

# ANNUAL REPORT

FOR  
THE YEAR 1998-1999



## THE RUBBER BOARD

[Govt. of India, Ministry of Commerce]

KEEZHKUNNU, KOTTAYAM—686 002  
KERALA STATE

# ANNUAL REPORT

1907

THE RUBBER BOARD

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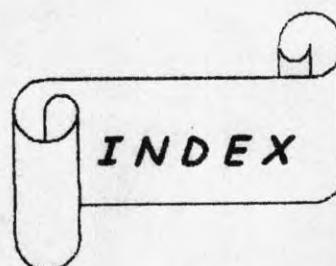
THE RUBBER BOARD

GOVERNMENT OF INDIA

MINISTRY OF COMMERCE

NEW DELHI





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# **ANNUAL REPORT ON THE WORKING OF THE RUBBER BOARD DURING 1998-99**

## **PART - I**

### **INTRODUCTION**

This is the annual report of the Rubber Board on its working for the year 1998-99 containing a summary of the activities from 1<sup>st</sup> April 1998 to 31<sup>st</sup> March 1999.

Rubber plays an important role in the industrial and economic development of the country, being a material used to make thousands of utility products. The Government of India constituted the Rubber Board under the Rubber Act, 1947 as a body corporate, primarily to promote natural rubber production in the country. The Board established the Rubber Research Institute of India in 1955 to undertake scientific, technological and economic research.

The research efforts have made significant contributions to the rubber industry. India evolved the high yielding clone RR II 105 with average productivity around 2,000 kg per hectare. Switch-over from seedlings to budding, application of fertilizers after soil and leaf analysis, pest and disease management practices, improved crop exploitation techniques and improved crop processing played a vital role in enhancing rubber production and upgrading quality of the processed rubber. Integrated approach to reduce the cost of production and improve quality and competitiveness, crop exploitation in association with yield stimulation, processing technically specified rubber and process aid rubbers, developing blends of NR with synthetic rubbers, developing formulations and processes for manufacturing processes, development of solar dryer for curing raw rubber etc. are some of the thrust areas in research and development activities.

The Rubber Plantation Development Scheme implemented from the VI Plan period is by far the largest scheme operated for development and promotion of rubber cultivation in the country. The scheme provides for technical support coupled with financial assistance to small growers in the traditional areas and in the non-traditional areas to undertake rubber cultivation. Input subsidy and guidance for adopting scientific techniques at all stages of planting and maintenance are extended in addition.

### Performance during 1998-99

The overall performance of the rubber plantation industry during 1998-99 has been impressive in spite of the fall in price. Production of natural rubber increased to 605,045 tonnes from 583,830 tonnes recording a growth rate of 3.6%. The consumption of natural rubber during the year increased by 3.4% to 591,545 tonnes from 571,820 tonnes in 1997-98.

### Price

During the year, the monthly average price of rubber was Rs.2,994/- per quintal for RSS 4 grade as against Rs.3,580/- in the previous year. A quantity of 1,840 tonnes of different grades of NR was exported during 1998-99.

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## **PART - II**

### **CONSTITUTION AND FUNCTIONS**

#### **INTRODUCTION**

The Indian Rubber Board was constituted under the Rubber (Production & Marketing ) Act, 1947 which came into force on 19<sup>th</sup> April, 1947 with the object of promoting the development of the rubber industry in India. The Rubber Production & Marketing (Amendment) Act of 1954 made certain changes in the constitution of the Board and its name was changed as The Rubber Board. This Act came into force on 1<sup>st</sup> August 1955. The Rubber Act was further amended by the Rubber (Amendment) Act, 1960, the Rubber (Amendment) Act, 1982 and by the Rubber (Amendment) Act, 1994. The Amendment in 1982 was to appoint a part time/whole time Chairman for the Board and an Executive Director on whole time basis (if considered necessary). The amendment in 1994 was to enhance the ceiling limit of cess from Re.0.50 to Rs.2/- per kg.

#### **CONSTITUTION**

The Rubber Board functions under the Ministry of Commerce of the Government of India with a full time Chairman as principal executive, responsible for discharging the following functions under Section 8 of the Rubber Act.

- (i) Promote by such measures as it thinks fit the development of the rubber industry. The measures 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) supply of technical advice to rubber growers;

- d) improving the marketing of rubber;
- e) 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; and
- g) carrying out any other duties which may be vested with the Board.

**(ii) It shall also be the duty of the Board**

- a) to advise the Central Govt. on all matters relating to the development of rubber industry, including the import and export of rubber;
- b) to advise the Central Govt. with regard to participation in any international conference or scheme relating to rubber;
- c) to submit to the Central Govt. and such other authorities as may be prescribed half yearly reports on its activities and the working of the Act; and
- d) to prepare and furnish such other reports relating to the rubber industry as may be required by the Central Govt. from time to time.

**There are 25 other members consisting of –**

- a) Two members to represent the State of Tamilnadu of whom one shall be a person representing the rubber producing interests;
- b) Eight members to represent the State of Kerala, six of whom shall represent the rubber producing interests, three of such being persons representing small growers;
- c) Ten members to be nominated by the Central Govt. of whom two shall represent the manufacturers and four labour;
- d) Three members of Parliament of whom two shall be elected by the Lok Sabha and one by the Rajya Sabha;
- e) The Executive Director (ex-officio); and
- f) The Rubber Production Commissioner (ex-officio).

The position of Executive Director has not been filled up.

List of members of the Board is given at the end of this report.

Seven Committees have been formed to review the Board's activities vis-à-vis the functions as laid down under Section 8 of the Rubber Act. These are Executive



Committee, Research & Development Committee, Market Development Committee, Planting Committee, Statistics & Import/Export Committee, Labour Welfare Committee and Staff Affairs Committee. The Committees examine proposals for development of natural rubber industry and make suitable recommendations to the Board.

Shri George John, Member, representing large growers was elected as Vice-Chairman for one year from 29.06.1998.

Shri KJ Mathew IAS. continued to be the Chairman of the Board.

### **MEETING OF THE BOARD AND ITS COMMITTEES**

The following meetings of the Board and of the Committees were held during the year.

**a) Board meetings**

133<sup>rd</sup> meeting on 20/04/1998

134<sup>th</sup> meeting on 29/06/1998

135<sup>th</sup> meeting on 19/12/1998

136<sup>th</sup> meeting on 27/03/1999

**b) Committee meetings**

Executive Committee 15/06/1998 & 22/10/1998

Market Development Committee 07/10/1998

Planting Committee 07/10/1998

Research & Development Committee 09/11/1998

Labour Welfare Committee 23/11/1998

Statistics & Import/Export Committee 11/12/1998

Staff Affairs Committee 30/12/1998



## **ORGANISATIONAL SET UP**

The activities of the Rubber Board were carried out by eight departments viz. Rubber Production, Administration, Rubber Research, Processing & Product Development, Training & Technical Consultancy, Finance & Accounts, Statistics & Planning and Licensing & Excise Duty; headed respectively by the Rubber Production Commissioner, the Secretary, the Director of Research, the Director (P&PD), the Director (T&TC), the Director (Finance), the Jt. Director (S&P) and the Director (L&ED).

