by the dealers and middlemen.

#### 2.3.4. Price fluctuations

The Rubber Act vests the Central Government with powers for prohibiting, restricting and controlling import and export of rubber either in general or in specified classes. The Act empowers the Government to notify prices. Minimum and maximum prices are fixed and notified so that growers may know what minimum prices they are entitled to and the rubber users may know what prices have to be paid by them. The Indian rubber market is characterised by wide fluctuations in the market prices.

2.3.4.1. An analysis of the price situation during the last few years show that wide fluctuations in natural rubber prices is a very common phenomenon.

The table 5.2 gives the price situation for the period 1965-66 to 1974-75.

TABLE 5.2MARKET PRICES OF NATURAL RUBBER FROM 1965-66 TO 1974-75(Rs.per 100 Kgs. in  
Kottayam Market)

Year	Price
1965-66	413.97
1966-67	558.89
1967-68	N.A.
1968-69	465.81
1969-70	500.70
1970-71	463.60
1971-72	420.78
1972-73	458.71
1973-74	515.39
1974-75	849.24

Source: Kerala State Co-operative Rubber Marketing Federation,  
Cochin.

Rs.516.33 is the average of the market prices.

The minimum notified price for the period 1965-66 to 1969-70 was Rs.327.40 per 100 Kgs. and maximum notified price was Rs.329.60 per 100 Kgs. For 1970-71 to 1974-75 the notified price is Rs.520 per 100 Kgs.

Table 5.3 shows the fluctuation in natural rubber prices during 1974-75.

TABLE 5.3MARKET PRICE OF NATURAL RUBBER FOR 1974-75(Average price in Rs. per  
100 Kgs. in the Kottayam  
Market)

Month	Price
April	689.40
May	836.40
June	899.40
July	986.67
August	1003.80
September	957.50
October	777.30
November	716.85
December	718.35
January	904.40
February	874.37
March	826.40
Average	849.24

Source: Kerala State Co-operative Rubber Marketing Federation,  
Cochin.

2.3.4.2. The notified price for the year 1974-75 was Rs.520 per 100 Kgs. But situation was not in par with the fixed

price. Rs.849.24 is the average market price of natural rubber for 1974-75.

2.3.4.3. The discrepancy between the notified price and the market price shows that corrective measures should be adopted for effecting price stability.

Table 5.4 shows the notified prices of rubber for the period 1950 to 1975.

TABLE 5.4

STRUCTURE OF NOTIFIED PRICE OF R.M.A.I GRADE NATURAL RUBBER

	From 21-5-51 to 27-10-52	From 28-10-52 to 14-2-1955	From 15-2-55 to 23-9-1955	From 24-9-55 to 31-3-1961	From 1-4-61 to 19-10-1967	From 20-10-67 to 11-9-70	From 12-9-70 onwards
DETAILS							
(1)	(Rs. per 100 lb) (2)	(Rs. per 100 lb) (4)	(Rs. per 100 lb) (6)	(Rs. per 100 lb) (8)	(Rs. per 100 lb) (10)	(Rs. per 100 Kg. (12)	(Rs. per 100 Kg. (13)
1. Cost of Production	70.42	85.36	85.36	85.36	94.86	242.69	343.50
2. Grade differential to equate cost of Production to RMAI sheet rubber	4.75	4.75	4.75	4.75	2.20	3.78	3.78
3. Rehabilitation allowance.	6.82	6.82	6.82	6.82	9.00	11.67	11.67
4. Ad hoc increase for cost and fund for rehabilitation	-	-	12.00	12.00	-	-	117

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
5. Return on employed capital	43.75	96-45	38-57	85.03	38.57	85.03	38.57	85.03	40.00	88.18	156.66	157.31
6. Total for IRMA I sheet rubber to be retained by the growers	125.74	277.21	135.50	298.73	147.50	325.18	147.50	325.18	146.06	322.00	415.00	520.00
7. Cess	0.50	1.10	0.50	1.10	0.50	1.10	6.25	13.79	13.25	29.21	30.00	30.00
8. Sales Tax	1.90	4.19	2.04	4.49	2.04	4.49	2.04	4.49	2.04	4.49	NA	NA
TOTAL	128.14	282.50	138.04	304.32	150.04	330.77	155.79	343.46	161.35	355.70	445.00	550.00
Notified Price												
Maximum	128.00	282.19	138.00	304.23	150.00	330.69	155.75	343.37	149.50	329.60	416.00	520.00
Minimum	127.00	279.99	137.00	302.03	149.00	328.49	154.75	341.16	143.50	327.40	415.00	-

Source: Indian Rubber Statistics, Volume 15, Rubber Board, Kottayam, 1976, p.60.

CHAPTER - VI

COST OF PRODUCTION IN  
ESTATES AND SMALL HOLDINGS

COST OF PRODUCTION

1. In Chapter II we have analysed the supply and demand position of rubber. Here, we make an attempt to estimate the cost of production of rubber in Kerala State. This attempt is based on the Plantation Inquiry Commission Report, the Tariff Commission Reports and the information collected from the Rubber Board.
  
2. A study on cost is essential on various grounds. Firstly, the cost of production of rubber changes from time to time due to the technical, scientific and research resultant reasons. Hence the Central Government, from time to time, notified the price for rubber on the basis of the estimated costs of production plus a reasonable return to the grower. Secondly, a study of cost helps to identify the areas of excess cost centres and the areas of waste. This will help to lower the cost of production. Competitive efficiency either of natural rubber or of finished goods depends on lowering the cost of production.
  
3. There have been a number of investigations on the cost of production both in the pre-independent and in the

post-independent era. The important among them are :-

- (i) The Plantation Inquiry Commission Report
- (ii) The Tariff Commission Reports and
- (iii) The Cost Assessment made by the Rubber Board.

3.1. The exigencies of the Second World War pressed for the maximisation of output and the conservation of all the available rubber in the country. The situation pressed the Government to issue an order under the Defence of India Rules requiring all rubber growers to deliver their rubber to Government purchase depots at a specified price. Timely revisions in price in accordance with the increase in costs were brought about. Government cost accountants made enquiries into costs in 1944, 1946 and 1948. Though the direct Governmental purchase of rubber was stopped in 1945, the control on prices was retained. Government fixed and notified the maximum and the minimum prices at which rubber could be purchased or sold. But the rising costs of production forced the industry to press for a revision and increase in the minimum prices to meet the rising production costs. So the Tariff Commission was requested to make a detailed investigation on this matter. They conducted enquiries in 1950, 1952, 1960, 1967 and in 1969. On the basis of their findings the Commission recommended the revision of prices of raw rubber. They further recommended measures for protection, assistance and guidance to the rubber plantation industry.

For the present analysis, we rely on the reports of the studies mentioned above.

#### 4. COST OF PRODUCTION - THE PLANTATION INQUIRY COMMISSION (1956)<sup>1</sup>

##### 4.1. Cost of Production of Estates

The Commission made the study by issuing questionnaire and proforma with explanatory notes for furnishing data for cost of production of rubber. This proforma was issued to all rubber estates with an area of over 100 acres. The cost of production was divided into the following major heads:--

1. Cultivation charges
2. Charges for collecting rubber
3. Charges for processing rubber
4. General charges
5. Packing and selling expenses.

4.1.1. The Commission requested the estates to furnish data for each of the above heads. Though 254 proforma were sent out, only 36 proforma were returned. Though the numerical percentage of response was only 14, the area covered was substantial representing about 40% (41,295 acres) of the estates over 100 acres and about 45% of production.

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1. The Plantation Enquiry Commission 1956 and The Tariff Commission 1960 made acre (for area) and lbs. (for production volume) as units in their study.

4.1.2. Managementwise the coverage was 99% of the sterling companies, 40% of the rupee non Indian Controlled Companies and 25% of the Indian Controlled Companies and 12% of the Proprietary and Partnership concern of over 100 acres.

4.1.3. Returns of proforma from the estates were analysed by the Commission by reducing the costs under each sub head to the cost per 100 lbs. To ascertain the accuracy regarding the returns furnished the Commission conducted an enquiry under the direct supervision of the Government Cost Accountants. A random sample of 17 estates was made by the Commission and the Government Cost Accountants were requested to visit these estates and analyse the data. The result of this investigation is given in table 6.1.

4.1.3.1. There was some difference in the figures arrived at by the Cost Accountants, and by the Commission. For the year 1950 the Cost Accountants' figures are higher than that of the Commission.<sup>2</sup>

4.1.3.2. Here, the term cost of production includes all expenses from cultivation to selling expenses including freight

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2. For the year 1953, the Commission's figures are higher than those of the Cost Accountants' by 16.4%. This difference in cost may perhaps be due to the fact that the Commission arrived at the figures from the data furnished by estates, whereas the Cost Accountants have taken the data from the books of the companies and certain costs might have been disallowed by them.

TABLE 6.1

AVERAGE COST FOR 100 lbs. OF RUBBER(In Rupees)  
(1 Kg. = 2.20462 lbs.)

PARTICULARS	1950-51			1951-52		
	Compa- nies	Pri- vate	All in average	Compa- nies	Pri- vate	All in average
1	2	3	4	5	6	7
<b>A. CULTIVATION</b>						
1)General field works	- 1.59	3.61	1.78	1.90	3.74	2.09
2)Filling in vacancies	- 0.17	-	0.16	-	-	-
3)Manuring	- 0.95	0.20	0.88	1.63	0.41	1.50
4)Spraying & dusting	- 6.10	3.17	5.81	7.74	3.70	7.32
5)Other pest control measures	- 0.37	0.11	0.35	0.48	0.18	0.45
TOTAL	- 9.18	7.09	8.98	11.75	8.03	11.36
<b>B. COLLECTION CHARGES</b>						
Tapping and collection	- 19.29	23.77	19.72	20.77	29.36	21.68
Other sundry charges	- 0.53	0.47	0.53	0.51	0.50	0.51
TOTAL	- 19.82	24.24	20.25	21.28	29.86	22.19
<b>C. PROCESSING CHARGES</b>						
Salaries of factory staff	- 1.18	0.21	1.08	1.16	0.20	1.06
Wages of factory labour	- 3.07	1.31	2.90	3.47	1.04	3.21
Fuel	- 0.97	0.69	0.94	1.06	0.63	1.01
Maintenance of factory	- 0.67	0.36	0.64	1.20	0.33	1.11
General Stores	- 1.06	2.13	1.16	1.41	2.20	1.49
Credit	- 0.30	-	0.26	0.25	-	0.22
TOTAL	- 6.65	4.70	6.46	8.05	4.40	7.66

	1	2	3	4	5	6	7
<b>D. GENERAL CHARGES</b>							
Up keep of building etc.	-	1.38	1.52	1.29	1.44	2.14	1.52
Depreciation	-	1.82	2.21	1.86	1.98	2.13	2.00
Cost of other labour benefits	-	1.56	0.84	1.49	1.76	1.56	1.74
Bonus to Staff	-	0.27	0.24	0.27	0.48	0.34	0.46
Bonus to labour	-	0.98	0.78	0.96	1.67	2.45	1.75
Salaries & allowances to Estates	-	5.70	5.70	5.70	6.77	5.32	6.62
Head Office	-	0.41	-	0.37	0.49	-	0.43
General Charges	-	2.21	2.70	2.26	2.59	2.28	2.56
Head Office	-	2.13	0.71	1.99	2.30	0.68	2.13
Credits	-	0.05	0.76	0.12	0.43	0.49	0.54
<b>TOTAL</b>	<b>-</b>	<b>16.41</b>	<b>13.94</b>	<b>16.17</b>	<b>19.05</b>	<b>16.41</b>	<b>18.77</b>
<b>E. PACKING</b>							
Cost of packing material	-	1.00	0.51	0.96	1.35	0.67	1.27
Labour for packing	-	0.21	0.19	0.20	2.24	0.32	0.26
<b>TOTAL</b>	<b>-</b>	<b>1.21</b>	<b>0.70</b>	<b>1.16</b>	<b>1.59</b>	<b>0.99</b>	<b>1.53</b>
<b>F. SELLING EXPENSES</b>							
Freight & transport-	1.11	0.97	1.10	1.07	1.97	1.17	
Stock	-	0.16	0.97	0.15	0.25	0.02	0.28
Other selling expenses	-	1.01	-	0.91	0.66	-	0.59
<b>TOTAL</b>	<b>-</b>	<b>2.28</b>	<b>1.04</b>	<b>2.16</b>	<b>1.98</b>	<b>1.97</b>	<b>1.98</b>
<b>GRAND TOTAL</b>	<b>-</b>	<b>55.55</b>	<b>51.71</b>	<b>55.18</b>	<b>63.70</b>	<b>61.68</b>	<b>63.49</b>
<b>Commission to Managers and other Senior Staff-</b>	<b>0.75</b>	<b>-</b>	<b>0.67</b>	<b>1.02</b>	<b>-</b>	<b>0.92</b>	
<b>Commission to Managing Director or agents &amp; agency Allowance</b>	<b>-</b>	<b>0.49</b>	<b>-</b>	<b>0.44</b>	<b>0.77</b>	<b>-</b>	<b>0.68</b>

Source: Government of India, Report of the Plantation Inquiry Commission 1956, Delhi, p.36.

TABLE 6.2

COST OF PRODUCTION OF RUBBER OF REPORTING ESTATES OF 100  
ACRES AND ABOVE FOR THE YEARS 1950-51 TO 1951-52

(In Rs. per 100 lbs.)

Year	Cost of production
1950-51	49.65
1951-52	57.43

Source: Government of India, Plantation Inquiry Commission Report 1956, Delhi, p.36.

and other transport charges. It excludes the amounts spent on commission, interest charges, taxation or cess.

Region-wise Analysis of Costs

4.1.4. Since most of the rubber was produced in one State\* (Travancore-Cochin) little importance could be given to regional comparisons. The main increase in cost was reported in Madras in 1952, while in Travancore it was reported in 1953. This increase was due to increased labour costs consequent upon the minimum wage notifications issued by the respective Governments. The increase was of similar nature, about Rs.20 per 100 lbs. According to the Plantation Inquiry Commission there was a high increase under tapping charges between 1950

\*Present Kerala State.

and 1953. It went up from Rs.4.59 per 100 lbs. in 1950 to Rs.10.29 in 1953 in Travancore-Cochin. The increase comes to 124 per cent.

#### 4.2. Cost of Production of Small Holders

Small holders occupy an important place in the industry. For arriving at the cost of production of small holders, a different procedure was adopted; the Rubber Board's field staff were requested to collect information for a selected number of small holdings of:-

1. below 25 acres (10.12 hectares)
2. from 25 to 50 acres (10.12 hectares to 20.23 hectares)
3. from 50 to 100 acres (20.23 to 40.47 hectares)

The Commission collected the figures for cost of production of small holders for the year 1955 with the help of the field staff of the Rubber Board. A simple proforma was drawn up for the purpose. The figures were collected by the field staff of the Rubber Board by oral enquiries. The total number of returns received from small holders upto 25 acres was only 21, covering 168.31 acres of rubber. From the 25 to 100 acres group only 5 returns were received covering 229 acres. Therefore, the total coverage was very limited.

TABLE 6.3AVERAGE YIELDS AND COSTS OF PRODUCTION UNDER SEVERAL  
GROUPS OF SMALL HOLDINGS

Size of small holdings	Number Ana-lysed	Acrea-ge ana-lysed	Average yield per bea-ring	Average cost of production in Rs. per 100 lbs.	
A {	Upto 5 acres	10	22.11	272.60	69.30
	5 - 15 acres	6	53.19	221.22	75.24
	15 - 25 acres	5	93.01	315.53	44.65
All groups upto 25 acres		21	168.31	275.53	57.00
B {	25 - 50 acres	2	67.00	201.92	120.14
	50 - 100 acres	3	162.00	170.31	108.23
All groups upto 100 acres		26	397.31	223.09	82.68

Source: Government of India, Report of the Plantation Inquiry Commission 1956, Part III Rubber, Delhi, p.40.

An analysis of the table reveals that there is a comparative advantage in cost in favour of those ranges with a greater area. In group A, the range 15 - 25 acres has the lowest cost of production, namely Rs.44.65. In group B also the range 50 - 100 acres has a lesser cost (108.23) when compared to 25 - 50 range.

TABLE 6.4

TABLE SHOWING THE NUMBER OF HOLDINGS UNDER VARIOUS COST  
GROUPS

	Average Cost		
	Below Rs.50	Rs.50 - 100	Over Rs.100
Number of holdings	7	10	4
Acreage covered	53.32	99.36	15.64

Source: Government of India, Report of the Plantation Inquiry Commission 1956, Part III Rubber, Delhi, p.40.

The major share comes under the cost group of Rs.50 - Rs.100 both in the case of the number of holdings and in coverage. Second comes the range of below Rs.50.

5. <sup>of</sup> COST PRODUCTION - TARIFF COMMISSION 1960

The Report (1952)<sup>3</sup> of the Tariff Commission on the revision of prices of raw rubber has made the survey upto the middle of 1952. The Tariff Commission's Report (1960) shows that considerable alterations had taken place in the structure of the industry since 1952 and the overall average yield of rubber had increased from 279 lbs. per acre in 1952 to 314 lbs. in 1958. The increase in yield was higher in

3. Government of India, Tariff Commission Report on revision of prices of raw rubber, 1952.

the case of large holdings than the general average, i.e. 419 lbs. per acre in 1958 instead of 351 lbs. in 1952. Consequently, the Commission decided to undertake a fresh investigation into the cost of production of the industry. For this purpose, the Commission selected some representative units to analyse the cost of production for the year 1957-58 and 1958-59. On the basis of the data thus obtained, the Commission arrived at the cost of production, and projected the costs for a period of 3 to 5 years after taking into consideration the trends in production and costs of individual items.

5.1. The Commission selected 12 estates and two small holdings, for cost enquiry, after consulting the Rubber Production Commissioner. Here, the Commission took note of the suggestions of the United Planters' Association of Southern India (UPASI) in selecting the estates for enquiry, provided proper accounts were available in these estates. But in the case of small holdings, response was poor.

The costed estates and small holdings with their area under mature rubber, immature planted area and total and average yield are given in table 6.5.

5.1.1. The coverage is about 15,000 hectares out of a tappable acreage of nearly 1.7 lakh acres and this accounts for

TABLE 6.5

Estates	Mature Acres	Immature acres	Total pro- duction lbs.	Average yield per acre lbs.
A	705	115	190,300	270
B	2,079	680	760,400	366
C	2,820	605	1,058,446	375
D	239	25	131,226	550
E	570	269	137,980	242
F	1,245	278	800,181	643
G	754	258	466,973	619
H	344	156	127,951	372
I	1,607	334	648,000	403
J	521	265	115,600	222
K	1,962	450	887,010	542
L	1,924	311	725,300	377
	14,770	3,746	6,049,367	410
=====				
Small Holdings				
M	40	--	9,253	231
N	42	3	8,172	195

Source: Government of India, Tariff Commission Report on the Revision of Raw Rubber Prices, 1960, Bombay; p.29.

about 1/8th of the rubber output. Regarding the geographical location, size and output, it represents a wider range.

5.1.2. In analysing costs, the Commission did not take into account the cost of two small holdings because the data

available with them were inadequate to draw any conclusion. The Commission took note of the demand for a special weightage for small growers. An extra allowance of 15 per cent was allowed and weightage was given in working out the average cost of production of large and small holdings in the ratio of 72 : 28. In terms of cost per 100 lbs. this worked out only to 28% and 4.2% in these two years, i.e. 1957-58 and 1958-59<sup>+</sup>.

5.2. The total expenditure for each of the costed units was collected under the following heads<sup>4</sup> for the two financial years 1957-58 and 1958-59:

1. Cultivation and up-keep of mature areas
2. Tapping and collection of latex and scrap
3. Processing of rubber products in different grades
4. General charges including
  - a) estates; and
  - b) Head office expenses
5. Packing charges
6. Cost of transport and charges upto F.O.B. Cochin
7. First years expenses on
  - a) Replanting
  - b) New Planting
8. Maintenance of immature areas for the subsequent years separately for each area replanted/

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+ For details see, Government of India, Tariff Commission Report on the Revision of Raw Rubber Prices, Delhi, 1960, p.74.

4. The cess on rubber and sales tax were left out from the period of costing.

newly planted in different years wherever possible.

The average cost of cultivation and upkeep and collection charges for the twelve units are worked out in table 6.6.

TABLE 6.6

ESTATE	Rupees per 45.36 Kgs. (100 lbs.)	
	1957-58	1958-59
A	72.40	75.35
B	67.13	73.22
C	71.27	64.69
D	51.51	55.86
E	65.94	84.83
F	44.96	49.39
G	48.49	48.27
H	81.05	71.36
I	75.68	71.04
J	104.65	98.26
K	66.15	65.84
L	74.28	74.31
Simple average:	68.63	69.37

Source: Government of India, Tariff Commission Report on the Revision of Raw Rubber Prices, Bombay, 1960; p.37.

This shows that there was no significant increase in costs in 1958-59.

5.2.1. Production of latex and scrap is the main function of a rubber grower. Hence in arriving at the final average cost, costs of latex and scrap have been calculated at the average of all the 12 estates.

5.2.2. Cost of Processing and Packing

The Commission worked out the processing cost separately under the heads salaries, wages, power and fuel, repairs and maintenance, depreciation etc. These cover all direct and indirect expenditure included in processing. The Commission followed the more rational method of relating the processing charges only to the quantity processed.

Packing charges are made up of the materials cost like gunnies and packing labour.

The average processing and packing charges for the year 1957-58 and 1958-59 are shown in table 6.7.

5.2.2.1. At 'K' estate none of the products was processed. The average has therefore been calculated on the basis of the figures of the remaining 11 estates. Processing charges differed widely from estate to estate and in 1958-59 they ranged from Rs.7 to Rs.26 per 100 lbs.

TABLE 6.7

ESTATES	Rupees per 100 lbs.	
	1957-58	1958-59
A	13.10	15.48
B	14.59	15.11
C	23.30	20.92
D	9.09	9.26
E	17.60	25.79
F	11.14	13.52
G	10.66	7.40
H	17.61	15.10
I	15.86	16.36
J	13.07	11.14
K	-	-
L	27.46	18.64
Simple average	15.77	15.34

Source: Government of India, Tariff Commission Report on the Revision of Raw Rubber Prices, Bombay, 1960, p.40.

A reason for such variation may be that some units process their scrap into E.B.C.<sup>5</sup> grades while others are engaged only in producing R.M.A. sheets. Another reason is the letting out of an area for contract tapping which results in a sharp fall in the quantity processed while the expenses remained stationary. Further, a large quantity of latex is sold in the raw state which reduces the quantity to be

5. E.B.C. - Estate Brown Crepe.  
About 20% of the crop from an estate is in the scrap rubber form. Generally, these scrap rubbers are converted into different grades of Estate Brown Crepe.

processed, without any corresponding economy in expenses. These show that there is scope for economy in the processing charges of the individual estates.

The grade differential to equate the average costs to that of R.M.A.I. grade rubber was Rs.3.11 (weighted average), Rs.2.40 (simple average) and Rs.3.19 (weighted average), Rs.2.20 (simple average) for the years 1957-58 and 1958-59 respectively.

### 5.3. Transport and Handling Charges

Generally, the basis of the statutory price is f.o.b. Cochin. Sometimes, sales are even effected at the estate itself as also in other centres. The transportation charges were estimated and the average was arrived at per unit of 100 lbs.

5.4. The Commission assumed that usually a replanted area comes into bearing in the 9th year. The replanting cost worked out thus to

Direct Cost	-	Rs.1,420
Estate general expenses	-	Rs. 792
Total	-	<u>Rs.2,212</u>

The Commission took note of the wide variations in the sale proceeds from estate to estate depending on its location. In computing the direct costs, a credit of Rs.80 per acre was taken on the basis of Re.1 per tree for an average stand of 80 trees per acre which is the average of the costed units.

This total expenditure of replanting one acre and maintaining it for the subsequent 7 years till maturity is equal to the cost of replanting one acre in any year and maintaining 7 acres in various stages of immaturity. Being 30 years is the economic life of rubber trees, the annual replantation cost for one acre of bearing area in any year will be 1/30th of the amount.<sup>6</sup>

i.e., Direct Costs	-	Rs.47.3
Estate general expenses	-	Rs.26.4
		<hr/>
Total	-	Rs.73.7
		<hr/>

$$\text{(Annual Cost of Replantation)} = \frac{73.7}{8} = 9.2 \text{ i.e. Rs.9.}$$

#### 5.5. Total Cost of Production

By adding each item of cost expenditure the total cost of production is found (see table 6.8).

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6. Government of India, Tariff Commission Report on the Revision of Raw Rubber Prices, Bombay, 1960, p.66.

TABLE 6.8TOTAL COST OF PRODUCTIONTHE TOTAL COST OF FOB COCHIN FOR 1958-59

		(Rupees per 100 lbs.)
		Simple average 1958-59
1.	Latex -	69.37
2.	Processing charges and Packing -	15.34
3.	Replantation cost -	9.00
4.	Grade differential to equate the cost of produc- tion to R.M.A.I. -	2.20
5.	Estimated freight and handling to F.O.B. Cochin -	3.15
Total cost of production -		99.06

Source: Government of India, Report on the Revision of Raw Rubber Prices, Bombay, 1960, p.42.

The yield per acre corresponding to the above cost was 408 lbs.

6. COST OF PRODUCTION -- TARIFF COMMISSION REPORT, 1967

The Tariff Commission (1967) made the selection of estates and the small holdings for the cost study (in

consultation with the Rubber Board) on a representative basis. The names of the costed estates and small holdings, their area under tapping, their immature area, total and average yield during the costed period are given in table 6.9.

TABLE 6.9

<u>Estates</u>	<u>Mature (Hectares)</u>	<u>Immature (Hectares)</u>	<u>Produc- tion (Tonnes)</u>	<u>Yield per hectares(Kgs.)</u>
A	642.76	353.08	487.096	757.82
B	71.33	175.54	51.522	722.00
C	122.96	374.59	138.679	801.80
D	127.48	229.82	67.455	529.00
E	113.28	89.17	70.082	618.66
F	384.52	313.12	338.260	879.69
G	200.15	457.87	162.961	814.19
H	908.14	228.29	678.100	746.69
I	501.34	117.40	494.391	986.14
J	156.75	63.46	120.896	771.27
K	298.98	162.46	279.843	935.99
Simple average				778.48
(Weighted average				807.59)

Estates	Mature (Hectares)	Immature (Hectares)	Production (Tonnes)	Yield per hec- tares (Kgs.)
<u>Small Holdings</u>				
L	2.465	2.307	1.594	646.65
M	2.465	2.635	1.655	671.40
N	3.642	9.931	4.090	1122.87
O	6.070	1.740	5.073	835.58
P	2.833	-	1.694	598.04
	Simple average			774.91
	(Weighted average			807.21)

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.37.

#### 6.1. Method of Costing

The total expenditure for each of the costed estates was collected under the following heads for the two financial years - 1964-65 and 1965-66:

1. Upkeep, maintenance and cultivation of mature areas
2. Tapping and collection charges of latex and scrap
3. Processing of latex into rubber products
4. General Charges including
  - a) Estate office, and
  - b) Head Office expenses
5. Packing charges
6. Cost of transport and handling upto F.O.B. Cochin
7. First year's expenses on
  - a) Replanting

b) **New Planting**

8. **Maintenance of immature area from second year to the year of maturity.**

6.1.1. In the case of small holdings, attempts were made to compile the expenses under the aforesaid heads for the sake of uniformity in presenting the costs of estates and holdings on a comparative basis. The main difficulty faced by the holdings was in respect of the allocation of expenses between the mature and immature area. The expenses identifiable with the mature area were taken under the heads of that area but the expenses which were common to both the areas were apportioned between them on rational basis (in consultation and discussion with the representatives of the holdings).

6.1.2. Basis of Allocation of General Expenses

Here the expenses incurred in the estate office and in the head office are referred to. The salaries and wages of the staff, medical benefits, maintenance of bungalows for the supervisory staff, postage, stationery etc. are included in the estate office expenses. The head office expenses are charged only to the mature areas, whereas the estate office expenses have been allocated to the mature and immature areas on the basis of wages. Expenses such as bonus, donation, managing agents' commission, interest etc. have been excluded from costs since these come either under the head of profit or under the head of return on employed capital.

### 6.1.3. Depreciation

The asset depreciation was calculated at the appropriate rates allowed in taxation.

### 6.2. Cost of Upkeep, Maintenance and Cultivation of Mature Area

The main items of work grouped under this head are weeding, manuring, spraying and dusting with fungicides and other pest control measures. Expenses of all the items like labour, manure cost, cost of spraying materials etc. have been included under this head. The average expenses per hectare and the incidence of the expenses per 100 Kgs. are given in table 6.10 in respect of the costed estates and holdings. (The total expenses have been divided by the total weight of procured crop to arrive at an incidence per 100 Kgs.)

TABLE 6.10

COSTS

1	1964-65		1965-66	
	Per Hectare	Per 100Kgs.	Per Hectare	Per 100Kgs.
	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
<u>Estates</u>				
A	302.52	39.51	406.74	53.67
B	341.57	44.91	638.93	88.46

1	2	3	4	5
C	671.40	56.87	634.38	79.12
D	48.73	11.29	169.21	31.98
E	246.94	45.63	274.85	44.43
F	493.94	51.32	456.60	51.91
G	361.58	60.80	456.03	56.01
H	494.40	71.86	562.65	75.35
I	364.65	35.73	412.23	41.80
J	319.99	41.28	165.69	21.48
K	204.01	22.19	218.87	23.38
<b>Simple Average</b>	<b><u>349.98</u></b>	<b><u>43.81</u></b>	<b><u>399.65</u></b>	<b><u>51.60</u></b>
<b><u>Small Holdings</u></b>				
L	262.88	42.58	264.91	40.96
M	202.03	31.97	213.79	31.84
N	388.53	44.87	612.85	54.58
O	571.66	69.07	928.50	111.11
P	-	-	536.89	89.77
<b>Simple Average</b>	<b><u>356.28</u></b>	<b><u>47.12</u></b>	<b><u>511.39</u></b>	<b><u>65.65</u></b>

**Source:** Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.41.

### 6.3. Cost of Collection

Wages of the tappers, the expenses incurred in the collection of latex and scrap and transporting the same

to the processing house are treated as collection cost. In certain estates the tappers are required to carry the latex and scrap upto the processing house, whereas in certain other estates there are arrangements for transporting the latex and scrap from the collection area to the processing units. The total collection expenses have been divided by the aggregate weight of the latex and scrap in the determination of the incidence per 100 Kgs. The expenses have been collected under wages, stores, transport and general expenditure. The expenses incurred for collection of 100 Kgs. of rubber for the costed estates and holdings are shown in table 6.11.

TABLE 6.11

COLLECTION EXPENSES

(In Rs. per 100 Kgs.)

	1964-65	1965-66
	Rs.	Rs.
<b>I. <u>Estates</u></b>		
A	107.72	112.05
B	115.86	132.51
C	192.54	208.85
D	153.38	151.70
E	129.98	136.01
F	67.79	69.09
G	126.92	88.79

	1964-65	1965-66
	Rs.	Rs.
H	140.61	134.49
I	92.40	102.69
J	62.16	58.89
K	73.22	78.49
Simple average	114.78	115.78
<b>II. <u>Small Holdings</u></b>		
L	81.34	84.13
M	82.09	75.10
N	77.66	62.87
O	63.03	80.54
P	-	98.93
Simple average	76.03	80.30

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.43.

The total average cost per 100 Kgs. upto collection stage is given in table 6.12.

While comparing the average cost in case of small holdings for the two years, it must be noted that the cost for 1964-65 was the average for 4 holdings, whereas the average for 1965-66 was the average for 5 holdings.

TABLE 6.12

(In Rs. per 100 Kgs.)

	Simple Average	
	1964-65	1965-66
<b>A. <u>Estates</u></b>		
1) Cost of maintenance and cultivation	43.81'	51.60
2) Cost of collection	<u>114.78</u>	<u>115.78</u>
Total cost upto collection	158.59	167.38
<b>B. <u>Small Holdings</u></b>		
1) Cost of maintenance and cultivation	47.12	65.65
2) Cost of collection	<u>76.03</u>	<u>80.30</u>
Total cost upto collection	123.15	145.95

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.44.

#### 6.4. Processing Cost

The processing charges comprise factory labour, cost of acid and chemicals, cost of fuel, repair and maintenance charges of processing house and smoke house, factory staff, salary and share of general expenses.

The average processing and packing costs for the costed units are shown in table 6.13.

TABLE 6.13

(In Rs. per 100kgs.)

	1964-65		1965-66	
	Process- ing cost	Packing cost	Processing cost	Packing cost
<b>I. Estates</b>				
A	-	-	21.23	1.32
B	30.16	1.53	46.83	2.05
C	33.02	2.31	37.79	2.64
D	19.93	1.52	19.04	1.05
E	-	-	-	-
F	31.89	3.36	33.68	2.45
G	29.60	2.26	32.88	1.96
H	45.34	2.06	-	-
I	34.67	2.60	38.18	2.60
J	-	-	-	-
K	19.51	1.15	21.42	1.87
Simple average	30.52	2.10	31.38	1.99
<b>II. Small Holdings</b>				
L	111.72		99.69	
M	78.94		88.76	
N	60.12		35.55	
O	35.37		40.84	
P	-		33.90	
Simple Average	71.54		59.75	

**Source:** Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.45.

6.5. Grade Differentials to Equate Average Costs to that of R.M.A. I

The processing charges of all the products were compiled and the proportionate costs of latex, packing charges and transport charges f.o.b. Cochin were added to this. The aggregate amount was then distributed amongst the costed products in such a way that the cost differentials of individual grades of products are on the basis of rationally assessed basic values of latex and scrap and other direct and allocated conversion charges. The excess cost of R.M.A.1 sheet thus calculated over the average costs denotes the grade differential. Table 6.14 gives the details.

TABLE 6.14

	(In Rs. per 100 Kgs.)	
	1964-65	1965-66
<b>I. <u>Estates</u></b>		
A	-	-
B	2.97	2.47
C	14.29	15.87
D	6.62	6.62
E	-	-
F	11.40	7.75
G	11.63	10.66
H	11.92	-
I	7.01	7.54

	1964-65	1965-66
J	-	-
K	1.94	2.13
Simple Average	8.47	7.58
<b>II. <u>Small Holdings</u></b>		
L	5.80	2.60
M	6.88	2.10
N	-	-
O	-	-
P	-	6.63
Simple Average	6.34	3.78

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.46.

The production grade-wise of processed sheets for estate A is not considered due to two reasons - on the one hand data was not available and on the other the production was very little. In case of small holdings the production grade-wise was available only in five cases - two in 1964-65 and three in 1965-66. As far as we know, the small holdings do not process rubber under various groups other than the R.M.A. sheets. It may be assumed that the quality of processed products does not vary much, as far as the small holders are concerned. Consequently, the grade differentials arrived at on the basis of the figures of these small holdings are

representative of the small holders. The grade differentials to equate the average cost with those of R.M.A.1 in respect of costed units are shown in table 6.14.

6.6. Transport and Handling charges from Estates to F.O.B. Cochin

Besides sending goods to Cochin, sales are also made to different destinations, and to various parties. Sometimes sales are also effected locally at the estates. Generally, the small holdings deliver their products to the local dealers or to the Co-operative Societies. The average charge for transportation and handling has been arrived at in the case of both estates and holdings on the basis of actual figures and on estimates. Transport and handling charges were estimated at Rs.4.02 and Rs.3.10 per 100 Kgs. as simple and weighted averages respectively.

6.7. Total Cost of Production

The total cost\* F.O.B. Cochin of R.M.A.1 sheets for 1965-66 is worked out in table 6.15.

6.8. Estimates of Cost

The Commission estimated costs for the succeeding three years in the light of its findings. In estimating the

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\* See Replantation Cost.

TABLE 6.15

		(In Rs. per 100kgs.)
		Simple average 1965-66
-----		Rs.
<b>A. <u>Estates</u></b>		
1. Latex	-	167.38
2. Processing charges & Packing	-	33.37
3. Grade differential to equate the cost of production to R.M.A.1.	-	7.58
4. Estimated freight and handling to F.O.B. Cochin	-	4.02
5. Replantation Cost	-	21.67
		-----
6. Total Cost of Production	-	234.02
		-----
The yield per hectare corres- ponding to the cost	-	778 Kgs.
<b>B. <u>Small Holdings</u></b>		
1. Latex	-	145.95
2. Processing charges & packing	-	59.75
3. Grade differential to equate the cost of production to RMA 1	-	3.78
4. Estimated freight and handling F.O.B. Cochin	-	4.02
5. Replantation Cost	-	21.67
		-----
6. Total Cost of production	-	235.17
		-----
The yield per hectare corres- ponding to the cost	-	775 Kgs.

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.47 and 48.

average yield per hectare per annum in respect of the costed estates and holdings the Commission considered the decrease in production due to the replantation programmes, the progressive increase in yield in the newly matured areas and the additional crop that would effect from the areas that are expected to mature during the estimated period. The simple average and the weighted average yield per hectare in respect of the estates worked out to 891 kgs. and 883 kgs. respectively; the corresponding averages in respect of the costed holdings were 766 Kgs. and 794 Kgs. respectively. Expenses incurred on the maintenance, manuring, tapping etc. were indirectly related to yield. Better upkeep and maintenance, more intensive manuring and efficient tapping will entail more expenses but will increase the yield. And a fall in the standard of the performance of these functions will tend to decrease the yield though it may result in an immediate fall in expenses. The Commission says "the quantum of expenses incurred by a particular estate can be regarded as 'true' only in relation to its yield under the given circumstances of the estate". In estimating the labour cost the Commission had taken into consideration the modified wage structure.\* The latest price

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\* The element of D.A. that has come into effect since 1st April 1967 is taken into account in estimating the cost. Reasonable annual increments have also been provided for staff. An allowance for contingency was also made at Rs.15 per 100 kgs. to meet unforeseen expenses in the future (e.g. to meet an increase in D.A. if any in the following year in accordance with the new wage structure).

trends in respect of fungicides, acids and chemicals were considered. The probability of consequent increases in the prices of miscellaneous stores were also taken in to account. Further, the Commission decided to adopt the simple average of estimated costs of the costed units to represent the rubber plantation industry.

#### 6.9. Replantation Cost

Replacement of the aged trees in a rubber estate forms an important cost item. This cost is counted against depreciation. The Tariff Commission of 1967 estimated 25 years as the economic life of a rubber tree. It is stated that after 25 years the maintenance of the trees becomes uneconomic. Therefore, it is advisable that the trees be felled after 25 years of tapping in order to effect better production. The same is the practice in Malaysia also. The Commission (1967), after considering the data collected from the costed units, has estimated the replantation cost at Rs.6,200 per hectare. The expenses for the first year has been worked out at Rs.1,560 and the balance represents the maintenance expenses for seven years which, on an average, worked out to Rs.663 per year out of the total replantation cost of Rs.6,200.

The net burden on a planter for the replantation is the total expenses incurred by him less the sales realisation of the felled trees. By the Commission (1960) the sales

realisation per tree was estimated at one rupee and the population of the trees per 0.40 hectare was estimated at 80.

6.9.1. The 1967 Tariff Commission estimated the sales realisation at Rs.5 per tree and the density as 200 trees per hectare. On the basis of these figures the Commission came to the conclusion that the plantation industry is really making profit. It may be pointed out here that the sales realisation per tree was much higher and the density of the trees was also much greater. The average realisation per tree varied from Rs.10.20 to Rs.19.07 in the costed estates. Depending upon the condition of the tree and the situation of the estate, the sales realisation varies considerably from plantation to plantation.

After considering all these aspects, the Commission adopted the sales realisation at Rs.5 per tree and the density at 200 trees per hectare. The adoption of these figures will provide a small extra margin to the industry.

The net expense for replantation to be incurred per hectare is shown in table 6.16.

The net expense for replantation to be incurred per hectare is Rs.5,200. The trees' life period is 30 years and fruition lag is 8 years. Therefore the annual replantation cost comes to Rs.21.67.

TABLE 6.16

	Rs./hectares
1. Cost of replantation and subsequent maintenance	6,200
2. Less credit for sale realisation of trees	1,000
3. Net expenditure	5,200

Source: Government of India, Tariff Commission Report on the Fixation of Raw Rubber Prices, Bombay, 1967, p.50.

6.9.2. The replantation expenditure incurred by a planter should be considered as his capital investment and he has to realise his capital investment at 4% per annum or Rs.208 per year. This sum, related to an average yield per hectare at 891 Kgs. makes it necessary for the grower to realise Rs.23.34 through the sale of 100 Kgs. of rubber. Since a portion of this is in the form of development expense, the Commission recommended one half of this amount viz., Rs.11.67 to be included in the retention price of the grower. The Commission recommended a new scale of subsidy to be paid to the growers to enable them to meet the balance amount of the replantation cost which is beyond recovering through the retention price.

#### 7. COST OF PRODUCTION - TARIFF COMMISSION REPORT 1969

The 1969 Commission concentrated their attention solely on the review of the cost of production of rubber upto

the collection stage both in the estates and in the holdings, leaving the other cost factors already covered by the 1967 Report. The Commission enlarged the size of the sample for costing, especially of the holdings. After the discussions with the Rubber Board, the Government of Kerala and the representatives of small growers, the Commission initially selected 15 estates and 125 holdings (as against 11 and 5 respectively in 1967) for cost study. The Commission collected the necessary data from the estates by deputing Commission's Cost Accounts Officer to examine their accounts and other records related to the cost data. But to effect the cost data of holdings, the Commission made use of the economic investigators and Cost Accountants to collect the relevant cost data through personal interview and from the already available records..

7.1. During their enquiry the Commission held discussions with the Rubber Board, representatives of the various organisations of rubber growers such as the United Planters' Association of Southern India, Indian Rubber Growers' Association, Kottayam, representatives of the rubber marketing co-operative societies, representatives of the consumers' associations viz. The Rubber Manufacturers' Association of India, Calcutta, and the Indian Rubber Industries' Association, Bombay and with the Officers of the Government of Kerala.

7.1.1. During their inquiry connected with yield study, the Commission found that the average yield of estates was 784 Kgs. per hectare, whereas it was 408 Kgs. per hectare in the case of holdings. Therefore the Commission related the cost of production to the average yield of 784 Kgs. and 408 Kgs. in estates and holdings respectively.

The Commission's estimates are given in table 6.17.

TABLE 6.17

	Cost per hectare Rs.	Per 100 Kgs. at 784 Kgs. per hectare (Rs.)
<b>A. <u>Cost of Production in Estates:</u></b>		
<b>I. Maintenance and upkeep:</b>		
(i) Wages	112.19	14.31
(ii) Stores	254.31	32.44
(iii) General Expenses	<u>98.61</u>	<u>12.58</u>
Total	465.11	59.33
<b>II. Tapping &amp; Collection:</b>		
(i) Wages	513.40	65.49
(ii) Stores	49.60	6.32
(iii) General Expenses	<u>562.51</u>	<u>71.75</u>
Total	1125.51	143.56
<b>Grand Total</b>	<b>1590.62</b>	<b>202.89</b>

	Cost per hectare	
	Rs.	Per 100Kgs. at 408Kgs. per hectare (Rs.)
<b>B. <u>Cost of Production in Holdings:</u></b>		
<b>I. Maintenance &amp; upkeep:</b>		
(i) Wages	149.24	34.37
(ii) Stores	283.10	69.38
<b>II. Tapping &amp; Collection:</b>		
(i) Wages	639.40	156.72
(ii) Stores	34.10	8.36
<b>III. General Expenses</b>	<u>71.00</u>	<u>17.40</u>
<b>Total</b>	<b>1167.84</b>	<b>286.23</b>

**Source:** Compiled from Government of India, Tariff Commission Report on Revision of Minimum Prices of Raw Rubber, Bombay, 1969, p.15 and 16.

7.2. The cumulative cost of production, as estimated by the 1969 Tariff Commission, for the estates as well as holdings is given in table 6.18.

Table 6.18 shows that the estate factor has greater cost advantage than the holdings. in respect of cost of production upto the latex stage by Rs.83.34. But the holdings are in a better position in the case of grade differential cost by Rs.4.18.

TABLE 6.18CUMULATIVE COST OF PRODUCTION FOR THE ESTATES AND HOLDINGS

	(In Rs. per 100 Kgs.)	
	Estates - yield at 784 Kgs. per hectare	Holdings - yield at 408 Kgs. per hectare
1. Cost of production upto latex	202.89	286.23
2. Packing	2.61	2.00
3. Processing	37.95	37.00
4. Replanting Cost	11.67	11.67
5. Grade differential to equate cost of production of R.M.A.1.grade	7.96	3.78
<b>Total</b>	<b>263.08</b>	<b>340.68</b>

Source: Government of India, Tariff Commission Report on Revision of Minimum Prices of Raw Rubber, Bombay, 1969, p.17.

7.2.1. The weighted averages of the 11 estates were made for arriving at the final figure of cost. In the case of holdings all the costs shown in table 6.18 were computed. It is found that the small growers have to pay a higher wage for hired labour when compared to the estates. In holdings the cost of tapping comes to Rs.5 per day, whereas the estates are able to get labour at the rate of Rs.3.50 to Rs.4 per day. The stores for the collection depend on the quantity of the latex collected and here also the cost for holdings is higher than that of the estates. The general expenses relate

to the expenditure incurred on salaries, leave salaries, provident fund, gratuity, medical benefits, vehicle maintenance, repairment of buildings, roads, rent, taxes, travelling expenses, depreciation, insurance, power, fuel etc. The general expenses of the estates are much higher than those of the holdings and the difference is mainly due to the reason that such expenses are not incurred by owners of small holdings.

7.2.3. The average cost of processing for the estates was worked out at Rs.37.95 per 100 Kgs. as against Rs.29.53 in the 1967 Report and for the holdings it was Rs.37. Packing charges were Rs.2.61 for estates and for holdings Rs.2 per 100 Kgs. Since most of the sales take place in adjacent areas of the holdings, small growers are practically free from expenditure incurred in respect of freight on sales of rubber.

7.2.4. Regarding the replantation cost the Commission relied on the figures arrived at by the previous enquiry, i.e. 1967 Enquiry. The element of grade differential in cost for estates works out to Rs.7.96. Regarding the holdings, the production is mainly confined to a few grades only and the differentials have not been worked out and hence the Commission adopted the same differential at the previous inquiry i.e. Rs.3.78.

## 8. COST OF PRODUCTION 1974-75 - RUBBER BOARD'S ASSESSMENT

The Plantation Inquiry Commission and Tariff Commissions have dealt with the cost aspect of natural rubber and this formed the basis for price fixation during 1950s and 1960s. But for the period of 1970-1975 there were no such authoritative studies. This made it necessary to estimate the cost of production for this period.

8.1. The 1970s saw an increase in almost all the elements of cost though not uniformly. The Tariff Commission in its report (1969) had adopted the basis for estimating cost of production by relying on the accounts for the period 1967-68 of the costed units. Further, the Commission had estimated the increase in production cost as a result of the enhancement of wage rates with effect from 1st January, 1969 following a tripartite wage settlement. Based on the cost of small holdings and considering the impact of the increased wage rates, the Tariff Commission recommended the price<sup>7</sup> (i.e. Rs.520 per 100 Kgs. of R.M.A.1 grade rubber). The yield level adopted for cost and price fixations was 784 Kgs. per hectare for estates and 408 Kgs. per hectare for holdings. These were the rubber plantation industry's average yield during 1967-'68 for the estate sector and holdings sector respectively.

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7. The original study insists on Rs.500 per 100 Kgs. as price and not on Rs.520.