The Headquarters of the Board along with the Administration, Rubber Production, Statistics & Planning, Licensing & Excise Duty and Finance & Accounts Departments remained located at own premises in Keezhukunnu, Kottayam-686 002. The Department of Research, Department of P&PD and the Department of Training & Technical Consultancy are located at the Rubber Research Institute of India campus at Kottayam – 686 009.

There are nine Sub/Liaison Offices under the Licensing & Excise Duty Department of which one was opened in Secundrabad during the reporting period on 24/06/1998. The Rubber Production Department has 3 Zonal Offices, 2 Nucleus Rubber Estate & Training Centres, 6 Supervisory Offices, 40 Regional offices, 2 ADO's offices, 170 Field Offices, 15 Regional Nurseries and 26 Tappers' Training Schools located at different rubber growing regions.

The Research Department runs two Regional Research Stations in Kerala, and a Regional Station each in Tamilnadu, Karnataka, Maharashtra (Dapchhari), Orissa, West Bengal, Assam, Mizoram, Meghalaya and Tripura. The Pilot Crumb Rubber Factory located at Kottayam and the Pilot Latex Processing Factory located at the Central Experiment Station at Chethackal were run by the Department of Processing and Product Development as also the Pilot Plant for Radiation Vulcanisation of Natural Rubber at Kottayam.

The Chairman exercised administrative control over all the Departments and Offices of the Board. The total of Officers and staff under the Board as on 31/03/1999 was 2271; 224 under Group 'A', 631 under Group 'B', 1215 under Group 'C' and 201 under Group 'D'. Very cordial relations existed between the staff and the executive personnel. Their good work has resulted in the impressive record of achievement during the year.

The activities of the different departments are summarised in the following pages.

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## **PART - III**

### **PROMOTION OF RUBBER PRODUCTION**

In order to achieve the major objectives of expanding the area under rubber in the country and to increase production of rubber from existing plantations through scientific agromanagement practices and exploitation techniques, the Board is implementing various schemes for providing technical as well as financial assistance to the growers. Based on the specific requirements of the local growers, separate schemes have been formulated for operation in the non-traditional region. Similarly specific projects such as Block Plantation Project and Tribal Rubber Plantation Project and schemes like free supply of fencing materials, additional incentive for planting materials etc. are implemented exclusively for the SC/ST category of growers. A series of training and visit programmes for needy rubber growers were also arranged. Funds for most of the schemes came from the World Bank Assisted Rubber Project and a few schemes were funded out of the cess collected by the Board.

A gist of the various projects/schemes operated and the progress achieved during the financial year 1998-99 are dealt with below.

- **Rubber Plantation Development Scheme** : This is one of the important schemes of the Board, mostly funded with the World Bank assistance. Details of applications received with area involved, permits issued, permitted area etc. during 1998-99 and 1997-98 were as follows.

Details	1998-99	1997-98
No. of applications	26641	46234
Area as per applications (ha)	17904	27847
No. of permits issued	15873	33920
Permitted area (ha)	9653	17104
Amount disbursed as	Rs.19.99 crore	Rs.16.57 crore

Field inspection and processing of applications are continuing and permits will be issued in all eligible cases within the next few months. Due to low price of rubber, there was slight decline in the planting tempo during this year.

- **Tribal Rubber Plantation Project:** This project is aimed at the rehabilitation of selected tribal families of Kerala and is funded out of the cess collection and the contribution from Govt. of Kerala. Progress of implementation of the project is indicated below:

Area planted under the project during 1998-99 (ha)	282.00
Cumulative area planted under the project upto 1998-99 (ha)	1457.00

- **Block Rubber Plantation Project:** This was formulated for the economic settlement of SC/ST category of people in non-traditional areas who practise shifting cultivation. The project is currently operated in Tripura, Orissa and Andhra Pradesh with financial support from the concerned State Govts. Details of planting under this project are as follows.

State	Planting in 1998-99	Cumulative Total upto 1998-99
Tripura	468.00 ha.	2383.00 ha.
Orissa	19.00 ha.	66.00 ha
Andhra Pradesh	5.00 ha.	55.00 ha.

In the State of Assam also a new scheme for Block planting in around 200 ha. in the Karbi Anglong District Council area is being implemented. Preliminary works for raising nursery and land preparation have been started.



- **Insurance of Rubber Plantations:** Rubber Plantations are insured against natural calamities. Small plantations coming under rubber the plantation development scheme are compulsorily insured. Insurance of mature plantations and also immature plantations coming outside the RPD Scheme, is optional to the growers. This scheme is operated with the support of nationalised insurance companies. Details of plantations insured and compensation paid are given below.

Details	1998-99	Cumulative Total upto 1998-99
Immature area insured (ha)	11250.00	63758.00
Mature area insured (ha)	485.00	9165.00
Compensation paid (Rs.in lakhs)	14.88	111.12

- **Extension schemes:** These are schemes formulated and implemented on an annual basis for providing financial and technical assistance for construction of smoke houses, purchase of rollers, bee keeping in rubber plantations etc. This year's physical and financial targets and achievements for various schemes are given below. All these schemes are funded out of cess collection.

Scheme	Target		Achievement	
	Physical	Financial	Physical	Financial
Roller Subsidy	2000	Rs.20.00 lakh	2000	Rs.20.00 lakh
Smoke House Subsidy	666	20.00	666	20.00
Assistance for Bee keeping	-	5.00	-	5.05
Promotion of growing cover crop	-	5.00	-	4.76
Sprayer/duster subsidy	50	3.00	32	2.22
Bio gas subsidy	-	20.00	-	19.66

In addition certain other schemes are in operation in the non-traditional areas alone. The targets and achievements for 1998-99 are as follows.

Scheme	Target	Achievement
Roller Subsidy for individuals	100 Nos.	96 Nos.
Free supply of rollers for NGOs	12 „	10 „
Boundary protection (SC/ST)	Rs.15.00 lakh	Rs.10.46 lakh
Boundary protection (General category)	Rs.5.00 lakh	Rs.5.60 lakh
Free supply of fencing materials –		
a) SC/ST individuals	Rs.5.00 lakh	Nil
b) SC/ST group planting	Rs.2.00 lakh	Nil
Irrigation	Rs.2.00 lakh	Rs.2.22 lakh
Transportation subsidy (estate inputs)	Rs.3.00 lakh	Rs.1.19 lakh
Smoke House subsidy	Rs.2.00 lakh	Rs.1.92 lakh

There is another scheme for setting up demonstration plantations in farmer's fields under operation in non traditional areas. As per this scheme, the Board meets the entire expenditure for planting and upkeep of such plantations. During 1998-99, 10 such plots have been developed.

- **Planting material generation:** In order to generate good quality planting materials for distribution to growers at reasonable price and also to check the monopoly of private sector in this field, the Board is maintaining its own nurseries and promoting nurseries sponsored by Rubber Producers Societies. The details are given below.

No. of nurseries owned by the Board	16
Area of nurseries	76.17 ha.

#### **Production target and Achievement during 1998-99**

	Target (Rs.)	Achievement (Rs.)
Green budded stumps	4.00 lakh	2.64 lakh
Brown budded stumps	8.00 lakh	12.84 lakh
<b>Total</b>	<b>12.00 lakh</b>	<b>15.48 lakh</b>
No. of sponsored nurseries	24 Nos.	24 Nos.



In the production of good quality planting materials, the targets have been exceeded. The planting materials produced have been distributed to the needy growers.

### **TAPPERS' TRAINING**

- **Regular course:** The Board is running its own tappers' training schools where owners/workers of rubber plantations are given training in rubber tapping on a regular basis for 30 days. Details follow.

No. of TT Schools	25
No. of people trained during 1998-99	2097 (in 139 batches)

- **Short term course:** Short term training of 5 days for rubber tappers is arranged in selected plantations for improving their skill in tapping.

No. of tappers who completed training during 1998-99      3,996 (in 283 batches)

### **NRETC & DISTRICT DEVELOPMENT CENTRES**

The Nucleus Rubber Estate & Training Centre in Tripura State and the District Development Centres in Assam and Meghalaya have been maintained satisfactorily. Tapping has been started in the DDC at Dharanggiri. The facilities available in these centres are being utilised for providing training to the growers in the respective regions. This year 150 people have been trained in these centres in rubber farming and crop processing.

**Rubber Plantation Training and Research Centre:** A new scheme for setting up a rubber plantation training and research centre in Assam State has been prepared and forwarded to the Ministry for approval. The proposal is to raise demonstration plantation and experimental plantations in 150 ha. of land given by the Govt. of Assam on nominal lease rent to the Board. Planting is proposed in a phased manner. The centre will meet the training requirements of growers/plantation workers. Ministry's approval for the scheme is

### **PROGRAMMES UNDER THE WORLD BANK ASSISTED RUBBER PROJECT**

In addition to the newplanting and replanting activities, various other components of the World Bank assisted Rubber Project such as demonstration plots, extension and training activities etc. were undertaken. The details are given below.

- **Demonstration plots in traditional areas:** Scientific methods of tree exploitation (controlled upward tapping - CUT), need based fertilizer application (DFA), soil and moisture conservation (SMC), disease control and plots with all these practices together are demonstrated in selected farmers' fields. Financial incentives are provided for adopting the recommended practices in a scientific manner. Targets assigned for the project period and achievement upto the end of March 1999, are given below.

Item	Target	Achievement as on 31/3/99
C U T	2000 ha.	2125.56 ha. (4918 plots)
D F A	3000 ha.	3350.36 ha. (8062 plots)
S M C	6000 ha.	6684.00 ha. (16001 plots)
Disease control	1500 ha.	2050.00 ha. (4342 plots)
All practices	138 ha.	198.6 ha. (425 plots)

Achievements in all the 5 items have exceeded the targets.

**RUBBER PRODUCERS' SOCIETIES:** The Board has been attempting to develop the culture of self reliance and mutual help among rubber growers by encouraging them to form self help groups by name Rubber producers Societies. Efforts are also being made to revitalise the defunct RPSs. Details of RPSs newly formed and rejuvenated are furnished below.

RPSs formed/ revitalised	1998-99	Cumulative upto 1998-99
RPSs newly formed	104	1808
RPSs rejuvenated	173	419

Two studies are being conducted by two reputed agencies viz. 'MANAGE', Hyderabad and the Indian Institute of Plantation Management, Bangalore to identify the problems related to RPSs and to suggest measures to make the RPSs more active and effective in rendering service to the growers.

- **Extension Agents and Tapping Assistants** : Under the World Bank Project, the RPSs are engaging Extension Agents and Tapping Assistants for dissemination of technical information regarding planting, maintenance and harvesting of rubber. The target for engaging these functionaries and the actual number engaged as on 31/3/1999 are given below.

	Target	Achievement
Extension agents	300	300
Tapping Assistants	300	270

- **Communication equipments**: For more effective transfer of technology to the farming community, audio-visual aids and other communication equipments are being purchased under the World Bank Assisted Rubber Project. Details of equipments purchased are given below.

Item	Purchased during 1998-99	Cumulative Total upto 1998-99
Mike set	2	43
Slide projector	-	40
Overhead projector	-	7
DLP projector	1	1
TV & Accessories	9	21
VCP/VCR	9	22
Direct projector	-	1
Digital camera	1	1
White Board with Marker pen	-	41

These equipments are being used in the field while conducting seminars/group meetings of farmers.

- **Films on rubber:** Under the World Bank Assisted Rubber Project, 5 films on various technical subjects are proposed to be made. Four films on the following subjects have been completed.

- a) Nursery Management
- b) Planting and Maintenance
- c) Productivity Enhancement
- d) Tapping and Processing

Work on another film on the subject 'Diseases, pests and control measures' is in progress. These films are being used as very effective tools for information dissemination especially in the non-traditional regions.

- **Model RPSs:** Out of the total 1808 RPSs, all are not functioning in the desired manner. Therefore a new scheme has been formulated to develop in the traditional area 10 model RPSs with infrastructure and facilities for community processing of latex, effluent treatment, training of growers from nearby RPSs etc. Financial requirement for setting up the facilities per RPS is Rs.12.5 lakh out of which assistance from the Board will be around 80%. The selected 10 RPSs have entered into agreement with the Board and tenders have been invited for the civil construction work.

- **Spraying against Corynespora leaf disease:** Attack of the fungus *Corynespora cassicola* on the leaves of rubber, especially of the most widely cultivated clone, RR11 105, has been observed in the Kerala – Karnataka border in epidemic proportions. Under the World Bank Assisted Rubber Project, a scheme has been launched to undertake prophylactic spraying of chemicals against the fungus in all plantations in the Kerala – Karnataka border. Details of spraying undertaken upto 31/3/1999 are given below. Spraying is still continuing.

Out of th

Attack o



Round of Spray	Mature area (ha)	Immature area (ha)
1 <sup>st</sup> round	3856	4047
2 <sup>nd</sup> round	45	3358
3 <sup>rd</sup> round	Nil	2730
4 <sup>th</sup> round	Nil	1341

- **Women's Development Project:** Under the World Bank Assisted Rubber Project, there is a proposal to undertake certain activities for the development of women involved in rubber related vocation. Activities under this project are proposed to be carried out through selected NGOs. Eight NGOs have been identified and the specific activities to be undertaken by each NGO are being finalised. One Women Development Officer in the Central Office and one Nodal Officer in each Regional Office have been posted to monitor the activities under this project.

## **TRAINING PROGRAMMES**

- **Overseas Training of Officers :** A proposal was sent to the Ministry for sending a few officers on overseas training. But the Govt. of India has not cleared the proposal and no officer could be sent on overseas training during 1998-99. Prior to 1998-99, 56 officers of RP Department have undergone overseas training in Malaysia/Thailand.
- **Overseas Training of Growers:** Under the overseas training programme 62 growers have visited Malaysia/ Thailand/Indonesia in 4 batches upto 1998-99. During 1998-99 no grower was sent out on overseas training.
- **Diploma course in NR production:** A batch of 17 tribal students from Tripura are undergoing a diploma course in NR production in the Kerala Agricultural University under the World Bank Assisted Rubber Project. The course will be over within the next 6 months.
- **Sasthradarsan:** Growers from non-traditional areas are taken to traditional regions for providing them with...

No. of growers from NT area who visited traditional region during 1998-99. 197

- **Campaign meetings:** A total of 1732 half a day meetings were conducted on a campaign basis throughout the traditional area during May 1998 to deliver the message of scientific tapping and agromanagement practices in which 38,383 growers/workers participated. In addition 1,560 meetings for technology transfer through face to face contact were held, in which 62,400 growers participated.
- **Supply of estate inputs:** Eleven items of estate inputs such as fertilizers, plant protection chemicals and tapping materials are supplied to growers at concessional rate through Regional Offices. The quantum of materials distributed during 1998-99 under each input is given below.