The industry's average yield rates estimated for estate and holding sectors for the year 1974-75 are as follows:

Estates	1,000 Kgs. per hectare
Holdings	670 Kgs. per hectare

## 8.2. Estimates of Cost of Production

### 8.2.1. Cost Upto Latex Stage

#### 8.2.1.1. Increase in Direct Wages

Under the Minimum Wages Act of Kerala State wage rates an adult male worker increased from Rs.3.75 in the 1969 Report to Rs.8.02 in 1975. (For a female worker it is Rs.7.64 as against Rs.3.37 in the 1969 Report.) Time rated tappers' wage was also increased to Rs.8.42 as against Rs.4.15 in the 1969 Inquiry. The same is the case with a factory worker also - Rs.8.22 in 1975 as against Rs.3.95 in 1969. An illustration is given in table 6.20

The percentage of increase is greater than 100% in all the cases. The greatest percentage of increase is found in the maintenance and upkeep.

About 1/6 of the wages (see table 6.21) incurred (per hectare) in estates was on account of maintenance and upkeep and the remaining 5/6 on account of 'Tapping Wages'.

TABLE 6.19

	Previous rate (in the 1969 Inquiry)	1975 Rate	Amount of increase	% of increa- se
<b>i) Maintenance &amp; Upkeep</b>				
Adult male worker	3.75	8.02	4.27	114%
Adult female worker	3.37	7.64	4.27	127%
<b>ii) Collection of Latex</b>				
Tappers (time rated)	4.15	8.42	4.27	103%
<b>iii) Processing</b>				
Factory worker	3.95	8.22	4.27	108%

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.8.

On this basis the above increase in wages is estimated.

The Tariff Commission had adopted the same amount of wages per hectare (Rs.825.35) for both the estates and holdings. Thus, the above increase, i.e. Rs.865, is made applicable to estate as well as holdings in the cost estimate. Therefore, the total direct wages come to Rs.1,690.35 per hectare (i.e. Rs.825.35 + Rs.865).

TABLE 6.20

	Per Hectare as per 1969 Report Rs.	Increase as % Es.	Amount of in- crease Rs.
<b>Wages:</b>			
1) Maintenance & Upkeep	138	114%	157
2) Tapping	687	103%	708
	-----	-----	-----
Total	825		865

Source: Rubber Board, Kottayam, Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.9.

#### 8.2.1.2. (b) Increase in Indirect Wages (Labour Benefits)

The increase in direct wages will reflect on the indirect wages also, e.g. 'leave with wages', 'Provident Fund', Gratuity etc.

The incidence of indirect wages in plantations is estimated in table 6.21.

This table shows that 23 1/3% of the increased direct wages (Rs.865) will also be added to the cost and it comes to Rs.207.

The benefits under the Plantation Labour rules are not applicable or enforced in the case of holdings upto 10.07

TABLE 6.21

	Per annum 300 working days	As % of dire- ct wages
1. Leave with wages (one day wage for every 20 working days)	15 days	
2. Paid holiday	7 days	
3. Gratuity (15 days wages for every completed year of service subject to a total of 15 months wages.)	15 days	
4. Sickness benefits (2/3 wages for 14 days a year)	9 days	
Total	46 days	15 1/3%
5. Provident Fund		8 %
Total		23%

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.

hectares (25 acres). Casual labourers are usually engaged in holdings and they will be paid higher wages. Further, benefits in kind such as food, ex-gratia payments during festivals etc. are also incurred. Taking all these into consideration, a provision of 10% for these benefits is considered and it comes to Rs.86.

8.2.1.3. Increase in Cost of Stores

Costs of manure and spraying materials are the main components of this. The prices of certain items of stores used by rubber growers are shown in table 6.22 for comparative purposes.

TABLE 6.22

	1967-68 Rs.	1974-75 Rs.	Increase as %
<b>1. <u>Manuring</u></b>			
Rubber Mixture (8:10:12) per metric tonne	500.00	1,400.00	180%
<b>2. <u>Spraying</u></b>			
Copper fungicide (per litre)	20.60	40.00	94%
Spray oil (per litre)	1.51	6.62	3.38%
Copper Sulphate	5.00	10.20	104%
<b>3. <u>Processing</u></b>			
Acetic Acid	4.00	9.50	138%

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.10.

Cost per hectare on the basis of the input rates recommended by the Rubber Board regarding the above stores is shown in table 6.23.

TABLE 6.23

	Cost per hectares		Incre- ase Rs.	Incre- ase as %
	1967-68 Rs.	1974-75 Rs.		
1) <u>Maturing</u> (by using 8:10:12 mixture) @ 160 Kgs. per <u>acre</u> per annum	198	553	355	180%
2) <u>Spraying</u> (Micron spraying using oil based copper fungicide @ 2¼ litres of fungi- cide and 11¼ litres of oil per <u>acre</u> per annum.	156	405	249	160%
<b>Total</b>	<b>354</b>	<b>958</b>	<b>604</b>	<b>170%</b>

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.10.

The table shows that there is an increase of cost to the tune of 170% and this is due to the price increase alone.

In the 1969 Inquiry the yield rates adopted were 784 Kgs. per hectare for estates and 408 Kgs. per hectare for holdings. But the corresponding yield estimates for 1974-75 are 1,000 Kgs. (estates) and 670 Kgs. (holdings), as mentioned elsewhere. This shows that there has been enough improvement in productivity since 1969. This increased productivity is due to the better cultural practises and the maturity of high yielding planting materials.

Stores cost per hectare on the basis of the reported figures (for estates) by the Tariff Commission in its previous three reports is given in table 6.24.

TABLE 6.24

Yield per Hectare	<u>1960</u>	<u>1967</u>	<u>1969</u>
	457 Kgs.	778 Kgs.	784 Kgs.
	Rs.	Rs.	Rs.
<u>Cost of Stores (per hectare)</u>			
<u>Stores (Maintenance)</u>			
Manuring	8.97	86.90	125.00
Spraying	36.59	96.88	125.00
Miscellaneous	<u>4.03</u>	<u>2.10</u>	<u>4.31</u>
Total	49.59	185.88	254.31
Stores (Tapping & Collection)	13.61	71.81	49.60
Grand Total (per hectare)	63.20	257.69	303.91

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.11.

The increase in cost of maintenance stores from 1967 to 1969 was by about 37%. The yield estimated for 1974-75 is 1,000 Kgs. per hectare for estates. If inputs as per the recommendations of the Board for plantations are adopted, the 1974-75 cost would be Rs.958 per hectare for manuring and spraying (vide table 6.24). In practice, the recommended quantum of inputs have not been used by most of the plantations

before. Taking all these into consideration, it seems that adoption of an increase of 30% in stores cost for increased output may be reasonable. In general, a total increase of 200% (170% for price increase and 30% for increased quantum of inputs) over the cost of "estate maintenance and upkeep stores" (manuring spraying etc.) reported in 1969 report may reflect the current conditions and hence the same is taken in this estimate. The amount comes to Rs.508 per hectare (i.e. 200% of Rs.254.31 shown in table 6.25). In the case of stores (tapping and collection) an increase in cost by 40% is taken on an adhoc basis. This works out to Rs.20 per hectare.

In the 1969 Report, the stores cost adopted for estate and holdings was Rs.303.91 per hectare and Rs.317.20 per hectare respectively (vide table 6.26). The small holdings incur higher costs due to retail purchase of materials, uneconomical transport charges etc. Taking into account the increase in cost, the current cost per hectare is estimated to be Rs.831.91 (i.e. Rs.303.91 + Rs.508 + Rs.20) in case of estates and Rs.845.20 (i.e. Rs.317.20 + Rs.508 + Rs.20) in case of holdings.

#### 8.2.1.4. Increase in General Expenses

This consists of estate general expenses, estate staff salary, plantation tax, land tax, workers benefits and depreciation of buildings and estate assets. Since 1967-68,

there has been significant increase in plantation tax and estate staff salary. In Kerala, plantations (under tapping) are liable to pay plantation tax. The rate of this tax was Rs.20 per hectare till 31-3-1968 which was raised to Rs.50 from 1-4-1968. At present plantations having an area of one hectare and above are liable to pay plantation tax, which was formerly applicable only to those area having two hectares and above. More small holdings were thus brought under the purview of the plantation tax. The increase in cost on account of plantation tax is Rs.30 per hectare for both the estates and holdings. Further, there were revisions in the pay scales and allowance rates. The approximate increase in staff salary consequent on these revisions is estimated to be about 50%. This increase affects the estate sector alone. Fifty per cent of the estate staff salary works out to Rs.57.\* Expected increase under Workers Benefits (indirect wages) has already been estimated above, viz. Rs.207 per hectare for estates and Rs.86 per hectare for holdings. All the other remaining items of 'general expenses' can be treated together. 1974-75 is the 7th year from 1967-68 which is based for accounts reflected in the 1969 Report. A 40% increase in cost is considered reasonable (@ about 5% per annum). At this rate the increase works out to Rs.82 per hectare.

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\*The Tariff Commission Report 1969 did not show separately the cost on account of the estate staff salary; only the total "general expenses" has been shown which is Rs.661.12 per hectare. Usually, estate staff salary forms about 17% of general expenses in estates. Thus estate staff salary works out to Rs.115 in the 1969 Report.

Thus the total increase estimated under 'general expenses' is Rs.376 per hectare for estates (i.e. Rs.30 + Rs.57 + Rs.207 + Rs.82) and the cost adopted in this computation for estate is Rs.1,037.12 per hectare (i.e. Rs.661.12 + Rs.376) as shown in table 6.25.

In the case of holdings the total increase estimated is Rs.116 per hectare, i.e. Rs.30 on account of plantation tax and Rs.86 on account of workers benefits. Therefore the cost adopted in this computation is Rs.187 (i.e. Rs.71 + Rs.116) for holdings as shown in table 6.25.

#### 8.2.2. Processing Cost

The incidence of processing cost is calculated normally on the basis of the quantity processed. Processing cost denotes factory wages, stores like acid, depreciation, repairs and maintenance of machinery, smoke house etc. Stores prices have increased; wages also have increased due to wage settlements. All these contributed to an increase in the processing cost. The increased wage amount forms about 24% of the total wages after adding an increase as per the Tariff Commissions Supplementary Report.<sup>7</sup> The increase in processing wages as per this supplementary wage rate increase was Rs.5 per 100 Kgs. for both estates and holdings. Thus the processing cost in the present (price) structure is found to be about

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7. The increased wages estimated by the commission in its supplementary report (consequent on enhancement of wages from 1-1-1969) is found to be around 32% (i.e.  $\frac{32 \times 100}{132}$ ).

TABLE 6.25

THE COST (1974-1975) UPTO LATEX STAGE

	Cost per hectare					
	<u>Estates</u>			<u>Holdings</u>		
	As per 1969 Report	<u>1974-75</u> <u>Estimate</u> Increase	<u>Estimate</u> Total	As per 1969 Report	<u>1974-75</u> <u>Estimate</u> Increase	<u>Estimate</u> Total
1) Wages	825.35	865.00	1690.35	825.35	865.00	1690.35
2) Stores	303.91	528.00	831.91	317.20	528.00	845.20
3) General Expenses	661.12	376.00	1037.12	71.00	116.00	187.00
<b>Total upto latex per hectare</b>	<b>1790.38</b>	<b>1769.00</b>	<b>3559.38</b>	<b>1213.55</b>	<b>1509.00</b>	<b>2722.55</b>
<b>Yield per hectare</b>	<b>784 Kgs.</b>		<b>1000 Kgs.</b>	<b>408 Kgs.</b>		<b>670 Kgs.</b>
<b>Cost per 100 Kgs.</b>	<b>228.37</b>		<b>355.94</b>	<b>297.43</b>		<b>406.35</b>

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.13.

Rs.21 per 100 Kgs. (i.e.  $\frac{5.07 \times 100}{24}$ ).

The increase in factory wages (Processing) resultant on wage settlements was estimated as Rs.22 per 100 Kgs. i.e. 108% of Rs.22, the increase as per table 6.26. Cost of acid shows an increase of about 138% during the last seven years and cost of fuel (smoking) about 70%. On the whole, the cost of processing stores increase is estimated to be about 90% and it amounts to Rs.9 per 100 Kgs. Thus the total increase in processing cost is estimated to be Rs.31 per 100 Kgs.

(i.e. Rs.22 + Rs.9). This increase is treated uniformly for both holdings and estates. Thus, according to this computation the total processing cost forms Rs.74.02 per 100 Kgs. for estates and Rs.73.07 for holdings (i.e. the processing cost as per table 6.26 and the additional increase in cost mentioned).

### 8.2.3. Other Items of Cost

Under this head of cost, the components are the cost incurred on packing, transport, replantation allowance and grade differential. The cost of packing materials have increased considerably and there is a significant increase in transport cost due to the increase in the cost of fuel, repairs, maintenance etc. "A 50% increase in the cost of packing and a 150% increase in transport costs are considered very reasonable".\* The cost arrived at by the Rubber Board is about Rs.13,500 per hectare. On the basis of the 25 years' economic life time and an average annual estimated yield of 1,000 Kgs. per hectare, the incidence per 100 Kgs. comes to Rs.54. The Tariff Commission considered 50% of the replanting cost as an element in price. According to the very same basis the replanting allowance is estimated as Rs.27 per 100 Kgs. The grade differentials as per the existing fixation is retained as such in the present cost computation also.

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\* Agenda and Notes of the 81st Rubber Board Meeting.

TABLE 6.26

	<u>Estimates per 100 Kgs.</u>	
	<u>Estates</u>	<u>Holdings</u>
A. Yield per Hectare	1000 Kgs.	670 Kgs.
B. 1) Cost upto Latex stage	Rs. 355.94	Rs. 406.35
2) Processing Cost	74.02	73.07
3) Packing	3.91	3.00
4) Transport	5.00	5.00
5) Replantation allowance	27.00	27.00
6) Grade differential	7.96	3.78
Total Cost	473.83	518.20
C. Return*	110.54	179.10
B + C	585.00	697.30

Source: Agenda and Notes of the 81st Rubber Board Meeting, Kottayam, 1974, p.15.

## 9. AN EVALUATION OF THE COST ESTIMATES

9.1. The Plantation Inquiry Commission (1956) considered the rubber area of range between 50 acres and 100 acres (20.23 and 40.46 hectares) as small holding. This prevented the scope and chance for considering those units with less than 50 acres in analysing the cost aspect with due weightage.

\* See minutes of the 81st Board Meeting, p.14.

Most of the units with an area greater than 50 acres (20.23 hectares) are having the characteristics of an estate.

9.2. Most of the studies gave importance to the estate sector and practically, the small holding sector was kept out from the purview of the analysis. The coverage of small holdings was poor when compared to the estate sector. The Tariff Commission 1960 had not taken into account the cost of the small holdings (even the two samples selected) in analysing costs on the ground that the data available with them were inadequate to draw any conclusion. (But the Commission took note of the demand for a special weightage for small growers). But the 1967 Commission considered the small growers sector with due importance. The Commission paid special attention to make the assessment on a comparative basis between the estate sector and the small holding sector.

9.3. The 1969 Tariff Commission took note of the growing importance of the small holding sector and its decisive role in the rubber plantation industry. The Commission (1969) enlarged the size of the holdings in the sample selection. It is a deviation from the previous attitudes. The Commission selected 125 units as against 5 in the 1967 inquiry. All the previous inquiries except 1967, practically declined the small holdings sector on the ground of non availability of sufficient data. But here, attention is paid to collect the data from the small holding sector.

9.4. There are no accurate and comprehensive data available on the current cost of producing natural rubber and the information available is fragmentary. The costs are representative of the industry to the extent of the sample units. The 1967 Tariff Commission Report has raised a controversy over the representative character of the sample units. If the units selected are sound that will reflect on the entire industry and vice versa.

9.5. Further, there has been no surveys at regular intervals initiated by the Tariff Commission. It is alleged that there is difficulty in ascertaining the true cost of production from the Tariff Commission's Surveys undertaken at irregular intervals.

9.6. The cost of production analysis gives a comparative cost structure of the small holding sector and the estate sector from the year 1950-51 to 1974-75. Table 6.27 shows that the cost of production in different periods from 1950-51 to 1974-75 registered a rise in varying degrees. There is an upward trend in the case of productivity also.

TABLE 6.27

COST OF PRODUCTION: ESTATES AND SMALL HOLDINGS (1950-'75)

1	Simple Average					Increase as %							
	2	3	4	5	6	7	8	9	10	11			
Plantation Inquiry Commission Report 1956	1960	1967	1969	1975	Rubber Board	1958-59	1965-66	1967-68	1974-75	1958-59 over 1950-51	1965-66 over 1958-59	1967-68 over 1965-66	1974-75 over 1967-68
	392.30	457.31	778	784	1,000	16.57	70.13	0.77	27.55	154.91			
1. Yield accepted for cost evaluation (Kgs. per hectare)	109.46	198.55	234.02	263.08	473.81	81.39	17.86	12.41	80.10	332.86			
2. Total cost (Rs. per 100 Kgs.)													
1. Yield accepted for cost evaluation (Kgs. per hectare)	279.44	n.a.	775.00	408.00	670.00	n.a.	n.a.	-47.35	64.22	139.77			
2. Total cost (Rs. per 100 Kgs.)	153.97	n.a.	235.17	340.68	518.20	n.a.	n.a.	44.86	52.11	236.56			
III. RECOMMENDED PRICE (Rs. per 100 Kgs.)	341.98	321.88	415.00	500.00	697.30	-5.89	28.93	20.48	39.46	103.90			

Source: Compiled from Chapter 6.

CHAPTER - VII

PROFITABILITY POSITION OF

ESTATES AND SMALL HOLDINGS

PROFITABILITY POSITION

1. In the previous chapters we have discussed the importance of Rubber, its demand and supply position, role of Rubber Board in the development of rubber plantation industry, role of rubber growers' co-operatives and credit structure of small holders, processing and marketing and cost of production of natural rubber. In this chapter, we propose to discuss the profitability position of the estates and small holdings. This is done with the help of the planning tool viz. the break-even chart.<sup>1</sup> "A picture is worth a thousand words! The break-even chart is a picture which sums up for management the characteristics of its profit structure as it was in the past or as it will appear in the future. This impression cannot be obtained from reports, tabulations or profit-and-loss statements."<sup>2</sup>

2. Break-Even Point

The break-even system is an easily understandable and simple device of picturing the effect of changes in volume on profits. The break-even concept reveals the effect

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1. The Break-Even System: A tool for profit planning  
Tucker Spencer. A., New York, 1964, p.16.
  2. Ibid., p.47.

of alternative decisions that convert costs from fixed to variable, the effect of decisions which reduce or increase costs, sales volume and income and the effect of decisions to changes in selling prices. At zero production there is a fixed cost, i.e. the cost incurred during the fruition lag.

2.1. The break-even point (B.E.P.) shows the no loss - no profit position where losses cease and profits begin or vice versa. B.E.P. is that level of income (sales) at which profits are zero.

2.2. In effect, every action or planned decision in a business enterprise will effect costs, prices, volume and profits. The break-even device shows the interplay of all of these factors in a way which helps management to select the best possible course of action. Thus the break-even technique aids the producer to design his future plans also.

3. Here, the profitability position of the rubber plantation industry and the profit share of the estates and holdings are calculated by using the break-even technique.

4. For calculating the profitability position of estates and small holdings, cost of production (break up into fixed cost and variable cost<sup>3</sup>), production volume and price of the produce are necessary.

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3. Costs upto latex stage and replantation costs are treated as fixed cost and the rest as variable cost.

Calculation of B.E.P.

Y - Total revenue  
 x - quantity of rubber produced  
 b - Price of 100Kgs. of rubber

$\underline{Y}^1$  - Total cost

$a^1$  - Fixed cost

$b^1$  - Variable cost

The equation for total revenue curve is  $Y = bx$

The equation for total cost curve is  $Y^1 = a^1 + b^1x$

At the break-even point (B.E.P.),  $BEP = Y = Y^1$

∴ Total Revenue = Total cost

Break-even point can also be found out from the following formula

$$BEP = F/PV$$

Where F = fixed cost

PV = Contribution (Price-variable cost)

5. For the purpose of calculating break-even point we have taken the estate sector and small holding sector for the periods 1965-66 and 1974-75.

- (1) 1965-66 (As per 1967 Tariff Commission Report)  
 (2) 1974-75 (As per Rubber Board's Assessment)

TABLE 7.1COST OF PRODUCTION - ESTATES AND SMALL HOLDINGS

	1965-66 (1967 Tariff Commission)		1974-75 (Rubber Board 1975)	
<u>Estates</u>				
(1) Yield accepted for cost evaluation (Kgs. per hectare)	778		1,000	
(2) Total Cost (Rs. per 100 Kgs.)	234.02		473.83	
	<u>Fixed cost</u>	<u>Variable cost</u>	<u>Fixed cost</u>	<u>Variable cost</u>
	189.05	44.97	382.94	90.89
<u>Small Holdings</u>				
(1) Yield accepted for cost evaluation (Kgs. per hectare)	775		670	
(2) Total cost (Rs. per 100 Kgs.)	235.17		518.20	
	<u>Fixed cost</u>	<u>Variable cost</u>	<u>Fixed cost</u>	<u>Variable cost</u>
	167.62	67.55	433.35	84.85
<u>Price</u> Rs. per 100 Kgs.	415		697.30	

See: Table 6.27 in Chapter VI.  
 By using the planning tool of break even chart  
 this table can be presented in a diagram.

The profitability position of estate sector for the year 1965-66 is shown in Chart 1.

The chart shows the following details:

1. The total sales volume is 778 Kgs.
2. The total revenue at the rate of Rs.415 per 100 Kgs. is Rs.3,228.70.
3. Fixed cost at this level of operation is Rs.1,470.00.

Variable cost = Rs.350.67

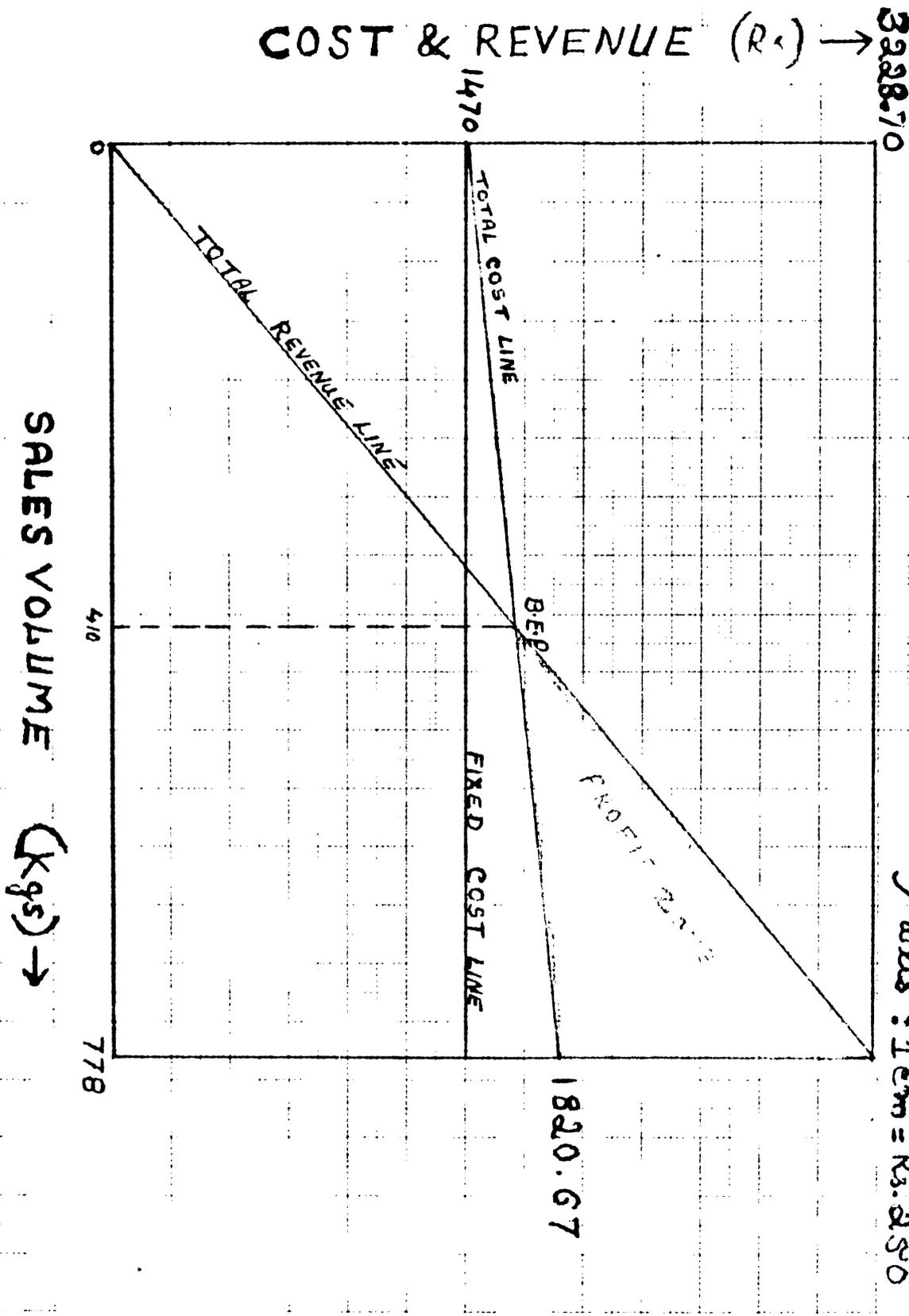
4. The total cost = Rs.1470 + Rs.350.67  
= Rs.1820.67

5. The B.E.P. is at 410 Kgs. or Rs.1701.50  
=====

CHART 1

BREAK EVEN CHART - ESTATE 1965-66

X axis: 1cm = 50 kgs  
Y axis: 1cm = Rs. 250



The Profitability Position of Small holding sector for the year 1965-66 is shown in Chart 2.