Item	Quantity
Urea	3106 MT
Muriate of potash	2464 „
Rock Phosphate	6677 „
Copper sulphate	410 „
Copper oxychloride	82 „
Spray oil	404 KL
Polythene sheet	361 MT
Rainguarding compound	852 MT
Indofil	186 Kg
Rubberkot	13 KL
Ethiphone	137 Ltr.

Action for procurement of estate inputs for 1999/2000 is in progress.

Some of the extension/advisory activities taken up in addition are dealt with hereunder.

#### I **Production and distribution of Planting materials**

To ensure the easy availability of budgrafted plants of the recommended clones at reasonable price, the Board continued to maintain rubber nurseries in all important rubber growing areas. The details are given below.



**Kerala**

	<b><u>Total extent</u></b> <b>(in ha.)</b>	<b><u>Region</u></b>
1) CN Karikkattoor	20.23	Kottayam
2) RN Kadackamon	4.04	Punalur
3) RN Perumpulickal	4.00	Adoor
4) RN Kanhikulam	4.88	Palakkad
5) RN Ulickal	5.20	Thalassery
6) RN Manjeri	2.00	Nilambur
7) RN Peruvannamoozhy	3.70	Kozhikode
8) RN Alakode	3.41	Taliparamba
<b>Total</b>	<b>47.46</b>	

**Non-traditional areas**

1) RN Devarappally	2.00	Andhra Pradesh
2) RN Darrangiri	7.05	Guwahati, Assam
3) RN Mijumdisha	14.00	Diphu, Assam
4) RN Hillara	6.00	Silchar, Assam
5) RN Jenggitchikgre	5.50	Tura, Meghalaya
6) RN Tulakona (NRETC)	5.66	Agartala, Tripura
7) RN Mendipather	5.54	Tura, Meghalaya
<b>Total</b>	<b>45.75</b>	

**Supply of planting materials in 1998**

Based on the cost study, prices of planting materials raised in the nurseries were fixed at Rs.5.25 for green budded stumps (GBS), Rs.5.75 for brown budded stumps (BBS) and Rs.11/- per meter for budwood (BW). Small growers were allowed a concession of Re.1.50, Ps.0.75 and Rs.4.50 respectively for GBS, BBS & BW.

During 1998-99, 248,238 Nos. of GBS, 736,954 BBS and 1,754 meters of BW were sold from nurseries in the traditional areas of Kerala. Majority of the materials were distributed to the small holders at concessional rate. The concession allowed amounted to Rs.9,25,237/-. In the non-traditional area, 438,649 BBS were produced and supplied to the growers. Cost of polythene bags and of planting materials supplied to growers have been

### **Despatch of budded stumps to NE & NT areas**

Procured 153.015 budded stumps from the private nurseries in Kerala and despatched the same to NE & NT areas, along with 808040 budded stumps raised in our nursery in traditional area.

### **Procurement of rubber seeds**

For nurseries in the non-traditional region, 50.06 lakh assorted rubber seeds, 27.89 lakh germinated seeds and 0.37 lakh polyclonal seeds were procured and distributed. For the Board's nurseries in Kerala, 14.55 lakh seeds were procured on germination basis.

### **Sponsored nursery**

To meet the growing demand of good quality planting materials at reasonable rates, sponsored nurseries were established in 36 centres under the control of RPSs. The Board had arranged supply of 5.64 lakh seeds for establishment of seedling nurseries in these sponsored nurseries.

## **II Advisory and Extension services**

- a) The field extension officers visited 204624 rubber holdings to advise growers on scientific methods of rubber cultivation, production, exploitation and processing. In order to disseminate knowledge on the correct techniques of planting, maintenance and crop harvesting radio talks were recorded and broadcast.
- b) Monthly publications in local languages on planting, cultural operations, processing, developments in the rubber field etc. in important rubber growing regions of non-traditional areas and Tamilnadu were regularly brought out. These publications include 'Rubber Malar' for Tamilnadu 'Rubber Sangbad' for Assam, 'Rubber Sangbad' for Tripura and 'Rubber Vartha' for Karnataka.

c) **Demonstration of scientific tapping in small holdings**

Tapping Demonstrators attached to the various Regional Offices visited holdings and demonstrated scientific methods of tapping and processing. Thrust was given to popularise the modern trends in exploitation such as Controlled Upward Tapping (CUT), application of yield stimulants, rainguarding and S<sub>2</sub> D<sub>3</sub> tapping system. This would help the planters to extract maximum output from the plantations for replanting within a reasonable span of time.

III **Annual scheme on productivity/quality improvement**

a) ***Financial assistance to small growers for purchase of sheeting rollers***

In order to improve the quality of the sheet rubber produced in small holdings, a scheme was implemented to extend financial assistance at the rate of Rs.1000/- per set of sheeting rollers to benefit the small and marginal growers. Financial outlay was Rs.20 lakh. During 1998-99 the entire Rs.20 lakh could be disbursed.

b) ***Financial assistance for construction of small smoke house***

With a view to persuading and encouraging the small growers to adopt better processing techniques a scheme was implemented offering financial assistance to the tune of Rs.3, 000/- for construction of smokehouse with a minimum capacity of 85 kg rubber sheets. This scheme was popular among the small growers and during 1998-99 an amount of Rs.19.98 lakh was disbursed against the target of Rs.20 lakh. In non-traditional areas, subsidy was paid @ Rs.5,000/- or 50% of the actual cost of construction to 38 growers amounting to Rs.1.92 lakh against the target of Rs.2 lakh.

c) ***Scheme for supply of low volume power operated sprayer/duster***

This scheme was introduced to popularise the use of low volume power operated sprayers/dusters among small growers for control of the leaf diseases. During the period

(RPSs), individuals, Cooperative Societies and Rubber Marketing Societies. The scheme provides grant of 50% subsidy limited to a maximum of Rs.15,000/- for sprayer-cum-duster and Rs.12,000/- for sprayer without duster attachment. For individuals, the subsidy is 25% limited to a maximum of Rs.7,500/- for sprayer-cum-duster and Rs.6,000/- for sprayer without duster attachment. For small sprayer-cum-duster, the subsidy element is Rs.2,000/- per RPS and Societies and Rs.1,000/- per individual. A total amount of Rs.2.22 lakh was disbursed as subsidy under the scheme.

**d) *Scheme for financial assistance for setting up of Bio-gas plants using rubber sheet processing effluent.***

This scheme was started during 1998-99 with a financial outlay of Rs.20 lakh. The objective of the scheme is to protect the environment by providing financial assistance for treating the sheet processing effluent anaerobically. The gas produced could be used as fuel for domestic purpose in smoke house for rubber sheets. An amount of Rs.19.66 lakh could be disbursed to 655 beneficiaries.

**e) *Scheme for extending financial assistance for apiculture***

The scheme is for giving financial assistance for generating additional income for growers from rubber plantations. The financial outlay is Rs.5 lakh. Rs.5.05 lakh was disbursed to small growers under the scheme during 1998-99.

**f) *Scheme for popularisation of leguminous ground cover in rubber plantations.***

This scheme with a financial outlay of Rs.5 lakh was continued during 1998-99 to encourage small rubber growers to establish leguminous ground cover in rubber plantations. An amount of Rs.4.76 lakh was disbursed as financial assistance.