1. Total production = 775 Kgs.
2. Total Revenue at the rate of Rs.415 per 100 Kgs. = Rs.3216.25
3. Fixed cost at this level of operation = Rs.1299.05
4. Variable cost = Rs. 523.51
5. Total Cost = Rs.1822.56

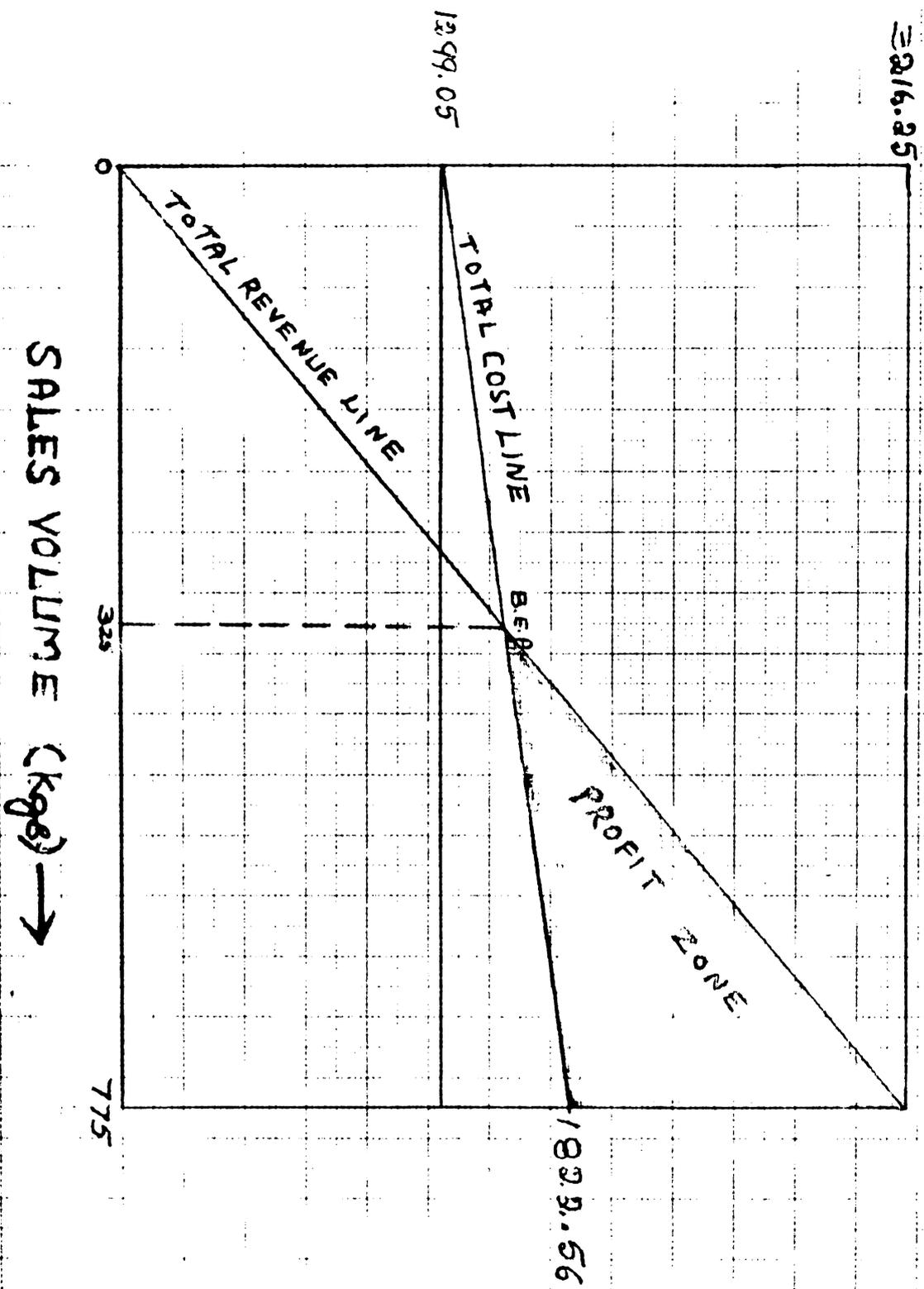
The B.E.P. is at 325 Kgs. or Rs.1348.75  
=====

# BREAK EVEN CHART - SMALL HOLDING, 1965-66

X axis 1cm = 50 kgs  
Y axis 1cm = Rs 2,50

CHART 2

COST & REVENUE (Rs) →



The Chart 3 gives the profitability position of the Estate sector for the year 1974-75.

1. Total Production	=	1000 Kgs.
2. Total Revenue at the rate of Rs.697.30 per 100 Kgs.	=	Rs.6973.00
3. Fixed cost at this level of operation	=	Rs.3829.40
4. Variable Cost	=	Rs. 908.70
5. Total Cost	=	Rs.4738.10

B.E.P. is at 631 Kgs. or Rs.4399.96  
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CHART 3

COST & REVENUE (R.) →

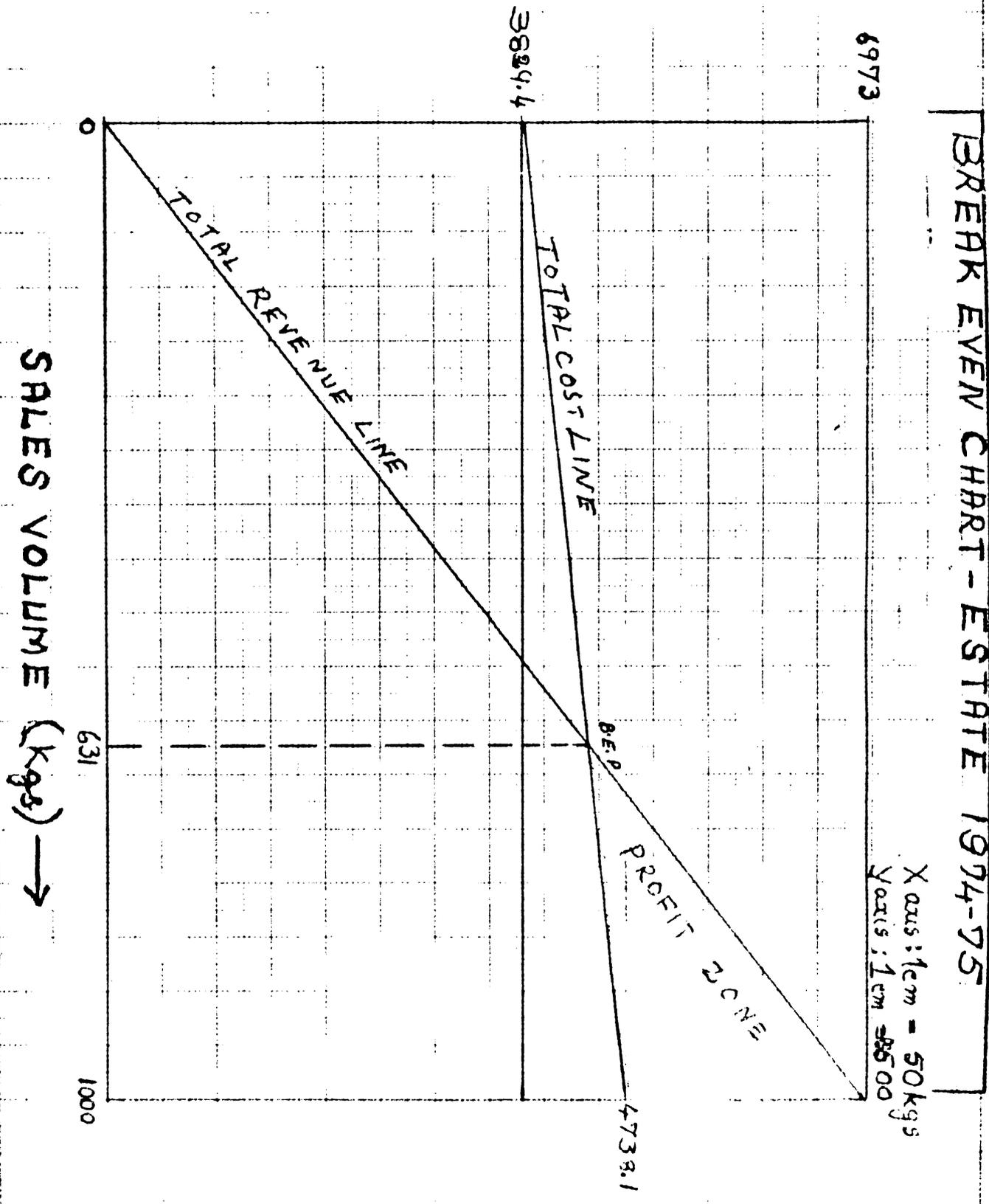


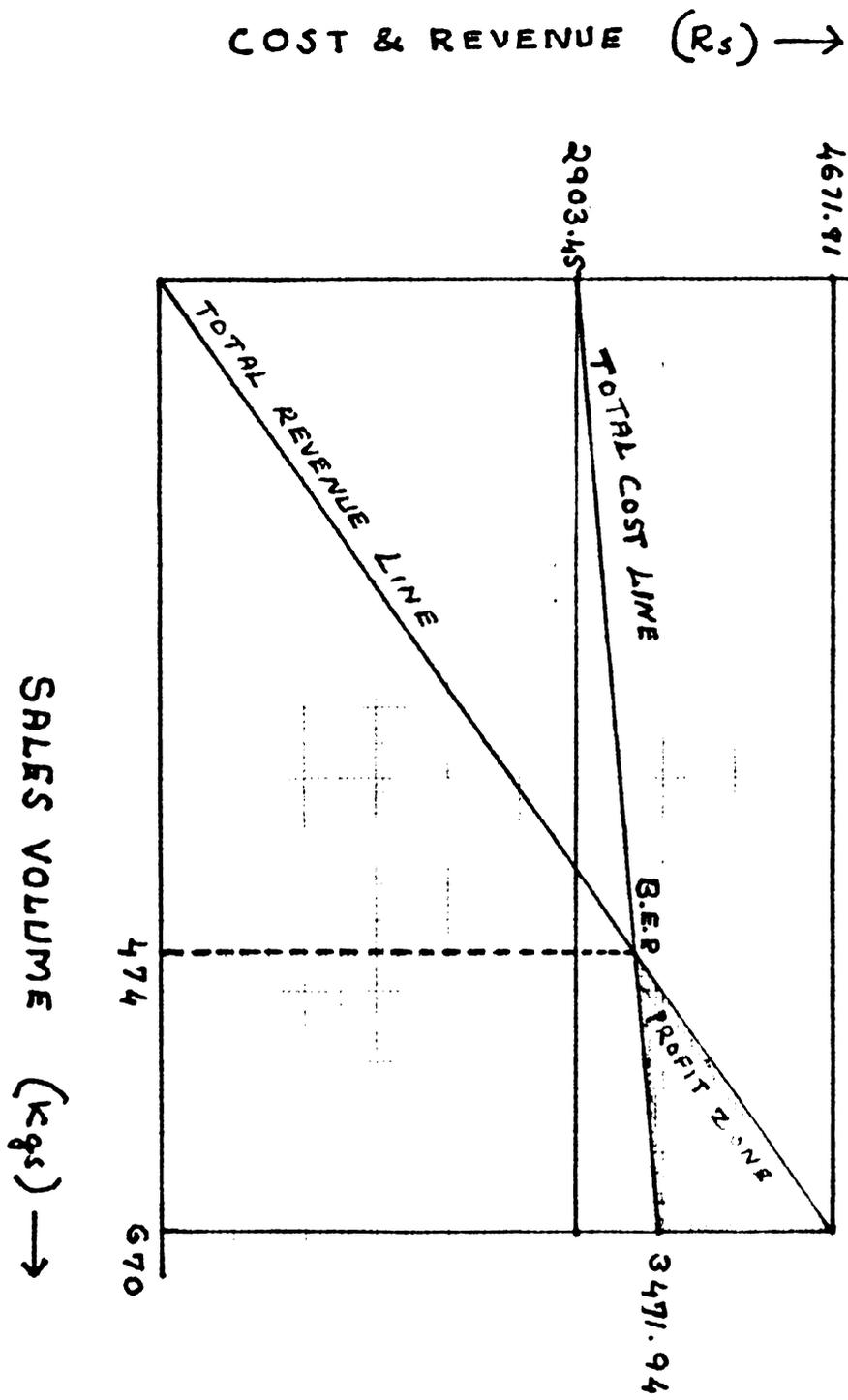
Chart 4 furnishes the profitability position of the small holding sector for the year 1974-75.

1. Total production	=	670 Kgs.
2. Total Revenue at the rate of Rs.697.30 per 100 Kgs.	=	Rs.4671.91
3. Fixed Cost at this level of operation	=	Rs.2903.45
4. Variable Cost	=	Rs. 568.49
5. Total Cost	=	Rs.3471.94

B.E.P. is at 474 Kgs. or Rs.3305.20

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CHART 4



BREAK EVEN CHART - SMALL HOLDING 1974-75  
X axis: 1cm = 50 Kgs.  
Y axis: 1cm = Rs. 500

5.1.1. From Chart-1 it can be seen that the break-even-point of the estate sector for 1965-66 is 410 Kgs. The producer is getting a profit share of 368 Kgs. (i.e., the difference between the total production and the B.E.P.) of rubber. At the price level of Rs.4.15 (1965-66 price) per 100 Kgs., he is getting a profit of Rs.1,527.20 ( $368 \times 4.15$ ) from one hectare of rubber area.

5.1.2. In the case of small holdings the break-even point is 325 Kgs. Thus a small holder is getting a profit share of 450 Kgs. in terms of rubber produced. In terms of rupees it is equivalent to Rs.1,867.50 from one hectare of rubber area. This illustrated in Chart-2.

5.1.3. Chart-3 shows that for 1974-75 estate sector is getting a profit share of 369 Kgs. Break-even point for this sector is 631 Kgs. and total production is 1,000 Kgs. At the price level of Rs.6.97 per 100 Kgs. (1974-75 price) the profit is Rs.2,573 from one hectare of rubber.

5.1.4. Chart-4 reveals that in the case of holdings the break-even point is 474 Kgs. The holding sector is getting a profit of 196 Kgs. in terms of quantity since the total production is 670 Kgs. This is equivalent to Rs.1,366.71 at the price level of Rs.6.97 per 100 Kgs.

5.2. Comparatively, estates are in a more advantageous position than the small holdings regarding the profit share. The profitability position of the rubber plantation industry shows its prospects for further growth.

6. Expansion and contraction of the profit area depend on the following three conditions:

1. Changes in variable costs
2. Changes in prices
3. Changes in production.

When the variable cost is reduced, naturally, the total cost line comes down and the profit zone expands. When the price is increased the sales line deviates from its original position to the upper half giving an increase in the profit zone. When the production is increased, the perpendicular at the total production point will be pushed off to the right side leading to an increase in the profit zone.

6.1. Changes in variable costs which are beneficiary to the growers (i.e., lowering of variable cost) are impractical under the existing conditions, because the price of the items that come under this head cannot be reduced beyond a certain level. Changes in the price of the product may be considered a tangible solution here.

## 7. Economic Unit

7.1. An estate is composed at least with a minimum area of 20.23 hectares (as per the Act). At the existing price level an estate of 20.23 hectares is getting a profit volume of Rs.52,030 (i.e.  $369 \times 20.23 \times 6.97$ ).

7.2. But the case of holdings is different. The holdings differ in area. Many of the families rely on these holdings for their livelihood. Therefore, it is necessary to define an economic holding either at the existing price level or at a proposed price level, considering the family sustenance and a provision for taxation.

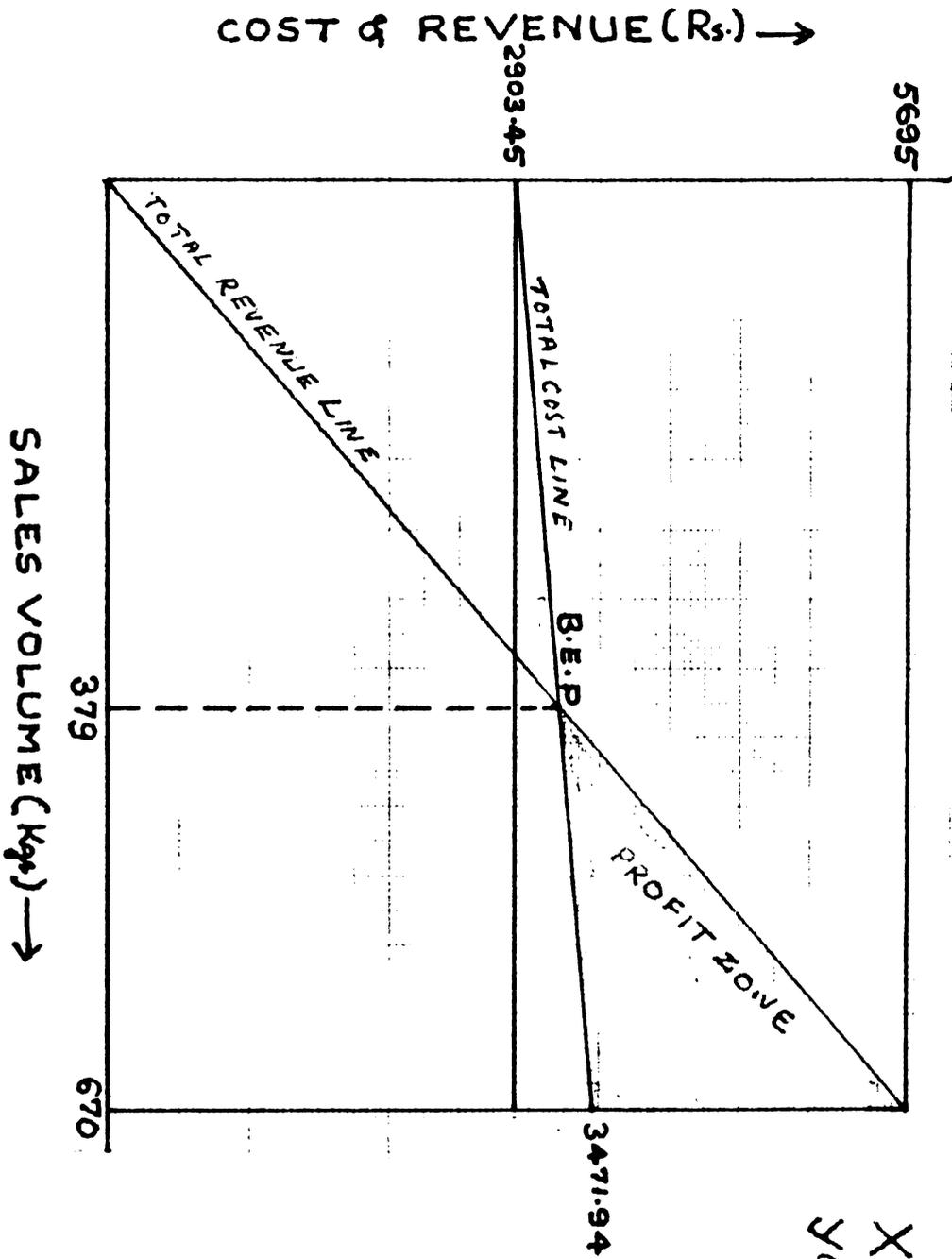
7.3. If an annual income of Rs.6,000 is assumed as the minimum necessary for the sustenance of a family, the same amount should be extracted from a self-sufficient or an economic holding. In the existing conditions (1974-75) an area of one hectare rubber gives 196 Kgs. of raw rubber to a small holder as the profit share (i.e., the difference between the total production and the B.E.P.). If 2.5 hectare is considered as an economic holding, the small grower should get this assumed amount (i.e., Rs.6,000) solely from that holding. The present price level gives only Rs.3,415.30 to the grower from an area of 2.5 hectares. This shows that the present price level is not sufficient to serve the purpose.

Chart 5 shows the profitability position of the small holding sector for the year 1974-75 at the proposed price level of Rs.850.00 per 100 Kgs.

1. Total Production	=	670 Kgs.
2. Total Revenue	=	Rs.5695.00
3. Fixed cost at this level of of operation	=	Rs.2903.45
4. Variable Cost	=	Rs. 568.49
5. Total Cost	=	Rs.3471.94

B.E.P. is at 379 Kgs. or Rs.3221.50  
=====

CHART 5



BREAK EVEN CHART - SMALL HOLDING.

1974-75

X axis: 1cm = 50 Kgs  
Y axis: 1cm = Rs. 500

7.4. If the price is raised to Rs.850 per 100 Kgs., the break-even point comes down to 379 Kgs. Chart 5 indicates this position. The grower is getting a profit equivalent to the price for 291 Kgs. from one hectare of rubber area. Thus at the price level of Rs.850 per 100 Kgs., small holder gets a sum of Rs.6,183.75 from the economic unit of 2.5 hectares of rubber. This includes a sum for family sustenance and a provision for taxation. Therefore, at the price level of Rs.850 per 100 Kgs. an area of 2.5 hectare rubber can be considered as an economic unit.

CHAPTER - VIII

CONCLUSIONS AND RECOMMENDATIONS

## CONCLUSIONS AND RECOMMENDATIONS

This chapter discusses the findings of the study.

1. The plantation sector is important to the Indian economy since it provides a major source of revenue, foreign exchange earnings and employment. During 1974-75 alone the rubber plantations yielded Rs.3,81,41,004 as revenue from excise duty, Rs.17,80,58,000<sup>1</sup> as foreign exchange and provided employment to 151,357 workers.
  
  2. From the study it is seen that comparatively estates enjoy high rate of profit than the small holdings. Holdings differ in area and many a family has to rely solely on the holding for its livelihood. In the year 1974-75 the profit share of estate was Rs.2,573.04 per hectare, whereas that of holding was only Rs.1,366.71 per hectare.
  
  - 2.1. The profit depends on price and cost of production. Under the existing conditions a hike in prices of raw
- 
1. Including manufacturing sector.

rubber is the only possible way by which the profitability position of the holdings can be enhanced.

- 2.2. An annual income of Rs.6,000 may be considered necessary for the up keep of an average family. This can be realised from a holding of 2.5 hectares only if the floor price is fixed at Rs.850 per quintal.
3. But factors such as price fluctuations, frequent fall in the prices of rubber to uneconomic level, absence of attractive cash incentives (financial patronage) for small holders and beneficial increase in prices of other commodities such as cocoa, cashewnut and pepper inhibit the development of rubber plantation industry.
4. Only by providing a reasonable return to the growers for their raw rubber the industry can be saved from the present predicament. Further, there must be arrangements to ensure the fixed price to the growers. Often the growers are getting only a lower price than the statutorily fixed price for their produce.
  - 4.1. By purchasing the produce of the growers directly at the notified price and by setting up a buffer stock the Government can ensure the notified price to the growers.

- 4.2. The scheme will operate to stabilise the price of natural rubber within the prescribed price stabilisation limit. The price is determined after taking into account the cost of production and profit margin, particularly for the small holders who account for the bulk of production.
- 4.3. The Government or the Rubber Board has to take the initiative for this purpose. The Kerala State Co-operative Rubber Marketing Federation can also effectively function in this regard.
- 4.4. Adverse declines in rubber price trends are the major problem of short term market instability. This is mainly because of the excessive speculation and market manipulation seen in the rubber market. The manufacturers are often interested in making price manipulation for controlling the market in their interest. Their intriguing purchase policies and offered prices prevent, in effect, the small holders from getting the minimum notified price for their produce. Wide fluctuations in the prices of natural rubber adversely affect the long term supply position due to the difficulties on the part of the rubber producers to make healthy long term plan for future production. This leads to

the decline of additional planting and attempts for increased yields from existing plantations. Price stability for natural rubber is a necessary condition for producers, especially small holders to implement a healthy and dynamic production plan.

- 4.5. The condition of the rubber market in India is defective. There is oligopoly situation on the part of buyers and competition on the part of sellers. The oligopoly of the consumers can be checked by forming a buffer stock of raw rubber.
- 4.5.1. The available data regarding the consumption of natural rubber show that the rubber market in India is controlled by the ten top tyre manufacturers. In 1974-75 these ten tyre companies accounted for 64 per cent of the total consumption of rubber in the country. The fate of about 150,000 small holders depends on the mercy of these ten tyre manufacturers.
- 4.6. The top few Indian manufacturers are aiming at the export ban, import permission and the fixation of a maximum price for raw rubber.
- 4.7. The main objective of the buffer stock is to achieve equilibrium in supply and demand conditions which will

ensure price stability. This will go a long way in ensuring remunerative and reasonable returns to the growers.

5. Buffer Stock of Natural Rubber

A buffer stock of rubber is meant for the establishment of internal commodity arrangements to improve the conditions and purchase of rubber at prices which are remunerative and just to producers, without excessive fluctuations. Further, the buffer stock of natural rubber is aimed at ensuring a balance in supply and demand requirements. The spirit of buffer stock of natural rubber demands proper arrangements for price stabilisation scheme for natural rubber.

- 5.1. The problem of financing the internal rubber buffer stock must be met with the financial assistance from either the Government or from the Rubber Board. By withholding and releasing the required volume of produce properly this agency can effectively achieve the goal.
- 5.2. A buffer stock is the only permanent solution for the problem of price fluctuations in the rubber market and for ensuring the notified price to the grower.

6. New Planting

There cannot be any increase in new planting especially in the small holding sector unless rubber cultivation becomes financially attractive in the long run. Under the existing market conditions, there is a tendency among small holders to switch over to other crops. This can be checked only by effecting appropriate price policy measures for natural rubber.

7. Replantation

For encouraging replantation of old and uneconomic areas with high yielding varieties of rubber, the growers must be given incentives such as the supply of highly subsidised fertilisers, subsidy for controlling leaf-fall disease and subsidy for manuring during the immaturity period.

- 7.1. The interest of the loan is to be subsidised at least partially by the Rubber Board.

8. Processing of Small Holders' Rubber

About 61 per cent of the rubber produced in India is contributed by the small holding sector. Their produce is inferior to that of the estate sector in terms of

quality and hence needs improvement. In addition to the existing financial and technical assistance to the co-operatives, the Board has to take initiative for improving the processing of smallholder's rubber by establishing technically specified rubber processing units either directly, or through co-operatives.

9. Small Holders in the Development of Rubber Plantation Industry

The most significant achievement of the rubber plantation industry over the years is the increase in productivity per hectare. The small holdings have gained importance over large estates both in area and in production by a great margin. In future also, further growth and expansion would have to be in the small holding sector. Despite the creditable achievements in productivity level in the past, there is still vast scope for further improvement in the small holding sector. Comparatively, there is less for this in the estate sector.

- 9.1. The remarkable increase in productivity in rubber plantations especially in the small holding sector was largely due to the increased use of high yielding planting materials. At the end of 1955-56, 91 per cent of the total area under small holdings was planted with

unselected planting materials by 1974-75 the ratio between the extents under high yielding and unselected planting materials became 62 : 38. In the case of large estates, the improvement of the ratio during the same period was from 30 : 70 to 97 : 3. The improvement was greater in the small holdings in terms of plant protection, cultural practices and improved tapping techniques since the level achieved by them at the beginning of the period was very low. The facts point to the necessity for providing maximum priority for increasing the pace of replanting in small holdings.

9.2. There is vast development potential in the small holding sector. Regarding the area under rubber, there is much scope for expansion in Kerala especially in the northern districts of Palghat, Malappuram, Kozhikode and Cannanore.

10. In short, for the development of the rubber plantation industry, a planned strategy must be formulated taking into consideration the following essential requirements:

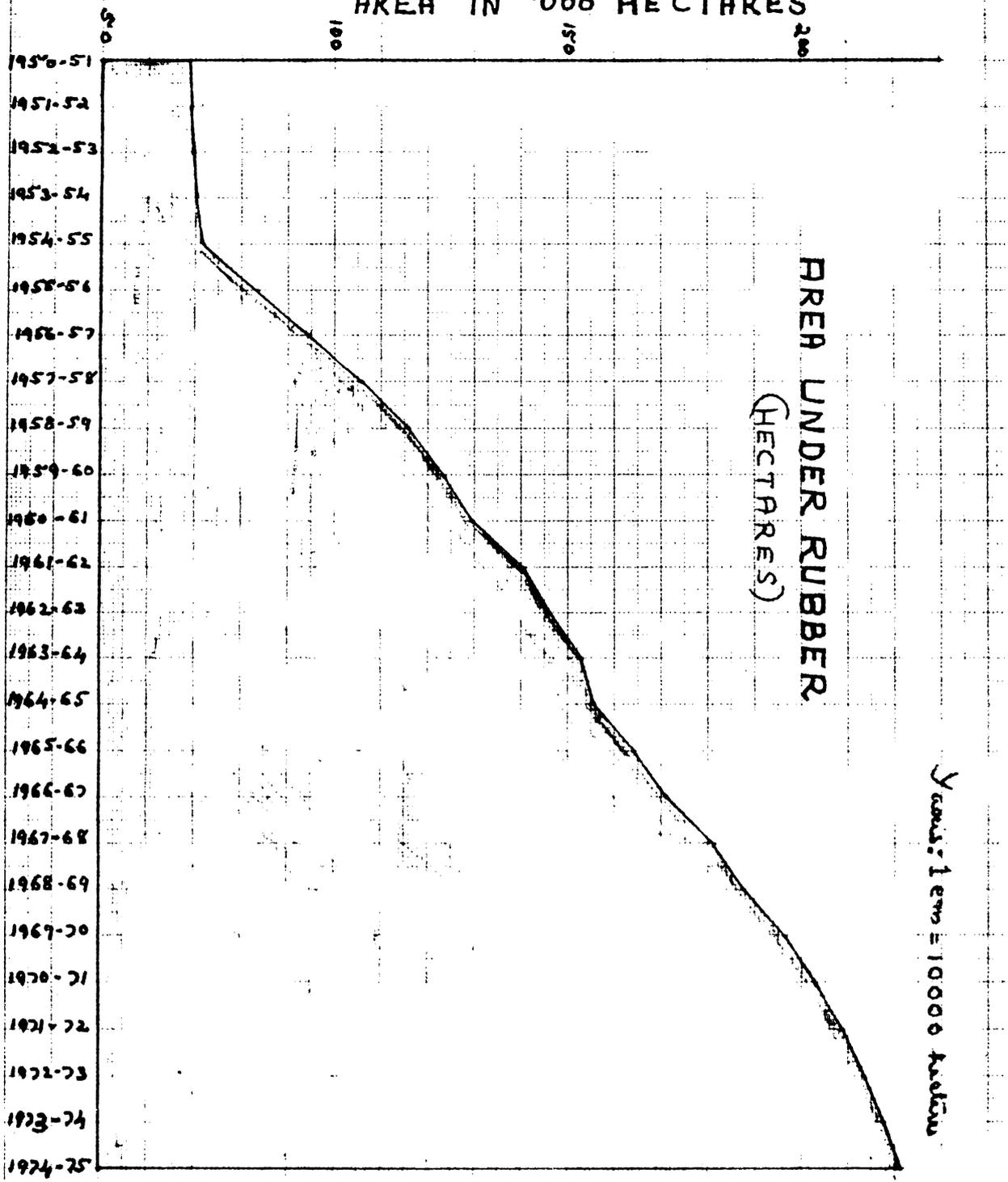
1. Increase in production to satisfy the short-term as well as the long-term demands
2. Encouragement for enhancement of rubber consumption

3. Modernisation of the existing plantations for increasing productive efficiency and lowering cost of production
4. Improvement in the quality of produce
5. Improvement in the marketing of small holders' produce
6. Along with the financial and other assistance to the co-operatives, enough checks on their functioning and performance
7. Fixing up of a statutory price providing a reasonable return to the growers
8. Steps for ensuring price stability
9. Formation of a buffer stock to safeguard the small holders' interest.
10. Development and expansion of small holding sector, and
11. Engineering of research and development programmes.

A N N E X U R E S

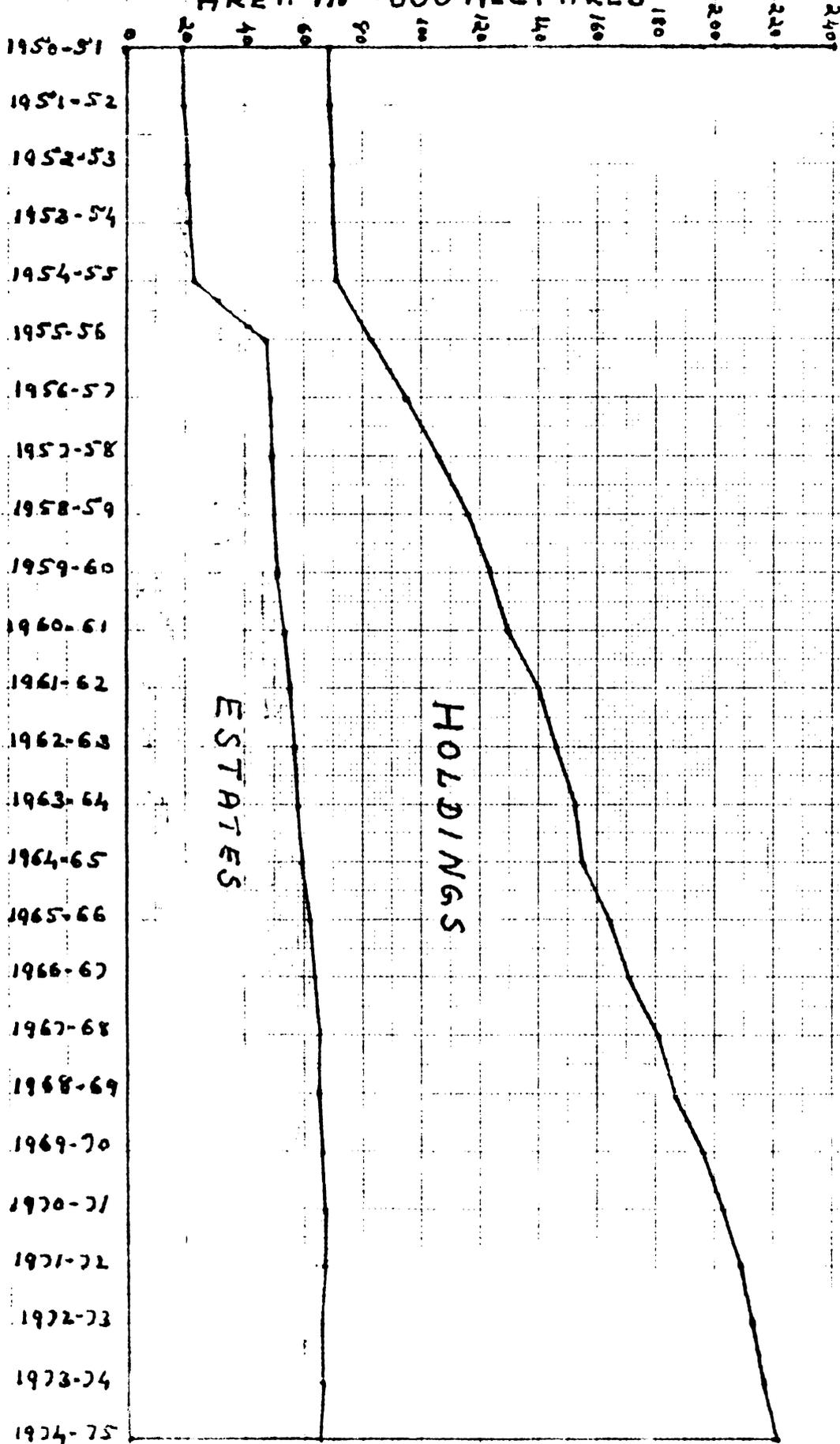
ANNEXURE-I

AREA IN '000 HECTARES



AREA UNDER RUBBER  
(HECTARES)

AREA IN '000 HECTARES

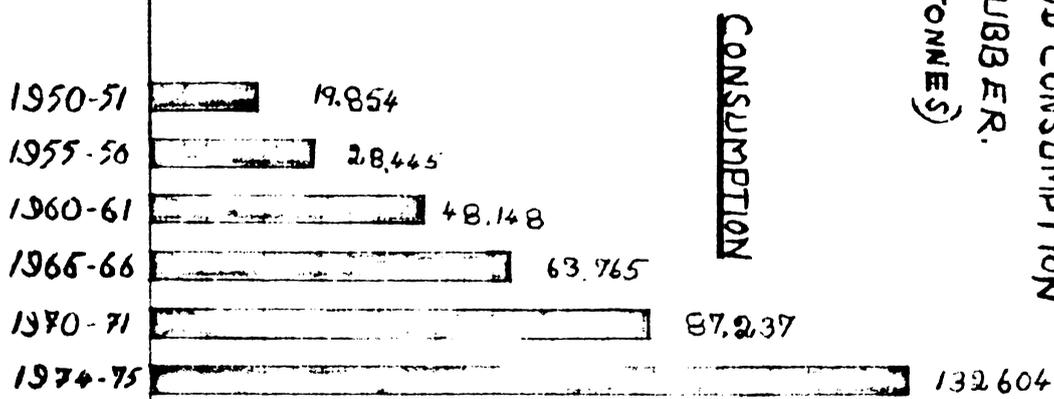
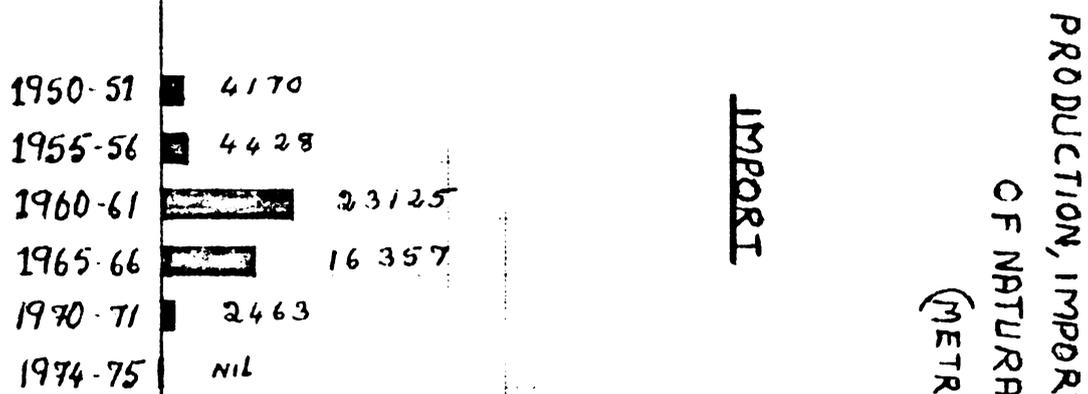
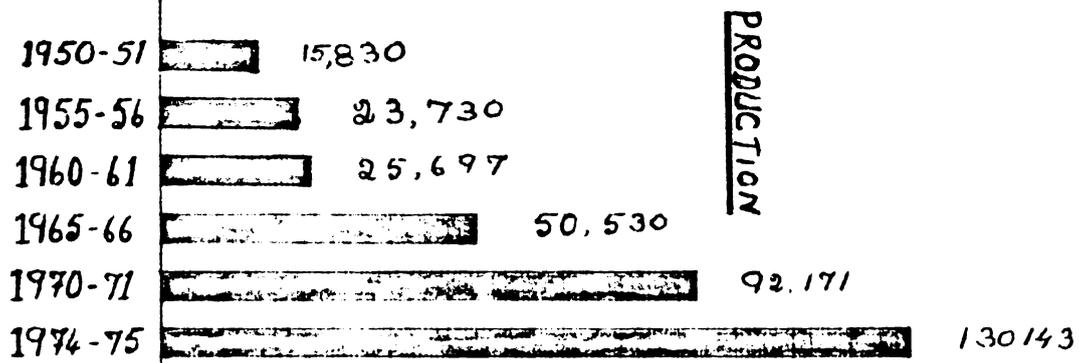


AREA UNDER HOLDINGS AND ESTATES

(HECTARES)

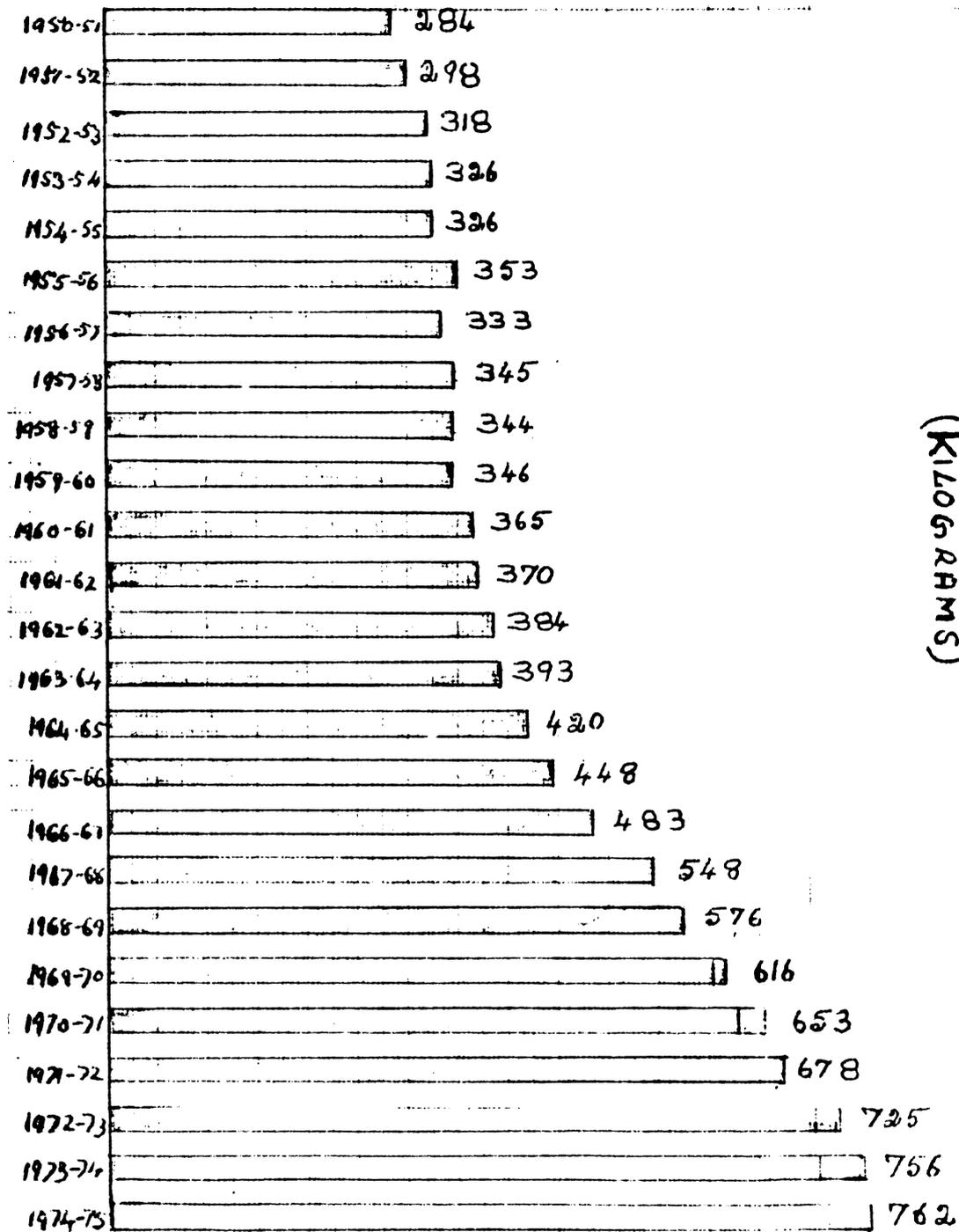
Scale : 1 cm = 20000 Hectares

ANNEXURE-III.



Y axis: 1cm = 1000 metric tonnes

## ANNEXURE-IV



AVERAGE YIELD PER HECTARE OF RUBBER

(KILOGRAMS)

Yaxis: 1cm = 50 kgs

## ANNEXURE-V

## PRODUCTION OF NATURAL RUBBER IN MAIN PRODUCING COUNTRIES

(In Thousand Metric Tonnes)

	1965-	1966-	1967-	1968-	1969-	1970-	1971-	1972-	1973-1974-	
	66	67	68	69	70	71	72	73	74 75	
(1) -----	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) (11)	
Malaysia	916.9	972.8	990.4	1100.3	1268.0	1269.2	1318.5	1304.1	1542.3	1549.3
Indonesia	716.5	736.7	700.8	793.9	880.4	815.2	819.3	773.7	885.8	855.0
Thailand	216.4	207.5	216.1	259.2	283.4	287.2	316.3	336.9	382.0	379.2
Sri Lanka	118.3	131.0	143.2	148.7	150.8	159.2	141.4	140.4	154.7	132.0
Vietnam	61.0	48.8	40.6	29.7	26.2	28.5	34.5	20.3	20.6	22.0
Cambodia	48.9	51.3	53.7	51.3	51.8	12.8	1.1	15.3	16.5	17.8
India	49.4	53.2	62.3	68.8	80.0	89.9	98.9	109.1	123.2	128.4
Brazil	29.3	24.3	21.5	23.0	24.0	25.0	24.2	25.8	23.4	18.6
Africa	159.3	176.5	163.0	169.0	182.0	213.0	203.8	208.5	224.5	232.8
Others	31.7	31.0	32.2	40.7	43.5	44.5	53.5	58.5	68.0	84.0
Total	2352.5	2392.5	2522.5	2685.0	2995.0	3102.5	3085.0	3120.0	3505.0	3440.0

Source: Rubber Board, Kottayam, Indian Rubber Statistics, Vol.15, 1976, p.88.