**g) *Financial assistance for irrigation in immature rubber plantations of NT areas***

Irrigation is beneficial to ensure proper growth of rubber plants and to reduce the immaturity period in NT areas. In order to motivate the rubber growers to take up irrigation in the immature rubber holdings, a scheme was implemented for giving financial



assistance against capital investment for establishing irrigation facilities. The scheme provides for financial assistance @ Rs.5,000/- per ha. with a ceiling of Rs.50,000/- per grower. An amount of Rs.2.22 lakh has been disbursed to eligible rubber growers in NT areas under this scheme.

**h) *Scheme for extending financial assistance to small growers in NT areas for the purchase of hand operated rubber sheeting rollers.***

Under the scheme, financial assistance is given to the growers in NT areas @ Rs.1,000/- per set of rollers to make good quality rubber sheets. Financial outlay was Rs.1 lakh during 1998-99 against which Rs.0.96 lakh was spent in favour of 96 growers

**i) *Free supply of rollers in NT areas***

The scheme was formulated to help the non-governmental organisations/voluntary organisations in NT areas to improve the processing facilities of natural rubber. During 1998-99 10 sets of rollers were supplied to these organisations incurring Rs.1.67 lakh against the target of Rs. 2 lakh.

#### **IV Development of Rubber Plantations in NT areas**

In order to achieve self sufficiency in natural rubber production, programmes for expansion in the area under rubber both in the traditional and the non-traditional areas (NT) where the agroclimatic conditions are more or less suitable for rubber cultivation have been under implementation. The NT areas includes the State of Goa & Maharashtra, Andhra Pradesh, Orissa, West Bengal & North-eastern States. As a result of the sustained efforts a large number of new entrepreneurs have taken up rubber cultivation.

**1) *Goa & Maharashtra***

In Goa, commercial rubber cultivation was pioneered by the State Forest Department from 1960 onwards and a large number of growers have started rubber cultivation. The extent under rubber is 92,784 ha.

In Maharashtra, rubber plantation is of recent origin and some of the plantations have come into tapping. The yield performance is more or less comparable to what is obtained in the traditional area. Aiming at further development in Konkan areas of Maharashtra, a Demonstration-cum-Nursery Project (DCNP) has been established in 7 ha. of land owned by the Konkan Krishi Vidhya Peet at Wakawali, Dapoli. Raising of rubber nurseries and planting in demonstration plots have been completed. All items of infrastructural development including irrigation system have been undertaken. During the year Rs.106,522 has been spent for the DCNP Dapoli. For the development of the rubber cultivation in Goa & Maharashtra, one Regional Office is functioning in Goa and an ADO's office at Khed. Now the total extent under rubber is 1127 ha. in Maharashtra.

## 2) Andhra Pradesh

The Board is maintaining a nursery at Devarappally in an area of 2 ha. for raising high yielding planting materials for rubber growers both in Andhra Pradesh and in Ganjam Dist. of Orissa. A Block Plantation Project for tribals is under implementation in Rampachodavaram and Maredumilli areas in East Godavari Dist. of Andhra Pradesh in collaboration with the GCPDC and State Govt. The expenditure for the plantation is shared between the Rubber Board, GCPDC and Govt. of Andhra Pradesh. Planting has been completed in 50 ha. during 1997. The total extent under rubber in Andhra Pradesh is 125.94 ha. For promoting rubber cultivation in Andhra Pradesh, one ADO's office is functioning at Maredumilli.

## 3 Orissa

The Board has been promoting rubber cultivation in Orissa from 1985 onwards. A Zonal office was opened in 1985 followed by 3 Regional Offices at Baripada (Mayurbanj Dist.), Bhubaneswar (Puri Dist) and Paralakhemundi (Gajapathy Dist). A Block Plantation Project is under implementation to plant up 40 ha. in Jadanathpur and Baripada in Mayurbanj Dist. with the active participation of the Govt. of Orissa. Planting has been completed in 25.39 ha.



Another block plantation project is under progress at Paralakhemundi. In the first phase planting has been completed in 38 ha. The expenditure is shared between the Rubber Board and ITDA of Govt. of Orissa. Total extent under rubber in Orissa is 336.49 ha.

#### **4 West Bengal**

A survey in West Bengal has revealed that selected areas in Jelpaiguri Dist, Siliguri Dist, Naxalbari Sub Division of Darjeeling Dist. and certain portions of Islampur, Bhalurghat and Raingunj Sub Division of North & East Binaipur Dist. are more or less suitable for rubber. A Field Office was opened in Siliguri to promote rubber cultivation in the State. Community nurseries were established under the Zilla Parishad, Burdwan. In addition, polybagged plants were supplied to interested growers for raising polybag nurseries for field planting. At present, West Bengal has 60 ha. of rubber.

#### **5 A&N Islands**

Based on the survey conducted during 1950s and 1960s, three rubber plantations came up in the A&N islands. Subsequently small holders started rubber cultivation in that area. The total extent now under rubber is 860 ha. The Regional Office at Port Blair is looking after the development of the rubber plantations in the A&N Islands.

A rubber nursery of 1.85 ha is maintained for the production of high yielding planting materials for supply to interested growers in the A&N islands.

The Rubber Board continued to maintain the Nucleus Rubber Estate and Training Centre comprising of 202.50 ha of rubber raised progressively from 1965 to 1968 in South Andaman. The NRETC has recorded a production of 219122.530 kg of rubber during the year. An expenditure of Rs.41 lakh was incurred towards the running expenses of NRETC including capital expenditure for infrastructural development during the year 1998-99. Due to continuous labour unrest, optimum production could not be obtained. Steps for progressive replanting of uneconomic low yielding rubber plants is being undertaken.

## **6 North Eastern States**

The Board continued to promote development of rubber plantations in North-eastern States. The Zonal Office in Guwahati is coordinating the development activities in all the States in the North-east excepting Tripura, through Regional Offices stationed at Guwahati, Silchar, Diphu and Jorhat (in Assam) and Tura ('Meghalaya'). The Zonal Office opened at Agartala, Tripura is monitoring the development activities in the State of Tripura through the Regional Offices opened at Agartala, Udaipur and Dharmanagar. An area of 1315 ha. brought under rubber cultivation in Tripura and 1098 ha in the other States during 1998-99. The estimated planted area at the close of 1999 is given below.

Tripura	24315.00 ha.
Assam	11244.73
Meghalaya	4600.78
Mizoram	993.32
Manipur	1318.13
Nagaland	1356.31
Arunachal Pradesh	143.13
<b>TOTAL</b>	<b>43971.40</b>

Taking into consideration the needs of this backward NT region, special incentive is offered to encourage new investment in rubber planting over and above grant of financial and technical assistance, such as schemes for supply of budded stumps and polybags for raising polybag nurseries and grant of cash assistance for maintenance of polybag plants.

### **World Bank aided Rubber Project**

The World Bank assisted India Rubber Project was formally started in January 1994 after signing an agreement with International Development Association (IDA) in 1993. The project is expected to close on September 30, 1999. Through the agreement, the project was eligible for a credit of US\$ 92 million. Since there was under utilisation of IDA credit to NABARD to refinance loans for processing factories and plantation

development, US\$ 36.5 million was reduced from the credit during the mid term evaluation in April 1996. Hence the total IDA credit at present is only US\$ 55.5 million. At an exchange rate of Rs.35 per US\$, the total investment cost of the project was Rs.5503 million. This includes Rs.1434 million of IDA credit through Rubber Board, Rs.538 million Govt. of India fund, Rs.662 million IDA credit through NABARD and Rs.2869 million contribution from beneficiaries and participating banks. Hence the IDA credit to the Rubber Board constitutes only 26.06% of the total project cost.