## ANNEXURE - VI

## CONSUMPTION OF NATURAL RUBBER IN MAIN CONSUMING COUNTRIES

(In Thousand Metric Tonnes)

	1965-	1966-	1967-	1968-	1969-	1970-	1971-	1972-	1973-	1974-
(1)	66	67	68	69	70	71	72	73	74	75
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
U.S.A.	523.0	554.4	496.7	591.2	607.9	568.3	587.1	650.9	698.0	733.1
Japan	201.5	216.0	243.0	255.0	268.0	283.0	295.0	312.0	335.0	312.0
U.K.	186.7	183.9	178.5	194.1	191.4	188.2	187.2	174.0	173.1	166.5
F.R.Germany	157.9	157.6	141.3	170.0	191.2	200.7	198.2	193.0	205.6	193.9
France	122.5	126.0	127.8	128.8	149.5	158.2	159.2	160.2	162.3	162.4
Italy	87.0	91.4	100.0	100.0	102.0	113.0	121.0	118.0	120.0	125.0
India	64.7	66.7	72.5	84.2	86.7	86.5	93.1	101.1	123.3	133.5
Canada	43.5	47.3	46.1	45.5	49.7	50.6	52.0	60.4	60.4	63.3
Eastern Europe	425.0	430.0	445.0	460.0	465.0	465.0	475.0	485.0	490.0	500.0
China	140.0	155.0	165.0	180.0	195.0	210.0	212.5	215.0	217.5	220.0
Australia	39.0	37.6	37.3	44.0	42.0	40.2	40.5	46.3	52.1	59.4
Brazil	26.6	30.9	32.1	38.2	35.0	36.7	41.8	44.2	51.1	57.9
Netherlands	20.8	22.6	19.7	20.6	20.4	22.0	22.0	23.2	23.4	24.8
Others	371.5	391.0	395.0	439.8	477.0	522.5	573.5	622.5	657.5	727.5
Total	2447.5	2542.5	2535.0	2780.0	2910.0	2992.5	3095.0	3235.0	3402.5	3515.0

Source: Rubber Board, Kottayam, Indian Rubber Statistics, Volume 15, 1976, p.90.

## ANNEXURE-VII

WORLD PRODUCTION, CONSUMPTION AND STOCK OF NATURAL RUBBER

(In Thousand Metric Tonnes)

YEAR	NATURAL RUBBER			
	New Supply*	Consumption	Excess(+) or Deficiency(-) compared with consumption	Stock at the end of the year
(1)	(2)	(3)	(4)	(5)
1965-66	2475.0	2447.5	+27.5	1165.0
1966-67	2552.5	2542.5	+10.0	1175.0
1967-68	2622.5	2535.0	+87.5	1267.5
1968-69	2760.0	2780.0	-20.0	1247.5
1969-70	3032.5	2910.0	+122.5	1375.0
1970-71	3135.0	2992.5	+142.5	1520.0
1971-72	3105.0	3095.0	+ 10.0	1530.0
1972-73	3177.5	3235.0	- 57.5	1472.5
1973-74	3572.5	3402.5	+170.0	1642.5
1974-75	3517.5	3515.0	+ 12.5	1645.0

\* Production plus deliveries from Government Stockpiles.

Source: Rubber Board, Kottayam, Indian Rubber Statistics, Volume 15, 1976, p.96.

## ANNEXURE - VIII

WORLD PRICE OF NATURAL RUBBER

(Average Price RSS 1 per 100 Kg.)

YEAR	LONDON (Spot)		NEW YORK		KUALA LUMPUR	
	Pound Ster- ling (2)	Equivalent Rate in Rs. (3)	U.S. Dollars (4)	Equivalent rate in Rs. (5)	Malaysian Dollars (6)	Equiva- lent rate in Rs. (7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1965-66	19.70	263	56.64	270	154.44	240
1966-67	18.23	383	52.08	391	144.1	353
1967-68	15.89	286	43.88	329	119.2	292
1968-69	17.25	310	43.74	328	117.1	287
1969-70	23.10	416	57.75	433	153.9	377
1970-71	18.70	337	46.25	347	124.4	305
1971-72	15.13	285	39.90	299	101.6	258
1972-73	14.89	281	40.21	311	93.5	261
1973-74	31.63	597	78.51	623	165.5	551
1974-75	33.17	621	86.80	689	170.4	597

Source: Rubber Board, Kottayam, Indian Rubber Statistics, Volume 15, p.98.

THE RUBBER ACT, 1947  
(XXIV OF 1947)  
(PASSED BY THE INDIAN LEGISLATURE)

(Received the assent of the Governor General on the 18th  
April, 1947)

(As amended by the Rubber (Production and Marketing) Amendment  
Act of 1954 (54 of 1954) and as further amended by the Rubber  
(Amendment) Act of 1960 (21 of 1960)

An Act to provide for the development under  
control of the Union of the rubber  
industry

Whereas it is expedient to provide for the develop-  
ment under control of the Union of the rubber industry.

It is hereby enacted as follows:--

1. Short title and extent. (1) This act may be called  
the Rubber Act, 1947.

(2) It extends to the whole of India except the State  
of Jammu and Kashmir.

2. Declaration as to expediency of Union control. It  
is hereby declared that it is expedient in the public interest  
that the Union should take under its control the rubber  
industry.

3. Definitions. In this Act, unless there is any-  
thing repugnant in the subject or context:--

(a) "Board" means the Rubber Board constituted under  
this Act;

(b) "dealer" means any person who deals in rubber  
whether wholesale or retail, or holds stocks of rubber, and  
includes the representative or agent of a dealer;

(c) "estate" means any area administered as one unit which contains land planted with rubber plants;

(d) "export" and "import" mean respectively taking out of, and bringing into, India by sea, land or air;

(dd) "India" means the territory of India excluding the State of Jammu and Kashmir;

(e) "manufacturer" means any person engaged in the manufacture of any article in the making of which rubber is used;

(f) "owner" includes any agent of an owner and a mortgagee in possession and a lessee of an estate:

(g) "prescribed" means prescribed by rules made under this Act;

(h) "rubber" means—

(i) crude rubber, that is to say, rubber prepared from the leaves, bark or latex of any rubber plant;

(ii) the latex of any rubber plant, whether fluid or coagulated, in any stage of the treatment to which it is subjected during the process of conversion into rubber;

(iii) latex (dry rubber content) in any state of concentration, and includes scrap rubber, sheet rubber, rubber in powder and all forms and varieties of crepe rubber, but does not include rubber contained in any manufactured article;

(i) "rubber plant" includes plants, trees, shrubs or vines of any of the following:—

(i) *Hevea Braziliensis* (Para Rubber).

(ii) *Manihot Glaziovii* (Ceara Rubber),

(iii) *Castilloa elastica*,

(iv) *Ficus elastica* (Rambong), and

(v) any other plant which the Board may, by notification in the Gazette of India, declare to be a rubber plant for the purposes of this Act;

(j) "Rubber Production Commissioner" means the Rubber Production Commissioner appointed under this Act.

(k) "Small grower" means an owner whose estate does not exceed fifty acres in area.

4. Constitution of the Board. (1) As soon as may be after the commencement of this Act, the Central Government shall, by notification in the Official Gazette, constitute for the purposes of this Act a Board to be called the Rubber Board.

(2) The Board shall be a body corporate by the name of the Rubber Board having perpetual succession and a common seal, with power to acquire and hold property both movable and immovable, and to contract, and shall by the said name sue and be sued.

(3) The Board shall consist of—

(a) a Chairman to be appointed by the Central Government;

(b) two members to represent the State of Madras, one of whom shall be a person representing rubber producing interests;

(c) eight members to represent the State of Kerala, six of whom shall be persons representing the rubber producing interests, three of such six being persons representing the small growers;

(d) the members to be nominated by the Central Government, of whom two shall represent the manufacturers and four labour; and

(e) three members of Parliament of whom two shall be elected by the House of the People and one by the Council of States; and

(f) the Rubber Production Commissioner, ex-officio.

(4) The persons to represent the States of Madras and Travancore-Cochin shall be elected or nominated as may be prescribed.

(5) Any Officer of the Central Government when deputed by that Government in this behalf shall have the right to attend the meetings of the Board and take part in the proceedings thereof but shall not be entitled to vote.

(6) The Board shall elect from among its members a Vice-Chairman who shall exercise such of the powers, and perform such of the functions, of the Chairman as may be prescribed or as may be delegated to him by the Chairman.

(7) The members of the Board shall receive from the Board such allowances as may be prescribed.

(8) It is hereby declared that the office of member of the Board shall not disqualify its holder for being chosen as, or for being, a member of either House of Parliament.

5. Vacancies in the Board. (1) If any authority or body fails to make within a reasonable time any nomination which it is entitled to make under section 4, the Central Government may itself nominate a member to fill the vacancy.

(2) Where a member of the Board dies, resigns or is removed, or ceases to reside in India, or becomes incapable of acting, the Central Government shall, on the recommendation of the authority or body entitled to nominate the member under section 4, or where such recommendation is not made within a reasonable time, then on its own initiative, appoint a person to fill the vacancy.

(3) No act done by the Board shall be questioned on the ground merely of the existence of any vacancy in, or defect in the constitution of the Board.

6. Salary and allowances of Chairman. The Chairman shall be entitled to such salary and allowances and be governed by such conditions of service in respect of leave, pension, provident fund and other matters as may from time to time be fixed by the Central Government.

6A. Executive Officers of the Board. (1) The Central Government shall appoint a Rubber Production Commissioner to exercise such powers and perform such duties under the direction of the Board as may be prescribed.

(2) The Central Government shall appoint a Secretary to the Board to exercise such powers and perform such duties under the direction of the Board as may be prescribed or as may be delegated to him by the Chairman.

(3) The Rubber Production Commissioner and the Secretary to the Board shall be entitled to such salaries and allowances and be governed by such conditions of service regarding leave, pension, provident fund and other matters as may be fixed by the Central Government.

(4) The Chairman, the Rubber Production Commissioner and the Secretary shall not undertake any work unconnected with their duties under this Act except with the permission of the Central Government.

7. Committees of the Board. (1) The Board may appoint such Committees as may be necessary for the efficient performance of its duties and functions under this Act.

(2) The Board shall have the power to co-opt as members of any Committee appointed under sub-section (1) such number of persons who are not members of the Board, as it may think fit.

(3) The Board may appoint and authorise agents to discharge on its behalf any of its functions in relation to the marketing or storing of rubber.

8. Functions of the Board. (1) It shall be the duty of the Board to promote by such measures as it thinks fit the development of the rubber industry.

(2) Without prejudice to the generality of the foregoing provision, the measures referred to therein may provide for--

(a) undertaking, assisting or encouraging scientific, technological and economic research;

(b) training students in improved methods of planting, cultivation, manuring and spraying;

(c) the supply of technical advice to rubber growers;

(d) improving the marketing of rubber;

(e) the collection of statistics from owners of estates, dealers and manufacturers;

(f) securing better working conditions and the provisions and improvement of amenities and incentives for workers;

(g) carrying out any other duties which may be vested in the Board under rules made under this Act.

(3) It shall also be the duty of the Board--

(a) to advise the Central Government on all matters relating to the development of the rubber industry, including the import and export of rubber;

(b) to advise the Central Government with regard to participation in any International Conference or scheme relating to rubber;

(c) to submit to the Central Government and such other authorities as may be prescribed half-yearly reports on its activities and the working of this Act;

(d) to prepare and furnish such other reports relating to the rubber industry as may be required by the Central Government from time to time.

8A. Power of the Board to import rubber for sale, or to purchase rubber, in the internal market. It shall be lawful for the Board with the previous approval of the Central Government to import rubber for sale, or to purchase rubber, in the internal market at such prices as the Central Government may fix.

8B. Consultation with the Board. Before taking any action touching the affairs of the Board under this Act, the Central Government shall ordinarily consult the Board;

Provided that no action taken by the Central Government shall be invalid or called in question merely on the ground that the action was taken without such consultation.

9. Funds of the Board. (1) The Indian Rubber Production Board constituted under the Rubber Control and Production Order, 1946, is hereby dissolved, and all funds and other property vested in, and all liabilities of, that Board shall respectively vest in, and be liabilities of, the Board constituted under this Act.

(2) The Board shall maintain two funds, a general fund and a pool fund.

9A. General Fund. (1) To the general fund shall be credited--

(a) all sums forming the funds of the Board immediately before the commencement of the Rubber (Production and Marketing) Amendment Act, 1954;

(b) all amounts paid to the Board by the Central Government under sub-section (7) of Section 12.

(2) The general fund shall be applied--

(a) to meet the expenses of the Board;

(b) to meet the costs of the measures referred to in section 8;

(c) to meet the expenditure incurred in the performance of its functions under this Act, or under rules made thereunder; and

(d) for making such grants to rubber estates or for meeting the cost of such other assistance to rubber estates as the Board may think necessary for the development of such estates.

9B. Pool Fund. (1) To the pool fund shall be credited--

(a) all sums realised by sales of rubber imported or purchased under section 8A;

(b) any other sum which the Board may, with the previous approval of the Central Government, transfer from the general fund to the pool fund.

(2) The pool fund shall be applied only to the rehabilitation of small growers in such manner as may be prescribed.

10. Registration. (1) Every person owning land planted with rubber plants, whether such land is comprised in one estate or in more than one estate and whether it is situated wholly or only partly in India, shall, before the expiry of one month from the date of commencement of this Act, apply to the Board to be registered as an owner in respect of each estate owned by him.

(2) A registration once made shall continue in force until it is cancelled by the Board.

11. Power to prohibit or control imports and exports of rubber. (1) The Central Government may, by order, published in the Official Gazette, make provision for prohibiting, restricting or otherwise controlling the import or export of rubber, either generally or in specified classes of cases.

VIII of 1878. (2) All goods to which any order under sub-section (1) applies shall be deemed to be goods of which the import or export has been prohibited or restricted under section 19 of the Sea Customs Act, 1878, and all the provisions of that Act shall have effect accordingly, except that section 183 thereof shall have effect as if for the word "shall" therein the word "may" were substituted.

VIII of 1878. (3) If any person contravenes any order made under sub-section (1) he shall without prejudice to any ~~confiscation~~ or penalty to which he may be liable under the provisions of the Sea Customs Act, 1878, as applied by sub-section (2), be punishable with imprisonment for a term which may extend to one year or with fine or with both.

12. Imposition of rubber cess. (1) With effect from such date as the Central Government may, by notification in the Official Gazette, appoint, there shall be levied as a cess for the purposes of this Act, a duty of excise on all rubber

produced in India at such rate, not exceeding fifty naye paise per kilogram of rubber so produced, as the Central Government may fix.

(2) The duty of excise levied under sub-section (1) shall be collected by the Board in accordance with rules made in this behalf either from the owner of the estate on which the rubber is produced or from the manufacturer by whom such rubber is used.

(3) The owner or, as the case may be, the manufacturer shall pay to the Board the amount of the duty within one month from the date on which he receives a notice of demand therefor from the Board and, if he fails to do so, the duty may be recovered from the owner or the manufacturer, as the case may be, as an arrear of land revenue.

(4) For the purpose of enabling the Board to assess the amount of the duty of excise levied under the section--

(a) the Board shall, by notification in the Official Gazette fix a period in respect of which assessments shall be made; and

(b) without prejudice to the provisions of section 20, every owner and every manufacturer shall furnish to the Board a return not later than fifteen days after the expiry of the period to which the return relates, stating--

(i) in the case of an owner, the total quantity of rubber produced on the estate in each such period; Provided that in respect of an estate situated only partly in India, the owner shall in the said return show separately the quantity of rubber produced within and outside India;

(ii) in the case of manufacturer, the total quantity of rubber used by him in such period out of the rubber produced in India.

(5) If any owner or manufacturer fails to furnish, within the time prescribed, the return referred to in sub-section (4) or furnishes a return which the Board has reason to believe is incorrect or defective, the Board may assess the amount of the duty of excise in such manner as may be prescribed.

(6) Any person aggrieved by an assessment made under this section may, within three months of the service of the notice under sub-section (3), apply to the District Judge for the cancellation or modification of the assessment, and the District Judge shall, after giving the Board an opportunity of being heard, pass such order (which shall be final) as he thinks proper.

(7) The proceeds of the duty of excise collected under this section reduced by the cost of collection as determined by the Central Government shall first be credited to Consolidated Fund of India, and then be paid by the Central Government to the Board for being utilised for the purposes of this Act, if Parliament by appropriation made by law in this behalf so provides.

13. Power to fix maximum and minimum prices for sale of rubber. (1) The Central Government may by order published in the Official Gazette, fix the maximum price or the minimum price or the maximum and minimum prices to be charged, in the course of a business of any class specified in the order, for rubber of any description so specified.

(2) Any such order may fix different maximum or minimum prices to be charged in the course of business of different classes for the same description of rubber.

(3) If any person buys or sells, or agrees to buy or sell, rubber at a price which is more than the maximum price, or less than the minimum price, fixed under sub-section (1) in that behalf, he shall be punishable with imprisonment for a term which may extend to one year, or with fine, or with both.

14. Licensing of transaction in rubber. No person shall sell or otherwise dispose of, and no person shall buy or otherwise acquire, rubber except under and in accordance with the terms of a general or special licence issued by the Board.

15. Provisions regarding licences under section 14. (1) Every general licence issued under section 14 shall be published by the Board in the Gazette of India and in such newspapers as the Board may direct.

(2) A special licence issued under section 14 shall be valid only for such period as may be specified therein;

Provided that the Board may from time to time extend the period of validity of any such licence.

(3) The Board may at any time for reasons to be recorded by it in writing revoke a special licence granted under section 14, and on such revocation it shall be returned to the Board by the person to whom it was issued.

(4) No application for a special licence made by a person who was carrying on business as a dealer or manufacturer immediately before the commencement of this Act shall be rejected by the Board except for special reasons to be recorded in writing.

16. Restriction on possession of rubber. (1) No person not being the owner or occupant of an estate or a person who has acquired rubber under a general or special licence issued by the Board under section 14 shall have any rubber in his possession.

(2) Any Court trying a contravention of sub-section (1) may, without prejudice to the provisions of sections 26, direct that any rubber in respect of which the Court is satisfied that such contravention has been committed shall be forfeited to Government.

17. Licences for planting or replanting. (1) No person shall plant or replant rubber except under and in accordance with the conditions of a special licence issued by the Board.

(2) A licence issued under this section shall specify the area in which rubber may be planted or replanted and the period for which the licence shall be valid.

(3) No licence issued under this section shall be transferable except with the land to which it relates.

18. Reports to be submitted by licensee. (1) Every holder of a licence issued under section 17 shall, at such times as the Board may require, furnish to it a report specifying the areas newly planted or replanted during the period to which the report relates and containing such other particulars as may be required by the Board.

(2) The Board may revoke any licence issued under section 17, if it is satisfied that the licence was obtained by misrepresentation or fraud or if the licensee contravenes any of the terms of the licence or if the licensee fails to submit the report referred to in sub-section (1).

19. Fees for special licences. The Board may levy such fees as may be prescribed for the issue and renewal of special licence under section 14, section 15 or section 17.

20. Submission of returns and maintenance of accounts. Subject to such exceptions as may be prescribed, every owner, every manufacturer, and every holder of a special licence issued under section 14 not being an owner or a manufacturer, shall--

(a) submit to the Board such returns at such times, in such form, and containing such particulars, as may be prescribed;

(b) maintain true and correct accounts and other records pertaining to his estate or business, as the case may be, in such form as may be prescribed;

(c) permit any person authorised in this behalf by the Central Government or by the Board or any member of the Board authorised by the Chairman in writing or any officer of the Board to inspect the accounts and records referred to in clause (b).

21. Inspection of land and premises. Any person authorised in this behalf by the Central Government or by the Board or any member authorised by the Chairman in writing or any officer of the Board may at any reasonable time inspect any place of business of a dealer or any factory or other premises of a manufacturer, for the purpose of verifying any statement or return submitted under this Act or for any other purposes of this Act.

22. Control by the Central Government. (1) All acts of the Board shall be subject to the control of the Central Government which may cancel, suspend or modify as it thinks fit any action taken by the Board.

(2) The records of the Board shall be open to inspection at all reasonable times by any officer authorised in this behalf by the Central Government.

23. Appeal. Any person aggrieved by an order of the Board refusing to issue or renew, or revoking, a special licence under the provisions of section 14, section 15 or section 17 may, within sixty days of the making of the order and on payment of the prescribed fee, appeal to the Central Government, and the decision of the Central Government thereon, and subject only to such decision the order of the Board, shall be final and shall not be called in question in any Court.

24. Accounts of the Board. (1) The Board shall keep such accounts, in such manner and in such form as may be prescribed, of all moneys received and expended by it.

(2) The Board shall cause the accounts to be audited annually by auditors appointed by the Central Government, and the auditors shall have the power to disallow any item of expenditure which in their opinion has not been properly incurred under this Act.

(3) The Central Government may, on the application of the Board, allow any item of expenditure disallowed by the auditors, under sub-section (2).

25. Powers of Central Government to make rules.

(1) The Central Government may, by notification in the Official Gazette, make rules to carry out the purposes of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, rules made under this section may provide for all or any of the following matters, namely:--

(i) principles regulating the nomination of members of the Board by the Central Government under clause (d) of sub-section (3) of section 4, and the election or nomination of the members referred to in clauses (b) and (c) thereof:

Provided that before making any nomination in the exercise of its powers the Central Government shall call for panels of names from the respective associations recognised by it of the interests referred to in clause (d);

(ii) the term of office of members of the Board, the circumstances in which and the authority by which members may be removed and the filling of casual vacancies in the Board;

(iii) the procedure to be followed at meetings of the Board and at committees thereof for the conduct of business, and the number of members which shall form a quorum at any meeting;

(iv) the maintenance by the Board of records of business transacted by the Board, and the submission of copies thereof to the Central Government;

(v) the holding of a minimum number of meetings of the Board every year;

(vi) the powers of the Board, its Chairman and committees thereof with respect to the incurring of expenditure and the powers and duties of the Rubber Production Commissioner and the Secretary of the Board:

(vii) the conditions subject to which the Board may incur expenditure outside India:

(viii) the preparation of budget estimates of receipts and expenditure of the Board and the authority by which the estimates are to be sanctioned;

(ix) the maintenance of the accounts of income and expenditure of the Board and the audit of such accounts;

- (x) the deposit of the funds of the Board in Banks and the investment of such funds;
- (xi) the re-appropriation of the estimated savings from any budget head to any other budget head;
- (xii) the conditions subject to which the Board may borrow funds;
- (xiii) the conditions subject to which and the manner in which contracts may be entered into by or on behalf of the Board;
- (xiv) the delegation to committees or the Chairman or Vice-Chairman or members or officers of the Board of any of the powers and duties of the Board under this Act;
- (xv) the staff which may be employed by the Board and the pay and allowances and leave and other conditions of service of officers and other employees of the Board;
- (xvi) the travelling and other allowances of members of the Board and of committees thereof;
- (xvii) the purposes for which the funds of the Board may be expended;
- (xviii) the maintenance of the registers and other records of the Board and of its various committees;
- (xix) the collection of any information or statistics in respect of rubber or any product of rubber;
- (xx) the form of application for registration under section 10 or the cancellation of such registration, the fee payable on such applications, the procedure to be followed in granting or cancelling registration and the registers to be kept by the Board;
- (xx a) the cases and circumstances in which the duty of excise under section 12 shall be payable by the owner and the manufacturers respectively, the manner in which the duty may be assessed, paid or collected, the regulation of the production, manufacture, transport or sale of rubber in so far as such regulation is necessary for the proper levy, payment or collection of duty;
- (xxi) the form of application for special licences under section 14 or section 17, the fees for the grant or renewal of such licences, and the forms of such licences;

(xxii) the manner in which rubber shall be graded and marketed;

(xxiii) the fee payable on appeals under section 23;

(xxiv) any other matter which is to be or may be prescribed.