The Project consists of 6 components viz. Replanting, Newplanting, Processing, Productivity enhancement, Institutional development and Women & Tribal development in Tripura; percentage of the project cost on each component being 29, 41, 12, 7, 10 & 1 respectively. The Institutional development has 5 sub components; Research, Extension, Training and Technical Consultancy, Rubber Board Organisation and Project Coordination. Project area for replanting consists of traditional areas of Kerala and Tamilnadu and for newplanting in Tripura and other non-traditional areas.

### **Physical Progress**

Achievement was good in the major components: 99.54% of the targeted replanting of 30.361 ha. and 98.28% of the newplanting of 44,227 ha. was covered upto March 31, 1999. During the year 1998-99 tempo of replanting and of newplanting was low. Due to continuing low price for rubber; replanting was 4,046 ha and replanting 5,270 ha. The Board has disbursed Rs.39.48 million and Rs.67.22 million for replanting and newplanting respectively during the year. However target area for the next year can be achieved when processing of 13,935 pending applications of the preceding years is completed.

Under productivity enhancement, 11 plantation inputs for important cultural practices like fertilizer application, plant protection etc. were distributed. Fertilizer was distributed to cover an area of 50,050 ha. The expenditure involved was Rs.101.86 million during 1998-99.



Under the processing component only one factory for reprocessing rubber sheet could be established through NABARD refinance. Utilisation of NABARD refinance for plantation development was also low during the initial years but last year and this year satisfactory progress has been achieved. During the year upto March 31, 1999, Rs.92.33 million was disbursed by NABARD for refinancing newplanting and replanting of rubber.

All the 7 research projects are progressing well. Results of the latex diagnosis studies indicate that this technique can be used for predicting exploitation status of holdings. Stimulation treatment in low frequency tapping trials gave better yield performance and the yield increase was 13 to 46%. Rainguarding experiments show 35 to 50% yield reduction in the absence of rainguarding and stimulation could recover only 10 to 19% of the yield loss. In the hot spot trial at Sukma, Madhya Pradesh the clones are showing good adaptability with significant variations.

Construction of the Training Institute at Kottayam was progressing well and 60% of the work was completed. As the contractor abandoned the work on August 31, 1998, the World Bank permitted Rubber Board to continue the work directly through Force Account procedure. The work could be restarted only after completely settling the claims of the contractor. Now the claims of the contractor have been finalised through a Commission appointed by Hon'ble High Court of Kerala. The work restarted on March 2, 1999 is progressing well. Construction of the Training Institute at Agarthala is progressing well and may be completed by August, 1999. Action was initiated for procuring the equipments and furniture for the two Institutes.

Consultants were engaged for certain specialised studies under the project. The copper residue study is progressing well and residue of copper on land and in water due to spraying Copper Oxychloride on rubber trees against abnormal leaf fall is being assessed. Soil survey and mapping of rubber soil in Kerala and Tamilnadu have been completed. Consultancy for establishing rubber database and rubber wood testing laboratory have reached a stage of procurement of hardwares and bids are being processed. The impact of the World Bank Project in traditional area and in Tripura is being evaluated by two Consultants. The final report on Tripura has been received. The project has helped in reducing jhuming cultivation, developing saving and banking habits among the tribal



people in Tripura in addition to their involvement in income generation activities and infrastructural development activities.

Computerisation of 26 Regional offices has been completed in the traditional area and the software developed was successfully installed. Data from Regional Offices are transferred to Head Office and processed. Computerisation of other Offices has been partially completed and second phase of computerisation has been taken up. M/s.NIIT, Bangalore has been engaged as consultant for this purpose.

Construction of the model TSR factory has reached advanced stage of completion. Construction of the rubber wood testing laboratory is in progress. Credit for the joint sector Rubber Wood Processing Factory is in final stage of sanction. Promotion campaign for rubber wood is being carried out. The total expenditure for Institutional development was Rs.222.91 million for 1998-99.

Under Women & Tribal development plan in Tripura 3791 tribal families are being given assistance in economic activities like piggery, poultry etc. Social activities like health camp, promotion of literacy and family planning are being promoted. Infrastructural facilities such as community hall, tube well, link roads, solar energy are being provided. Under the Project 7,711 ha. has been planted with rubber upto March 31, 1999.

#### **Financial achievement**

Out of Rs.1,971.735 million of IDA credit to Rubber Board and Govt. of India, Rs.1,337.44 million was spent upto March 31, 1999. The target for 1998-99 was Rs.485.5 million and the actual expenditure incurred was Rs.439.5 million.

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## **PART – IV**

### **ADMINISTRATION**

Important functions in Administration consists of constitution/reconstitution of the Board and its Committees, monitoring implementation of the Board's decisions, recruitment of personnel for different Departments, proper maintenance of the establishment through house keeping operations, disbursement of employees entitlements including retirement benefits, price collection and marketing, collection of statistics, publicise Board's schemes and activities, carryout labour welfare measures, attend to vigilance and legal functions and official language implementation.

The functions were carried out through the following Sections/Divisions/Offices.

- 01     **Establishment (General Administration, Personnel Administration & Establishment)**
- 02     **Marketing**
- 03     **Publicity & Public Relation**
- 04     **Labour Welfare**
- 05     **Internal Audit**
- 06     **Legal**
- 07     **Vigilance**
- 08     **Official Language Implementation**

#### **General Administration**

The activities of the Board for the year 1997-98 were documented through the Annual Report which was presented to the Government as required under Clause 8 (3)© of the Rubber Act, along with the Annual Accounts. Monitored implementation of the decisions of the 4 meetings of the Board held during the year.

## Entitlement

During the period 23 employees were given financial assistance for construction of own house by advancing Rs.42,18,050. Besides Additional House Building Advance to the tune of Rs.21,13,650/- was disbursed in 28 cases based on their revised Pay consequent on implementation of the orders of the Govt. on recommendations of the V Central Pay Commission. Vehicle advances amounting to Rs.8,85,165/- were given to 38 employees (Rs.2,65,925 as Car Advance to 2, Rs.5,96,740 as two wheeler advance to 21 and Rs.22,500 as cycle advance to 15). In addition an amount of Rs.6,81,427 was advanced to 21 officials as two wheeler advance under the World Bank Scheme.

Service Books, leave accounts and personal files of employees were properly maintained. Retirement benefits were newly given to 19 employees including 12 who left on voluntary retirement, invalid pension for one and compulsory retirement for another. In addition there were 5 cases of family pension of employees who died in harness.

Consequent on the implementation of CCS (RP) Rules 1997, retirement benefits were revised in 208 cases; as detailed.

|    |                                      |                 |
|----|--------------------------------------|-----------------|
| a) | <i>Post 1.1.1996</i>                 | <i>68 cases</i> |
| b) | <i>Pre 1996 (1.1.86 to 31.12.95)</i> | <i>88 cases</i> |
| c) | <i>Pre 1986</i>                      | <i>52 cases</i> |

Consequent on the Govt. raising the retirement age from 58 to 60 from May 1998, normal retirement got postponed by 2 years. Hence number of retirements was low. As on 31.3.1999, there were 328 Pensioners on the Board's rolls.