(3) Every rule made under this section shall be laid as soon as may be after it is made before each House of Parliament while it is in session for a total period of thirty days which may be comprised in one session or in two successive sessions, and if before the expiry of the session in which it is so laid or the session immediately following, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be, so however that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

26. Penalties. (1) If any person--

(a) contravenes any provision of this act, other than section 11 or section 13, or any rule made under this Act, or

(b) in any report or return to be furnished under this Act makes any statement which is false and which he knows to be false or does not believe to be true, or

(c) obstructs any officer of the Board in the discharge of any duty imposed on or entrusted to him by or under this Act, or

(d) having the control or custody of any account book or other record, fails to produce such book or record when required by any authorised officer to do so,

he shall be punishable with imprisonment for a term which may extend to one year, or with fine which may extend to one thousand rupees, or with both.

(2) If the person committing any offence under subsection (1) is a company, every person who at the time the offence was committed was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly;

Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided

in this Act if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(3) Notwithstanding anything contained in sub-section (2), where an offence under sub section (1) has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director or manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation-- For the purposes of this section,---

(a) "company" means any body corporate, and includes a firm or other association of individuals; and

(b) "director" in relation to a firm means a partner in the firm.

27. Procedure for prosecutions. No prosecution for any offence punishable under this Act shall be instituted except by or with the consent of the Central Government or the Board.

27 A. Jurisdictions of courts. No court inferior to that of a presidency magistrate or a magistrate of the first class shall try any offence punishable under this Act.

28. Bar of legal proceedings. No suit, prosecution or other legal proceedings shall lie against the Board or any officer of the Board for anything in good faith done or intended to be done under this Act.

29. Validation of certain acts and indemnity in respect thereof. All acts of executive authority, proceedings and sentences which have been done, taken or passed with respect to, or on account of, rubber during the period commencing on the 26th day of January, 1950, and ending with the date of commencement of this Act, by the Government or by any officer of the Government or by any other authority in the belief or purported belief that the acts, proceedings or sentences were being done, taken or passed under the principal Act shall be as valid and operative as if they had been done, taken or passed in accordance with law, and no suit or other legal proceedings shall be maintained or continued against any authority whatsoever on the ground that any such acts, proceedings or sentences were not done, taken or passed in accordance with law.

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## THE RUBBER RULES, 1955

(As amended upto 23rd October, 1976)

## MINISTRY OF COMMERCE AND INDUSTRY

## NOTIFICATION

## RUBBER CONTROL

New Delhi, the 1st August 1955

S.R.O. 1662--In exercise of the powers conferred by Section 25 of the Rubber Act, 1947 (XXIV of 1947), and in supersession of the Rubber (Production and Marketing) Rules, 1947, the Central Government hereby makes the following rules, namely:--

## CHAPTER I

## PRELIMINARY

1. Short title. These rules may be called the Rubber Rules, 1955.

2. Definitions. In these rules, unless the context otherwise requires--

(i) "the Act" means the Rubber Act, 1947 (XXIV of 1947)

(ii) "Board" means the Rubber Board constituted under sub-section (1) of Section 4.

(iii) "Chairman" means the Chairman of the Board appointed under clause (a) of sub-section (3) of Section 4.

(iv) "Commissioner" means the Rubber Production Commissioner appointed under sub-section (1) of Section 6A;

(v) "Committee" means any committee appointed by the Board under sub-section (1) of Section 7.

(vi) "Form" means a form set forth in the First Schedule to these rules.

- (vii) "Large grower" means an owner who is not "small grower".
- \*(vii-a) "Masterbatches" means a mother stock of a mix of rubber and any one or more compounding ingredients used for the manufacture of rubber goods;
- (viii) "Member" means a member of the Board.
- \*(viii-a) "Processing of rubber" means,
- (a) conversion of field latex of any rubber plant into--
    - (i) technically specified rubbers in solid block of any other forms;
    - (ii) masterbatches;
  - (b) the preparation of preserved latex and latex concentrates from such field latex; and
  - (c) the conversion of various forms of scrap, sheet or crepe rubber into--
    - technically specified rubbers in solid block or any other forms;
- (viii-b) "processor" means, a person who undertakes processing of rubber.
- (ix) "Secretary" means the Secretary to the Board appointed under sub-section (2) of Section 6A.
- (x) "Section" means a section of the Act.
- (xi) "Small grower" means an owner whose estate does not exceed fifty acres in area.
- \*(~~ix~~-a) "Technically specified rubber" means, rubber graded according to technical standards specified by the Indian Standards Institution from time to time.
- (xii) "Vice-Chairman" means the Vice-Chairman of the Board elected under sub-section (6) of Section 4; and
- (xiii) "Year" means the year commencing on the first day of April.

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\* Inserted by Government of India, Ministry of Commerce Notification G.S.R. 2402 dated 20th September, 1975.

## CHAPTER II

## BOARD AND ITS CONSTITUTION

**3. Constitution of the Board and manner of filling vacancies.** (1) The Board shall consist of the Chairman and twenty-four other members representing the different interests and authorities specified in clauses (b) to (f) sub-section 3 of Section 4.

<sup>1</sup>(2) Of the two members to represent the State of Madras, one shall be nominated by the Government of Madras and the other shall represent the large growers. The person representing the large growers shall be elected from among the large growers of the State of Madras in accordance with the rules set forth in the Second Schedule to these rules.

<sup>1</sup>(3) Of the eight members to represent the State of Kerala, two persons shall be nominated by the Government of Kerala to represent that State. Three persons shall represent the large growers in the State of Kerala and three persons the small growers. The persons representing the large growers shall be elected from among the large growers of that state in accordance with the rules set forth in the Second Schedule to these rules. The persons representing the small growers shall be nominated by the Central Government after making such consultation as it thinks fit.

(4) Of the ten persons to be nominated by the Central Government, Government may make such consultation as it thinks fit before nominating the representatives concerned as members of the Board.

**4. Term of office.** (1) Save as hereinafter provided, a member shall hold office \*for such period not exceeding three years as may be specified in the notification in the Official Gazette notifying his nomination or election and shall be eligible for renomination, or re-election as the case may be, (GSR 598 dated 13-5-1959).

1. Amended by Government of India, Ministry of Commerce and Industry, Notification No.G.S.R.226, dated the 7th April 1958. (Published in the Gazette of India, Part II, Section 3(1) dated the 11th April, 1958).

\*Inserted as per Government of India, Ministry of Commerce, Notification No.G.S.R.395, dated the 22nd February 1968 (Published in the Gazette of India, Part II, Section 3(1), dated the 2nd March, 1968).

<sup>2</sup> Provided that a member elected under clause (e) of sub-section 3 of Section 4 by either House of Parliament shall cease to be a member of the Board if he ceases to be a member of the House by which he was elected.

(2) A member elected or nominated to fill a casual vacancy, or a member nominated by the Central Government on failure of any authority or body mentioned in sub-section (3) of Section 4 to make a nomination, shall hold office as long as the member whose place he fills would be entitled to hold office if the vacancy had not occurred or the nomination had not been made as the case may be.

5. Resignation. A member of the Board or of a Committee may resign his office by a letter addressed to the Secretary, but the resignation shall not take effect until accepted by the Chairman of the Board or of the committee, as the case may be <sup>3</sup>(or until the expiry of thirty days from the date of receipt of resignation by the Secretary, whichever is earlier).

6. Removal from the Board. The Central Government may remove any member from his office:--

- (a) if he becomes bankrupt or insolvent or suspends payment of compounds with his creditors, or
- (b) if he is convicted of any offence which is punishable under the Indian Penal Code, Act XLV of 1860), and is under the provisions of the Code of Criminal Procedure, 1898 (Act V of 1898), non-bailable,<sup>3</sup> (or)
- (c) if he is of unsound mind and stands so declared by a competent court; or
- (d) if he absents himself from two consecutive meetings of the Board without the leave of the Chairman, and in any case from three consecutive meetings; or
- (e) if he defaults in payment of any dues to the Board, and is so declared by the Board.

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2. Inserted as per Government of India, Ministry of C. & I, Notification No.S.R.O.I (2) Plant (B)/57, dated the 27th June 1957 (Published in the Gazette of India, Part II Section 3, dated the 6th July, 1957.)

3. Inserted as per Government of India, Ministry of C. & I, Notification No.S.R.O.549, dated the 14th February, 1957. (Published in the Gazette of India, Part II, Section 3, dated the 23rd February, 1957.)

7. Absence from India. (1) Before a member of the Board departs from India-

- (a) he shall intimate to the Secretary the date of his departure from, and the date of his expected return to India; and
- (b) if he intends to be absent from India for a longer period than six months, he shall tender his resignation.

(2) If a member departs from India without complying with the provisions of sub-rule (1), he shall be deemed to have resigned with effect from the date of his departure from India.

8. Vice-Chairman. (1) <sup>4</sup>The Board shall, in each year elect a member to be the Vice-Chairman for a period of twelve months commencing from the date of his election or, if the election is held before the expiry of the term of office of an existing Vice-Chairman, from the date on which such Vice-Chairman would vacate office.

(2) In the event of the Vice-Chairman resigning his office as such or ceasing to be a member of the Board, the Board shall at its next meeting elect another member to be the Vice-Chairman for the unexpired portion of the term of office of the Vice-Chairman elected under sub-rule (1).

### CHAPTER III

#### PROCEDURE OF MEETINGS OF BOARD AND ITS COMMITTEES

9. Meetings of the Board. There shall be not less than two ordinary meetings of the Board in any one year on such dates and at such places as the Chairman may think fit. The interval between any two ordinary meeting shall not, in any case, be longer than eight months.

10. Quorum. No business shall be transacted, at a meeting of the Board unless there are present at least eight members of the Board and no business shall be transacted at a meeting of a committee, unless there are present a majority of members constituting the committee.

<sup>4</sup> Amended as per Government of India, Ministry of C. & I., Notification No.S.R.O.3329, dated the 11th October 1957. (Published in the Gazette of India, Part II, Section 3, dated the 19th October 1957.)

<sup>5</sup>10A. Absence from meeting of a committee. Any member of the committee who absents himself from two consecutive meetings of the committee without the leave of the Chairman, and in any case from three consecutive meetings, shall cease to be a member of that committee.

<sup>5</sup>10B. Filling of casual vacancies. (1) Any casual vacancy on a committee shall be filled by the Board.

(2) A person appointed to fill a casual vacancy in a committee shall hold office so long as the member whose place he fills, would have been entitled to hold office, if the vacancy had not occurred.

<sup>5</sup>10 C. Presiding over committee meetings. The Chairman shall preside over every meeting of the committee at which he is present and in his absence, the Vice-Chairman shall preside, if he is a member of the committee. In the absence of both the Chairman and the Vice-Chairman, the members of the committees shall elect one from amongst those present to preside at that meeting.

11. Power to call meetings. (1) The Chairman of the Board or the committee may at any time call a meeting of the Board or the committee, as the case may be, and shall do so if a requisition for that purpose is presented to him by at least eight members in the case of a meeting of Board and half the total number members in the case of a meeting of a committee.

(2) At least fourteen clear days before any meeting of the Board and at least ten clear days before in the case of a meeting of a committee, notice of time and place of the intended meeting, signed by the Secretary, shall be sent to the Government of India of the <sup>6</sup>(appropriate) Ministry and left at or posted to the address of every member of the Board or the committee.

Provided that in case of urgency, a special meeting may be summoned at any time by the Chairman who shall inform in advance the Government of India in the (appropriate) Ministry and the members of the subject matter for discussion and

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<sup>5</sup> Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February 1957. (Published in the Gazette of India Part II, Section 3, dated the 23rd February 1957.)

<sup>6</sup> Substituted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O. 549, dated the 14th February 1957 (Published in the Gazette of India Part II, Section 3, dated the 23rd February, 1957.)

the reasons for which he considers it urgent. No ordinary business shall be transacted at such special meetings.

(3) The Chairman may require any officer of the Board or invite any person or persons to attend any meeting of the Board or the committee but they shall not have the power to vote.

<sup>7</sup> 11 A. Agenda. (1) At least 10 clear days before any ordinary meeting of the Board and at least 7 clear days before any meeting of a committee, a list of business to be transacted at the meeting signed by the Secretary shall be sent to the Government of India and left at or posted to the address of every member of the Board or the committee.

(2) No business not included in the list of business shall be transacted without the permission of the Chairman of the Board or the committee.

12. Presiding over meetings. The Chairman of the Board shall preside over every meeting of the Board at which he is present and in his absence, the Vice-Chairman shall preside, but when both the Chairman and the Vice-Chairman are absent from any meeting, the members present shall elect one of their own members preside at that meeting.

13. Business by circulation. (1) Any business which is to be transacted by the Board or the committee may, if the Chairman of the Board or of the committee so directs, be referred to members by circulation of papers and any resolution or proposal so circulated and approved by the majority of members, who have recorded their views in writing shall be as effectual and binding as if such resolution or proposal were decided by a majority of members at a meeting.

Provided that at least eight members of the Board or a majority of the members of the committee, as the case may be, have recorded their views on the resolution or proposal.

Provided further that when a resolution or proposal is referred to members by circulation of papers, any five members of the Board or three members of the committee, as the case may be, may require that the resolution or proposal be referred

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<sup>7</sup> Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February 1957. (Published in the Gazette of India, Part II, Section 3, dated 23rd February, 1957.)

to members at a meeting and thereupon such reference shall be made to members at a meeting of the Board or the committee, as the case may be.

(2) When any business is referred to members by circulation, a period of not less than 14 clear days in the case of the Board and 10 clear days in the case of a committee shall be allowed for receipt of replies from members. Such period shall be reckoned from the date on which the notice of business is issued.

(3) If a resolution or proposal is circulated, the result of the circulation shall be communicated to all the members <sup>8</sup>(of the Board or of the committee, as the case may be.)

(A copy of the resolution or proposal circulated and the result of the circulation shall also be communicated to the Government of India.)

14. Voting. (1) Except as provided in rule 13, every question brought before any meeting of the Board or its committee, shall be decided by a majority of the members present and voting at the meeting before which the matter is brought. No member shall vote by proxy.

(2) In the case of an equality of votes, the Chairman or the member presiding shall have a second or casting vote.

15. Appointment of committees. (1) There shall be an Executive Committee consisting of:--

- (a) the Chairman who shall be the ex-officio Chairman thereof;
- (b) the Vice-Chairman;
- (c) the Rubber Production Commissioner; and
- (d) two other members to be elected by the members of the Board from among themselves in such manner as may be laid down by the Board.

(2) Nothing in this rule shall derogate from the power of the Board to constitute for such period as may be specified in each individual case, any other Standing Committee or any adhoc committee for any of the purposes mentioned in Section 8 or Section 8A. The Chairman of the Board shall be the ex-officio Chairman of all committees constituted under this rule.

<sup>8</sup>Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February, 1957. (Published in the Gazette of India Part II, Section 3, dated the 23rd February, 1957.)

<sup>9</sup>16. Travelling and other allowances to members of the Board and its committees. (a) A member of the Board or of any committee other than a Government servant, shall be entitled to draw, in respect of any journey performed by him for the purpose of attending a meeting of the Board or of a duly constituted committee thereof or for the purpose of discharging any duty assigned to him by the Board or the Committee concerned, travelling allowance and daily allowance at the highest rates admissible to Government servants of the first grade under the rules and orders made by the Central Government and for the time being in force.

(2) In the case of any journey performed by an official of the Central or the State Government specially nominated or co-opted by the competent authority to serve on any adhoc committee or any other committee or to attend to any other business of the Board, the travelling and daily allowances admissible to him shall be payable by the Board at the rates admissible to him under the rules of the Government under which he is for the time being employed.

(3) No travelling allowance or daily allowance shall be allowed to a member of the Board or of any committee unless he certifies that he has not drawn any travelling or daily allowance from any other source in respect of the journey and halt for which the claim is made.

(4) Travelling allowance shall be payable from the usual place of residence of a member of the Board or any committee to the place of the meeting or the place where he has gone to attend to any business of the Board and back to his place of residence.

Provided that when the journey commences from or the return journey terminates at any place other than his usual place of residence, the travelling allowance shall be limited to the amount that would have been payable had the journey commenced from or terminated at the usual place of residence or to the amount payable in respect of the actual journey undertaken, whichever is less.

Provided further, that in special circumstances and with the previous approval of the Central Government, the Chairman may grant travelling allowance from places other than the usual place of residence of a member.

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<sup>9</sup> Substituted as per Government of India, Ministry of Commerce, and Industry, Notification No.S.R.O.549, dated the 14th February 1957. (Published in the Gazette of India, Part II, Section 3, dated the 23rd February, 1957.)

(5) Conveyance allowances. No conveyance allowance for attending meetings of the Board or any committee or for attending to any other business of the Board shall be paid to those members of the Board or committee who draw travelling or daily allowance.

Provided that a member of the Board or any committee who is resident at a place where the meeting of the Board or that committee is held or where any other business of the Board is transacted, may be paid the actual expenditure incurred on conveyance by him subject to a maximum of Rs.10 per day.

17. Revision. (1) The Central Government may, for reasons to be recorded in writing, review any decision of the Board or its committees and pass such order in the matter as it thinks fit.

(2) A copy of every order passed under sub-rule (1) shall be sent to the Board or the committee, as the case may be, by the Central Government.

(3) On receipt of a copy of the order as aforesaid, the Board or the committee, as the case may be, may make a representation to the Central Government against the said order and the Central Government may after considering the said representation, either cancel, modify or confirm the order passed by it under sub-rule (1) or take such other action in respect of the matter as may, in the opinion of the Central Government, be just or expedient, having regard to all the circumstances of the case.

#### CHAPTER IV

##### BOARD AND ITS ESTABLISHMENT

18. Salaries and allowances. All expenditure on account of the salaries, allowances, pension, leave and other contributions, if any, of the Chairman and other officers appointed by the Government under Sections 6 and 6A shall be met from the funds of the Board.

\* 19. Board's establishment. The Board may from time to time subject to the availability of specific provision in the budget estimate of the Board as sanctioned by the Central Government, sanction such establishment as may, in its opinion, be necessary for the efficient performance of its functions:

Provided that no post shall be created without the previous sanction of the Central Government if the maximum salary of the post exceeds Rs.1300/- per mensem;

Provided further that, in case of exigencies, temporary posts which would need to be created in the interest of the Board and the maximum salary of which does not exceed Rs.1300/- per mensem may be created by the Chairman. (G.S.R.1756 dated 20-11-1967.)

Provided also that the confirmation of a direct recruit in a post the maximum salary of which exceeds Rs.1300/- per mensem shall be made with the prior approval of the Central Government.

20. Omitted.

21. Omitted.

22. Filling of temporary vacancies in sanctioned posts. Temporary vacancies in respect of sanctioned posts which are not covered by Section 6 A shall be filled by the Chairman.

23. Postings and transfers. Postings and transfers of all officers and other members of the staff of the Board shall be made by the Chairman who may delegate this power to such extent as he deems fit, to the Commissioner.

24. Pay and allowances of borrowed officers. The pay and allowances including travelling allowances of Government Officers lent to the Board other than officers lent for appointment under Section 6A shall be such as may be determined by the Central Government. (G.S.R. 206 dated 7-2-1962.)

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\* Amended as per Government of India, Ministry of Commerce and Industry, Notification No.G.S.R. 241 dated 31st January 1976. (Published in the Gazette of India, dated 21st February, 1976.)

11 24A. Grant of advances for building etc., of houses. (i) An advance for building a new house (including purchase of land for the purpose) or for purchase of a ready-built house or for enlarging living accommodation of an existing house owned by an officer (other than one appointed by the Central Government) or other employee of the Board may be granted to such officer or employee at such rates and on such conditions as may be determined by the Board in conformity with the rules of the Central Government for the time being in force regulating the grant of advances for building etc. of houses to Central Government Servants.

(ii) The advance specified on (i) above may be granted for the same purpose to an officer of the Board appointed by the Central Government also, at such rates and on such conditions as may be admissible to officers holding comparable posts under the Central Government in accordance with the rules of the Central Government for the time being in force.

(iii) The grant of advance is subject to the availability of funds under the head "Advances recoverable bearing interest."

(iv) The Board, the Executive Committee and the Chairman shall have power to grant advances up to the amounts specified below:--

Board	-	Over Rs.20,000
Executive Committee	-	Up to Rs.20,000
Chairman	-	Up to Rs. 5,000

24B. Grant of advances for the purchase of motor car, motor cycle or bicycle. An advance for the purchase of motor car, motor cycle or bicycle may be granted to an officer or employee who is in permanent employ of the Board at such rates and conditions as may be admissible to an officer or employee holding a comparable post under the Central Government in accordance with the rules of the Central Government for the time being in force. Subject to the concurrence of the Central Government, permanent Government servants on deputation to the Board will also be eligible to the grant of

11 Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.G.S.R.797, dated the 13th September, 1958. (Published in the Gazette of India Part II, Section 3(1), dated the 13th September, 1958.)

such advances from the Board in accordance with the aforesaid rules. The grant of advances is subject to the availability of funds under the head 'Advances recoverable bearing interest.'

25. Omitted.

26. Sending persons abroad. The Board shall not send any officer of the Board or any member of the Board to places outside India without the previous sanction of the Central Government.

## CHAPTER V

### POWERS OF THE BOARD AND THE CHAIRMAN

27. Powers of the Chairman. (1) The Chairman shall be responsible for the proper functioning of the Board and the implementation of its decisions and the discharge of its duties under the Act.

(2) The Chairman shall be the principal executive officer of the Board and shall exercise administrative control over all departments and officers of the Board.

(3) Subject to such delegation as may be made by the Chairman to such other officers as may be appointed for the purpose of this rule, the Chairman shall--

- (a) cause all important papers and matters to be presented to the Board as early as practicable;
- (b) issue directions as to the method of carrying out the decisions of the Board;
- (c) grant, or subject to resolution by the Board, authorise some other person to grant, receipts on behalf of the Board for all moneys received under the Act;
- (d) maintain or cause to be maintained an account of the receipts and expenditure of the Board; and

- (e) present a half-yearly draft report of the working of the Board to the Board for approval and submit the report in the form approved by the Board to the Central Government.
- (4) The Chairman shall have power--
- (i) to sanction or reject applications under Section 10 for registration from estates, and to cancel registrations in force;
- (ii) to issue general or special licences under Section 14 and extend the period of validity of such special licences suspend, or revoke such licences or restore any licence so suspended;<sup>12</sup>
- (iii) to issue licences for planting and replanting rubber under Section 17, extend the period of their validity and to revoke them;
- (iv) to call for information, documents and returns and to inspect or cause to be inspected, accounts and places of storage or of business as required or provided by the Act or these rules;
- (v) to require the Board or any committee to defer taking action, pending a reference to the Central Government on any decision taken by the Board or the committee.
- (5) The Chairman may sanction an expenditure on contingencies, supplies and services and purchase of articles required for the working of the office of the Board and required for the execution of measures in furtherance of the object of the Act, subject to the necessary provisions in the budget.
- (6) The Chairman may by order in writing delegate any of his powers under clauses (i) to (iv) of sub-rule 4 and sub-rule 5 to any other officer of the Board.<sup>13</sup>
- (7) Where a matter has to be disposed of by the Board or a committee and a decision cannot wait till a meeting of the Board or the appropriate committee, as the case

<sup>12</sup> Substituted as per Government of India, Ministry of Commerce, Notification No.G.S.R.1000, dated the 18th June 1966. (Published in the Gazette of India dated the 25th June 1966 in Part II, Section 3 (1).)

<sup>13</sup> Substituted as per Government of India, Ministry of Commerce, Notification No.G.S.R.698, dated the 3rd May, 1965. (Published in the Gazette of India, Part II, Section 3(1), dated the 8th May, 1965.)

may be, is held, or till completion of circulation of papers, the Chairman may take a decision himself and after taking decision thereon keep the members of the Board or the committee informed of the decision so taken.

28. Delegation of powers. (1) The Board shall have power to delegate to a committee such power as it deems fit.

(2) Every committee appointed by the Board shall exercise the powers conferred on it by or under the Act or these rules subject to such instructions, direction or limitations, if any, as may be defined by resolution of the Board and all acts of all committees shall be subject to the control of the Board which may cancel, suspend or modify, as it thinks fit, any such act.

29. Restriction on delegation of powers. (1) The Board shall not delegate any administrative or financial power to any committee, other than the executive Committee.

(2) The Board shall not delegate any of the following powers to the Executive Committee:--

- (a) the power to sanction expenditure in excess of Rs.10,000 in respect of any single item;
- (b) the power to adopt the Budget Estimate of the Board on its behalf;
- (c) the power to sanction expenditure incurred outside India in excess of Rs.5,000 in respect of any single item;
- (d) the power to re-appropriate estimated savings in excess of Rs.2,500 in the case of any single item;
- (e) the power to write off losses in excess of Rs.500 in any single case.

30. Power to incur expenditure from General Fund.

14 (1) Subject to the provisions of the Act and these rules, the Board may incur sub expenditure from the General Fund as it may think fit and write off losses upto a maximum of Rs.1,000/- in any single case and may delegate such powers to the Chairman and other officers of the Board to such extent as it deems fit;

Provided that, save with the sanction of the Central Government, no expenditure shall be incurred which is in excess of the sanctioned budget allotment.<sup>15</sup>

<sup>14</sup> Inserted as per notification referred to under 13.

<sup>15</sup> Amended as per Government of India, Ministry of Commerce, Notification, No.G.S.R.1756 dated the 20th November 1967. (Published in the Gazette of India, Part II, Section 3 dated the 2nd December, 1967.)

(2) Re-appropriations within a head of expenditure be made by the Board and, subject to clause (d) of sub-rule (2) of<sup>16</sup> (rule) 29, the Board may delegate its powers in this behalf to the Chairman or Secretary.

(3) Re-appropriations between heads of expenditure<sup>15</sup> (other than those relating to Administration, Research and Development) shall not be made save with the previous sanction of the Central Government.

(4) The Board shall not incur expenditure outside India in excess of Rs.10,000 on any single item without the previous sanction of the Central Government.

30A. Assistance from Pool Fund. 17(1) Subject to the provisions of the Act, the Board may incur such expenditure from the Pool Fund, as it may think fit, for assisting any small grower or any class of small growers:--

- (i) in carrying out replanting in his or their estates with high yielding planting materials;
- (ii) in planting new areas with rubber; and
- (iii) in maintaining the areas planted or replanted as aforesaid.

(1A) The assistance referred to in sub-rule (1) may take the form of:--

- (i) grants or loans in one or more instalments to meet the cost of one or more items of work either wholly or partly; or
- (ii) supply of planting materials, manure and estate requisites either free of cost or at subsidised rates; or
- (iii) expenditure relating to services such as training in tapping, demonstration of cultural methods and practices, tender of advice on production of films, publications and the like, including expenditure on establishment and related items of work; or

<sup>16</sup>Substituted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February, 1957. (Published in the Gazette of India dated the 23rd February, 1957.)

<sup>17</sup>Substituted as per Government of India, Ministry of Commerce Notification No.G.S.R. 1397, dated the 10th September 1965. (Published in the Gazette of India, Part II, Section 3(1).)

- (iv) lump sum grants to small growers in one or more instalments to meet wholly or partly the cost of erection of smoke-houses-cum-processing sheds, either directly or through co-operative societies.

(2) The Board may write off losses up to a maximum of Rs.1,000 in any single case.

(2A) The Board may incur expenditure from the Pool Fund in connection with the supply of sprayers or dusters free or on rental basis, or rollers on hire purchase basis to small growers, directly or through co-operative societies.

18(2B) The Board may also, on such terms and conditions as may be laid down by it from time to time and approved by Central Government:--

- (a) advance loans to co-operative societies whose activities are conducive to the benefit of the small growers such as
- (i) purchase and sale of rubber produced by small growers;
  - (ii) procurement for and distribution to small growers of planting materials, manure, acid, implements and such other things; and
- (b) purchase shares in such societies.

17(3) The Board may delegate the powers under sub-rules (1), (1A) and (2) to the Chairman and any other officer of the Board to such extent as it deems fit.

31. Borrowing powers. The Board may with the previous sanction of the Central Government borrow, on the security of the General Fund or any other of its assets, for meeting its expenses or for any other purposes referred to in Section 8 of the Act.

Provided that no loan shall be taken which is repayable later than six months from the date of the loan.

32. Contracts. (1) The Board may enter into contracts, provided that every contract which extends over a period

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<sup>18</sup>Inserted as per Government of India, Ministry of International Trade, Notification No.GSR.1298, dated the 1st August 1963. (Published in the Gazette of India, Part II, Section 3(1), dated the 10th August 1963.)

of more than three years or involves expenditure in excess of Rs.20,000 shall require the previous sanction of the Central Government.

(2) Subject to the provision of sub-rule (1) the Board may delegate to the Chairman such power for entering into contracts on its behalf as it may think fit.

(3) Contracts shall not be binding on the Board, unless they are executed by the Chairman, or an officer of the Board duly authorised by the Chairman.

<sup>19</sup>(4) Neither the Chairman nor any officer of the Board nor any member of the Board shall be liable for any assurance or contract made by the Board but any liability arising out of such assurance or contract shall be discharged from the moneys at the disposal of the Board.

**33. Power to call for information and documents.**

The Board may serve by post a notice upon--

- (a) the owner of any estate requiring him to furnish within such period, not being less than 30 days as may be specified in the notice, such information and documents relating to the area planted with rubber or to the production (including the cost of production) and sale of rubber produced on the estate or to the ownership of the estate or to any other matter as it may deem necessary to enable it to discharge its duties under the Act.
- \*<sup>(b)</sup> any licensed dealer or any manufacturer or any processor or any other person, if the Board has reason to believe that such person has any rubber in his possession, requiring him to furnish within such period, not being less than 30 days as may be specified in the notice, such information and documents relating to the stocks of rubber held and sale of rubber or to any other matter as it may deem necessary to enable it to discharge its duties under the Act.
- <sup>19</sup>(c) Any person required to furnish any information or to produce a document under clause (a) or (b) shall

<sup>19</sup>Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February 1957. (Published in the Gazette of India, Part II, Section 3, dated 23rd February 1957.)

\*Inserted as per Government of India, Ministry of Commerce, Notification No.G.S.R.2402 dated the 2nd September, 1975. (Published in the Gazette of India, Part II, Section 3, sub-section (1), dated the 20th September, 1975.)

furnish such information or produce such document, or show cause why it could not be furnished or produced within the time specified in the notice.

- \* (d) The Board may authorise any officer to call for production of information and records from an owner of an estate, or any licensed dealer or any manufacturer or any processor or any other person if he has reason to believe that such person has any rubber in his possession.
- (e) All manufacturers, whether they hold valid licences issued under rule 40 or not, shall submit half-yearly returns in Form M for the period 1st April to 30th September and 1st October to 31st March of each financial year showing the total quantity in kilograms of all rubber (a) purchased or otherwise acquired during such periods (separately for indigenous and imported rubber) and (b) consumed or used in the process of manufacture during the same periods.
- (f) All manufacturers, whether they hold valid licences issued under rule 40 or not, shall after the close of each financial year also submit a report from a Registered Auditor or any other authority previously approved by the Board, certifying the correctness of the returns submitted under clause (e).  
(S.O.163 dated 13-1-1961.)

<sup>19</sup>33A. (1) If any owner of an estate fails to furnish in due time the return referred to in sub-section (4) of Section 12 or furnishes a return which the Board has reason to believe is incorrect or defective, the Board may serve a notice on the owner calling upon him to produce all or any of his accounts relating to production of rubber on his estates and to prove--

- (a) if no return has been submitted, that there was no production;
- (b) if a return has been submitted, the correctness and completeness of the return.

The Board shall, after checking the amount and after making such further enquiry as it deems fit, assess the amount payable under sub-section (2) of Section 12.

(2) The same procedure shall be followed if for any reason the whole or any part of the production in an estate has escaped assessment in any year.

The Board may delegate its powers under this rule to the Secretary and to such other officers of the Board as it deems fit.

33B. (1) If any manufacturer fails to furnish in due time the returns prescribed by the Board in pursuance of clause (b) (ii) of sub-section (4) of Section 12 of the Act and rule 33(e) or furnishes a return which the Board has reason to believe to be incorrect or defective, the Board may serve a notice on the manufacturer calling upon him to produce all or any of his accounts relating to the purchase, acquisition or use of rubber and to prove--

- (a) if no return has been submitted, that there has been no purchase or acquisition of rubber or that no rubber has been used in the manufacture;
- (b) if a return has been submitted, the correctness of the return.

(2) The Board shall, after checking the return and after making such further enquiry as it deems fit, either through its own officers or through officers of the State Government or Central Government or such other authorities assess the amount of excise duty payable by such manufacturer.

(3) The Board may delegate its powers under this rule to the Secretary and to such other officers of the Board as it deems fit.

33C. The manufacturer, who has purchased or otherwise acquired rubber from another manufacturer under a licence issued by the Board under rule 40A shall not be liable to pay any excise duty on the quantity of rubber so purchased or otherwise acquired if it had already been assessed and collected.

33D. (1) Every manufacturer shall by demand notice send through registered post or in such other manner as the Board may direct be intimated of the amount assessed on the quantity of rubber acquired during the periods specified in rule 33(e). On receipt of such notice, the manufacturer shall pay to the Board the amount specified therein either in cash at the Board's Office at Kottayam or by money order or by bank draft or cheque duly crossed and payable at Kottayam to the Secretary of the Board within 30 days from the date of receipt of the said notice.

(2) On such demand being made, if a manufacturer fails to pay the amount within the due date, the Board may take steps to report the fact to the Central Government or the State Government concerned for recovery of the outstanding amount as an arrear of land revenue. (S.O.163 dated 13-1-1961.)

<sup>20</sup>33E. Powers of Board to remit or abandon claims to excise duty. (1) It shall be lawful for the Board to remit or abandon claims to excise duty on rubber upto one thousand rupees in any single case of assessment.

Provided that the arrears of excise duty, pending more than a year, have been certified to be irrecoverable by the revenue authorities of the State concerned; Provided further that—

(a) petty amounts upto fifty rupees in any single case of assessment, may be written off without any certificate of irrecoverability as mentioned in the preceding provision subject to the condition that such amount is certified to be irrecoverable by the Secretary or any other officer of the Board, to whom the powers under rule 33B have been delegated;

(b) where petty amounts upto fifty rupees cannot be certified as irrecoverable under clause (a), a certificate of recovery shall be issued by the Board to the revenue authorities of the State concerned and the recovery may be written off by the Board if the amounts are not recovered by the revenue authorities within a reasonable time.

(2) The Board's powers under sub-rule (1) to remit or abandon claims to excise duty, shall be subject to the provisions of rule 10 of the Delegation of Financial Powers Rules, 1958.

(3) The Board may delegate its powers under this rule to the Chairman to such extent as it deems fit.

## CHAPTER VI

### FINANCE AND ACCOUNTS OF THE BOARD

34. Budget Estimate. (1) The Board shall in each year prepare a budget for the General Fund for the ensuing financial year and shall submit it for the sanction of the

<sup>20</sup>(Published as per Government of India, Ministry of Commerce, Notification No.G.S.R.26, dated the 27th December, 1968 in the Gazette of India, in Sub-section (1) of Part II, Section 3 dated the 27th December 1968.)

Central Government on or before such date as may be appointed by that Government.

(2) The budget shall be in such form as the Central Government may direct and shall include a statement of--

- (i) estimated opening balance;
- (ii) estimated receipts by way of grant from the Central Government under sub-section (7) of Section 12.
- 21(iii) proposed expenditure classified under the following heads or such other heads as the Central Government may direct:--
  - (a) Administration
  - (b) Works
  - (c) Research
  - (d) Labour Welfare
  - (e) Development Department
  - (f) Replanting Subsidy
  - (g) Advances to Employees.

(3) The proposed expenditure under each head shall be further classified under the following sub-heads:--

- (i) Pay of Officers
- (ii) Pay of Establishment
- (iii) Allowances, Honoraria, etc.
- (iv) Other charges, contingencies, etc.

(4) Supplementary estimates of expenditure shall be submitted for the sanction of the Central Government in such form and on such dates as may be directed by it.

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<sup>21</sup> Substituted as per Government of India, Ministry of Commerce Notification No.G.S.R.1756, dated the 20th November 1967. (Published in the Gazette of India, Part II, Section 3, sub-section(1), dated the 2nd December 1967.)

35. Accounts of the Board. The Board shall maintain separate accounts for the General and Pool Funds.

(1) General Fund-- In respect of General Fund for which budget estimates are prepared, the Board shall maintain accounts of receipts and expenditure relating to each financial year.

(2) The audited statement of receipts and expenditure for each period together with the auditor's report thereon shall be submitted to the Central Government.

(3) After the close of each year, the Secretary shall place the statement before the Board and afterwards transmit it to the Central Government.

(4) Omitted.

(5) The grants received from the Central Government under sub-section (7) of Section 12 shall be deemed as receipts of the Board.

(6) The opening balance, if any, shall also be stated as such separately.

(7) Expenditure incurred in the year shall be shown under separate heads and sub-heads.

(8) The closing balance of the year shall be shown at the foot of the accounts on the expenditure side.

36. Pool Fund. (1) A special fund known as the Pool Fund shall be created under sub-section (2) of Section 9. In respect of the Pool Fund for which budget estimates are prepared, the Board shall maintain accounts of receipts and expenditure relating to each financial year.

(2) The audit report on the accounts of the Pool Fund together with the explanatory notes shall be put up to the Board.

37. Deposit of Funds of the Board in Banks and the investment of such Funds. (1) Money required for current expenditure of the Board with the exception of petty cash and surplus moneys shall be kept in a current account in the State Bank of India or such other bank as the Central Government may approve.

22(2) Any funds not required for current expenditure may be placed in deposit account with the Central Government in the Public Account or invested in short-term deposits with such banks as may be approved by Central Government for the purpose.

(3) The placing of money in deposit with the Central Government shall require the sanction of the Chairman or, in his absence, of the Vice-Chairman of the Board.

(4) Payments by or on behalf of the Board shall be made in cash or by cheque drawn against the current account of the Board.

23(5) Such cheques and all orders for making deposits or investments or withdrawals of deposits or investments or for the disposal in any other manner of the funds of the Board shall be signed by the Finance and Accounts Officer or any other officer of the Board, duly authorised by the Board in this behalf, and countersigned by the Chairman or the \*\*Commissioner of the Board:

Provided that where the amount covered by any such cheque or order does not exceed Rs.5,000/-, such cheque or order may be countersigned by the Secretary or in his absence by any other officer of the Board duly authorised by the Chairman.

## CHAPTER VII

### MISCELLANEOUS

38. Registration of Rubber Estates. (1) Every person subject to the provisions of Section 10 shall make in duplicate an application to the Board in Form A, for registration as an owner in respect of each estate owned by him,

<sup>22</sup> Substituted as per Government of India, Ministry of International Trade, Notification No.G.S.R.1804, dated the 11th November 1963. (Published in the Gazette of India, Part II Section 3(1) dated the 23rd November, 1963.)

<sup>23</sup> Substituted as per Government of India, Ministry of Commerce Notification No.G.S.R.245, dated the 27th January, 1969. (Published in the Gazette of India, Part II, Section 3, sub-section(1), dated the 8th February 1969.)

\*\* Amended as per Notification No.15(8)Plant(B)/70 dated 6-3-71.

(2) The Board may call for any additional information which it may deem necessary for the purpose of registering such person as the registered owner in respect of each estate owned by him.

(3) The Board shall allot a registration number to every estate in respect of which an application has been made in Form A and shall return the duplicate copy of the applicant with the registration number duly filled in.

\*39. Licence to deal in rubber. (1) Every person other than a processor who wants a special licence to purchase, sell or otherwise deal in rubber, shall apply for a licence in Form B.

The Board, if it is satisfied with regard to the suitability of the applicant, may issue a licence in Form C.

(2) The licences shall be numbered and shall not be transferable.

\*39A. Licence to acquire rubber for processing and for selling rubber so acquired. (1) Every person who wants a special licence to acquire rubber for processing or to sell the rubber so acquired after processing or otherwise, shall apply to the Board for a licence in Form B1.

(2) Every such application shall be accompanied by a project report in cases where processing units are yet to be established.

(3) The Board may issue a special licence under this rule in Form C1, if it is satisfied with regard to the following matters, namely:--

- (i) suitability of the applicant;
- (ii) suitability of the site selected;
- (iii) availability of raw materials;
- (iv) availability of technical know-how;
- (v) arrangements made for technical specification;

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\*Inserted as per Government of India, Ministry of Commerce, Notification No.G.S.R.2402, dated the 2nd September 1975. (Published in the Gazette of India Part II, Section 3, sub-section (1), dated 20-9-1975.)

(vi) economic feasibility.

(4) The special licences issued under this rule shall be numbered and shall not be transferable.

(5) No application for a special licence under this rule made by a person who was processing rubber before the commencement of the Rubber (Amendment) Rules, 1974 shall be rejected by the Board except for special reasons to be recorded in writing.

40. Licence to acquire rubber. Any manufacturer desiring a special licence to purchase or otherwise acquire rubber shall apply to the Board in Form D. If the Board approves, a licence may be issued in Form E.

<sup>24</sup> 40A. Any manufacturer holding a special licence in Form E and desiring in an emergency to sell rubber acquired by him under that licence to another manufacturer holding a special licence in Form E, shall apply to the Board in Form 'D1'. If the Board approves, a licence may be issued in Form 'E1' for each such transaction.

41. Licence to plant rubber. (1) Any person desiring to undertake planting or replanting of rubber shall apply to the Board in Form F.

(2) The Board shall consider all applications and may grant to such applicants as it thinks fit licences in Form G for planting and in Form I for replanting in respect of the whole or any part of the area asked for or may refuse to grant a licence. The Board may, in granting licences, impose such conditions as it deems fit.

<sup>25</sup>(3) The licence specifying the area of planting or replanting shall be issued for a calendar year or part thereof.

(4) Any right of planting of rubber granted by a licence shall be deemed to be attached to such land and shall

<sup>24</sup> Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.2824, dated the 30th August 1957. (Published in the Gazette of India, Part II, Section 3, dated the 7th September 1957.)

<sup>25</sup> Substituted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.2905, dated the 5th September 1957. (Published in the Gazette of India, Part II, Section 3, dated the 14th September 1957.)

not be transferable apart from the land on which such right is permitted to be exercised.

(5) Every holder of a licence shall, at such times as the Board may from time to time, require, furnish to the Board a return giving the areas newly planted or replanted during that period in pursuance of such licence together with such other particulars as may be required for the purposes of the Act.

42. Power to revoke or cancel licences. The Board may, at any time, after affording a reasonable opportunity to the licensee to be heard, revoke or cancel any licence if it is satisfied that the licensee obtained the licence by misrepresentations of facts or fraud or if he fails to submit the necessary returns, <sup>26</sup>(or if he contravenes any of the conditions of the licence.)

<sup>27</sup>43. Monthly and annual returns. (1) Every small grower, when required to do so, and every large grower, shall submit to the Board a true and correct monthly return in Forms H and L, giving the particulars of rubber stock held, produced or disposed of by him, and an annual return in Form H1, giving the particulars of total area, area under rubber, production of rubber, manuring, plant protection and labour employed as required therein.

(2) Every licensed dealer shall submit to the Board, a true and correct monthly return in Forms H2 and L, giving the particulars of rubber stock held, acquired or disposed of by him.

(3) Every manufacturer shall submit to the Board, a true and correct monthly return in Forms K and L, giving the particulars of rubber stock acquired, consumed or disposed of by him, and an annual return in Form K1, giving the particulars of consumption of various kinds of rubber in relation to end products, as required therein.

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<sup>26</sup> Inserted as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February 1957. (Published in the Gazette of India, Part II, Section 3, dated the 23rd February 1957.)

<sup>27</sup> Substituted as per Government of India, Ministry of Commerce, Notification No.G.S.R.2402, dated 2nd September, 1975. (Published in the Gazette of India, Part II, Section 3, Sub-section (1), dated 20th September 1975.)

(4) Every processor whether he holds a valid licence issued under rule 39A or not, shall submit to the Board, a true and correct monthly return in Forms H3 and L1, giving the particulars of rubber stock held, used out of own production or acquired for processing and disposed of by him as required therein.

43A. Where the Act or these rules require any person to submit any statement or return, that person shall submit a 'nil' statement or return for any period for which there are no particulars to be furnished in the statement or return.

<sup>28</sup>43B. Declaration regarding inter-State transport of rubber. (1) No person shall transport or cause to be transported rubber from one State to another State without a valid Declaration in the prescribed Form issued by the Board to such person. The prescribed Declaration Form so issued by the Board to a person shall not be used in the name of any person other than the person to whom it is issued. The Form to be used for the said Declaration by a registered owner of an estate shall be Form N1, that to be used by a dealer licensed under rule 39 shall be Form N2, that to be used by a processor licensed under rule 39A shall be Form N3 and that to be used by a manufacturer licensed under rule 40 shall be Form N4. The person to whom a Declaration in the prescribed Form is issued by the Board shall adhere strictly to the instructions given in the Notes specified in the said forms.

(2) On demand by any officer of the Board authorised in that behalf by the Chairman of the Board, or any officer of the Central or State Government authorised in that behalf by that Government, the person transporting rubber and the consignee shall produce the Declaration.

44. Registers. The Board shall maintain the following registers, namely:--

- (a) a register of estates;
- (b) a register of dealers licensed;
- (c) a register of manufacturers to whom licences for purchase of rubber have been issued.

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<sup>28</sup> Amended as per Government of India, Ministry of Commerce, Notification No. G.S.R. 1497, dated the 27th September, 1976. (Published in the Gazette of India, Part II, Section 3, Sub-section (1) dated 23-10-1976.)

- \*(d) a register of licensed processors and other processors.

<sup>29</sup> 45. Licence fees. The Board shall levy fees at the following rates for a year or part of a year for issuing licences under these rules namely:--

- (a) for purchasing rubber exceeding 150 lbs. but not exceeding 4 tons - Rs.4 per licence;
- (b) for purchasing rubber exceeding 4 tons - Rs.4 per licence;
- (c) for new planting and replanting of rubber - Re. 1 per licence;
- (d) for licence to dealers - Rs.100 per licence; and
- (e) for licence to a manufacturer holding a valid licence in Form 'E' for selling rubber to another manufacturer holding a valid licence in Form 'E' in emergencies - Rs.5 per licence.

Provided that the licence fee to be levied under clause (c) shall be for a calendar year or part thereof.

- (f) for licence to acquire rubber for processing and to sell rubber so acquired - Rs.100 per licence.

46. Appeals. For appeals to the Central Government against any order of the Board, under Section 23, a fee of Rs.25 per appeal shall be levied.

<sup>30</sup> 47. Powers and duties of the Commissioner. The Commissioner shall be in charge of Development programmes of the Board. Besides advising the Chairman in technical and Development matters and exercising powers that may be

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\* Inserted as per Government of India, Ministry of Commerce, Notification No.G.S.R.2402, dated 2nd September, 1975. (Published in the Gazette of India, Part II, Section 3(1), dated 20th September 1975.)

<sup>29</sup> Amended as per Government of India, Ministry of Commerce and Industry, Notification No.S.R.O.549, dated the 14th February 1957, S.R.O.2824 dated the 30th August 1957 and S.R.O.2905 dated the 5th September 1957.

<sup>30</sup> Substituted as per Government of India, Ministry of Commerce Notification No.G.S.R.27, dated the 27th December 1968. (Published in the Gazette of India, Part II, Section 3, Sub-section (1) dated the 27th December 1968.)

delegated to him by the Chairman he shall undertake, or encourage, or cause to be undertaken or encouraged, economic research and also make technical advice available to the rubber growers.

**\*\*48. Grading and Marketing of Rubber. Every processor shall grade and market his products, in conformity with such standards as are specified by the Indian Standards Institution from time to time.**

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**\*\* Inserted as per Government of India, Ministry of Commerce, Notification No.G.S.R. 2402, dated 2nd September, 1975. (Published in the Gazette of India Part II, Section, 3, Sub-section (1), dated 20th September 1975.)**

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