## Personnel Administration

Selection of suitable personnel to vacant positions for smooth functioning of the Board was ensured following recognised recruitment rules and statutory provisions relating

to reservation of posts for candidates from SC/ST/OBC communities. There were properly constituted Selection Committee/DPCs for selection of personnel befitting job recruitments. Periodical returns on the personnel recruited at reservation points were sent to the Government.

The total number of Officers and staff under the Board as on 31.3.1999 was 2271 as detailed below.

| Name of Department               | Group A    | Group B    | Group C     | Group D    | TOTAL       |
|----------------------------------|------------|------------|-------------|------------|-------------|
| Administration                   | 10         | 25         | 64          | 16         | 115         |
| Rubber Production                | 98         | 377        | 779         | 121        | 1375        |
| Excise Duty                      | 16         | 40         | 79          | 8          | 143         |
| Research                         | 66         | 138        | 201         | 46         | 451         |
| Processing & Product Development | 14         | 24         | 32          | 4          | 74          |
| Finance & Accounts               | 6          | 10         | 27          | 2          | 41          |
| Statistics & Planning            | 5          | 7          | 13          | 2          | 27          |
| Training & Technical Consultancy | 9          | 10         | 20          | 2          | 41          |
| <b>TOTAL</b>                     | <b>224</b> | <b>631</b> | <b>1215</b> | <b>201</b> | <b>2271</b> |

## Marketing

During the reporting period, collected and compiled price of various grades of natural rubber and reported to the press for publication, like daily average price of RSS 4 and of ungraded rubber in Kochi and Kottayam markets, average price of all grades of rubber including centrifuged latex and TSR in Kottayam market, average price of scrap rubber and daily price of various grades of sheet rubber in Kuala Lumpur, Malaysia.

The price information was intimated on a regular basis to the Ministry of Commerce, Ministry of Industry, Public Sector Plantation Companies etc. The price of



centrifuged latex, technically specified rubber, PLC etc. were also collected and circulated regularly to the various offices of the Board, Plantation Companies etc.

The Govt. notified the benchmark price of Rubber in September 1998 at Rs.3405 for RSS 4 and Rs.3355 per quintal for RSS 5. Since the market remained below the benchmark, price support procurement at the prevailing market was made by the STC. During 1998-99 STC procured 11,606 tonnes. Since supply of rubber was in excess of the demand consequent on low growth in the rubber manufacturing industry, the Govt. suspended import of rubber under advance licence and asked the manufacturers to meet their requirement of rubber for export production from the STC. The Govt. asked STC to supply rubber to the rubber products exporters at the international price, which was lower to the Indian price by Rs.224 per quintal on the average for RSS 4 during 1998-99. During 1998-99, STC released to the manufacturers 5308 tonnes of natural rubber at the international price. Loss in the transaction was met by the Govt. of India.

Average prices of various grades of rubber per quintal during 1998-99 are indicated below.

|                 | 1998-99 |
|-----------------|---------|
| RSS 1           | 3,553   |
| RSS 2           | 3,362   |
| RSS 3           | 3,136   |
| RSS 4           | 2,994   |
| RSS 5           | 2,856   |
| Latex (60% drc) | 2,689   |
| ISNR 5          | 3,240   |
| ISNR 10         | 2,979   |
| ISNR 20         | 2,759   |
| ISNR 50         | 2,638   |

Collected details of imports of natural rubber coming to the country through the 4 major ports of India (Kochi, Madras, Calcutta, Bombay) and data on natural rubber exported. During the period 26,307 Tonnes of natural rubber was imported and 1840 Tonnes of natural rubber was exported.

## **Publicity and Public Relations**

The Publicity/Publication activities mainly consist of publishing journals and other publications on various aspects of rubber cultivation. The following were brought out during the year.

- a) Twelve issues of the Malayalam magazine "Rubber". As on 31.3.1999 the number of annual subscribers was 9148 and of life subscribers 5436.
- b) Twelve issues of 'Rubber Statistical news'.
- c) 8800 copies of Rubber Growers' Companion 1999.
- d) 1000 copies of the book on 'rubber and its cultivation'.
- e) One issue of 'Rubber Board Bulletin'
- f) Three issues of the journal named 'Inside Rubber Board'.

Press handouts on various topics were released to the national as well as local dailies which secured wide coverage. A total of 41 press releases and 81 advertisements were issued. Farm features on subjects of seasonal importance were published in the 'Karshikarangam' pages of various Malayalam dailies.

During the period under report took part in seven exhibitions at Chengannoor, Pathanamthitta, Coonoor, Kannur, Chennai, Thiruvananthapuram & Kottayam.

Utilised services of the AIR and Doordarshan for dissemination of scientific knowledge on rubber cultivation, crop processing and marketing. A team of journalists from Kerala were taken to the North Eastern States to make them aware of the activities of the Board there. As part of social welfare activities, 15 bags of rice was supplied to flood affected people of Kottayam Dist.

## **Labour Welfare**

Section 8 (2) (f) of the Rubber Act empowers the Board to undertake measures for better working condition and improvement of amenities and incentives for rubber plantation workers.

The Board had devised many schemes for the welfare of the workers for which an amount of Rs.1,12,56,137 lakh was spent during the year under report.

### **a) Educational Stipend Scheme**

The scheme provides for financial assistance for educating the children of rubber plantation workers at the primary, secondary, graduation/postgraduation levels.

The assistance consists of payment of tuition fee, hostel/boarding fee and lumpsum grant for purchase of books, instruments etc.

An amount of Rs.14,37,886/- was spent under this scheme during <sup>1998-99</sup>~~1997-98~~.

### **b) Educational Scholarship Scheme**

The scheme provides children of rubber plantation workers incentive for high performance in academic courses under educational stipend scheme. Scholarships ranging from Rs.250/- to Rs.2,000/- is paid per student. An amount of Rs.20,700/- was spent under this during the year.

### **c) Group Insurance-cum-Deposit Scheme (9 Phases)**

This is a social security measure for the workers not covered by the Plantation Labour Act against death and injuries caused by accidents. This scheme also encourages the habit of saving. The first phase was started in 1986-87. Each phase continues to be in operation for a period of 10 years. The workers enrolled have to renew membership every

year by remitting their share of insurance premia. During 1998-99 the Board remitted Rs.9,50,500/- as Board's share favouring 9,505 workers after ensuring that they have remitted equal amount as their share. The insurance company paid compensation to 51 workers amounting to Rs.1,36,755/- for injuries/death by accident.

**d) Housing Subsidy Scheme (Unorganised Non-marginal holdings)**

This scheme provides assistance to rubber plantation workers not covered by the Plantation Labour Act, 1951 for construction of own house. The assistance is limited to Rs.7,500/- per worker for house built in brick and mortar. For house built with mud walls and grass thatch, the assistance would be Rs.4,000/- only. For houses with mud wall and tin or aluminium roof, the assistance would be Rs.5,000/-. An amount of Rs.21,73,500/- was disbursed during 1998-99 in favour of 290 applicants.

**e) Housing Subsidy Scheme (Unorganised Sector Marginal holdings)**

This scheme provides for assistance in house construction for workers employed in holdings, each with area between 0.75 ha and 1 ha. All other conditions of the scheme for housing subsidy for rubber plantation workers in the unorganised sector (non-marginal holdings) are applicable to this scheme. Amount disbursed during 1998-99 was Rs.21,81,250/- in favour of 291 applicants.

**f) Housing Subsidy Scheme (Organised Sector)**

This scheme provides financial assistance to workers covered by the Plantation Labour Act, 1951 for the construction of own house. The assistance is limited to Rs.7,500/- per worker. Amount disbursed during 1998-99 was Rs.8,64,000/- in favour of 118 applicants.

**g) Scheme for providing Sanitary facilities**

The scheme provides assistance to build latrines by the rubber plantation workers as per prescribed plan and estimate. The assistance either covers 75% of the cost of



construction or Rs.3,000/- of the latrine whichever is less. Total amount paid under the scheme during 1998-99 was Rs.21, 93,000/- in favour of 731 applicants.

**h) Medical Attendance Scheme**

The scheme assists plantation workers of unorganised sector with reimbursement of medical expenses and subsistence when unable to work due to illness. Workers who undergo sterilization operation for promotion of small family are also given assistance. During 1998-99 an amount of Rs,5,92,426/- was disbursed to 533 workers.

**i) Housing and Sanitary Scheme for SC/ST Rubber Plantation Workers**

This scheme was implemented on a pilot basis exclusively for SC/ST workers of rubber plantations guided by the Rubber Producers' Societies. Assistance limited to Rs.14, 000/- is granted to the worker for construction of house with latrine. The scheme was financed from the SCP/TSP fund. During 1998-99 an amount of Rs, 8,17,875/- was disbursed in favour of 109 workers.

## **Internal Audit**

Main function of the Internal Audit is inspection/audit of various offices/units of the Board. During the period under report internal audit inspections were conducted in 46 offices/units located in different parts of the country.

Replies to AG's audit objections were sent in time. The total number of outstanding paras on 31.3.1999 was 88. Review of Attendance Register as a measure of enforcement of office discipline was undertaken. Opinion/advice was given in 203 cases including 50 pension cases, leave encashment, pay fixation, service verification etc.

Economy in the use and maintenance of vehicles and consumption of fuel was ensured by follow-up of procedures and Government Orders strictly. Annual physical

verification of stock was brought upto date by initiating follow-up action with concerned offices/units and ensured the disposal of unserviceable items.

## **Legal matter**

The legal functions include rendering advice/opinion on matters referred to, draft legal documents, initiate steps for prosecution under the Rubber Act, 1947 assist in conciliation proceedings in labour matters and tax cases and monitoring progress of litigations for and against the Board.

During the year under report, timely action was taken and advice was rendered on hundreds of files. Applications of 32 employees under House Building Advance Scheme were scrutinised for determining eligibility under the Rules. Legal documents to be executed were drafted/prepared. Appropriate steps were taken through lawyers to safeguard the interests of the Board in litigations pending in various courts. Parawise comments and necessary instructions were given to Standing Counsels and the Central Government pleaders in cases pending in High Courts.

## **Vigilance**

### **a) Complaints**

During the year under report, took up for enquiry/verification 20 complaints containing allegations against 6 Officers of Groups A & B status and 14 officials of Groups C & D status. The allegations mainly related to misappropriation of Board's funds; making false/vexatious complaints in vituperative language against senior Executives, insubordination and unruly behavior towards superiors, failure to comply with lawful direction/orders, habitual unauthorised absence disrupting smooth functioning of the office etc. Enquiries were made and appropriate deterrent action was taken.

**b) Cases**

Major penalty proceedings against 10 officials and minor penalty action against 6 officials were instituted during the year under report.

**c) Property statements and acquisition/disposal of immovable/movable property**

Annual statements of immovable property as on 31.12.1998 were called for from all officers of Group A & B status. The statements received were scrutinised. Also dealt with/processed 80 applications of the employees pertaining to acquisition/disposal of immovable property and 60 applications/intimations relating to transactions in movable properties such as motor cars, two wheelers, refrigerators, televisions, washing machines etc.

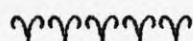
## **Official Language Implementation**

A meeting of the Official Language Implementation Committee was held during the year. Annual programme for the year was prepared.

Hindi week was celebrated in September 1998. Competition in Hindi noting & drafting, elocution & essay writing, recitation in Hindi, Hindi Typewriting and Hindi quiz were conducted. Token prizes and cash awards were given to the I & II place winners. Separate competitions were also conducted for the children of employees of the Board. An Official Language Conference was held in February 1999.

Six issues of the Hindi bulletin were published during the year. Hindi classes were conducted in which 25 employees were trained. Facilities for training in Hindi through correspondence course were arranged. Training in Hindi Typewriting was also given to Board's employees.

The Hindi Library was utilised by the employees to improve their knowledge in Hindi.



## **PART - V**

### **RUBBER RESEARCH**

The Rubber Research Institute of India, the research wing of the Board, has as a Central Experiment Station, nine Regional Research Stations and two *Hevea* breeding substations. The Central Experiment Station has a 254 ha, experimental rubber plantation, while the Regional Research Stations have experimental plantations with area ranging from 20 to 77 ha. For the North Eastern Region, a research complex has been established at Agarthala with five Regional Research Stations in Tripura, Assam, Meghalaya, Mizoram and West Bengal. For other non-traditional areas, there are three Regional Research Stations located in Maharashtra, Madhya Pradesh and Orissa. In the traditional region, another Regional Research Station was established at Padiyoor in Kerala in 1994. The following are the research highlights during the year under report.

The most suitable period for collection of leaf samples for analysis to ascertain nutrient status was found to be between 220 and 310 days after leaf emergence. In a silt pit experiment, where conservation pits were dug at the rate of 100, 150, 200 and 250 per ha, the soil conserved was found to be 5, 8, 9 and 14 tonnes/ha/year respectively. From a trial on control of weeds using chemical herbicides, a new systemic herbicide 'Sulphosate' was found to be equally effective as 'Glyphosate'. In terms of dry matter production and uptake of nutrients by three leguminous covers, *Pueraria* showed superiority. In a cropping system experiment where *Amorphophalus* (yam) was intercropped with rubber, a net profit of Rs.6000/ha was obtained from the inter crop during the 6<sup>th</sup> year of planting rubber.

High frequency of somatic embryogenesis and plantlet formation were obtained from immature anthers and flower buds. *Hevea* (clone RR11 105) tissues were transformed with gene coding for isopentenyl transferase, superoxide dismutase and antisense genes for conferring tolerance against TPD. Experiments to overcome the problem of growth retardation and drying of transgenic plantlets regenerated from tissues transformed with sorbitol 6-phosphate dehydrogenase for conferring drought tolerance resulted in an



efficient new pathway for large scale production of transformed embryos. Plantlets were produced up to second leaf stage. As a preliminary step to develop cDNA library for the isolation of selected genes as well to study gene expression, a simple and very efficient protocol for the isolation of RNA from bark tissue was developed. RNA was isolated from bark tissues of TPD tolerant plant and plants affected with different levels of TPD.

Ten clones resultant of 1982 hand pollination in small scale trial continued to exhibit superior yield over RR11 105. Two ortet selections registered higher yield than RR11 105 during the first year of tapping. Clones RR11 50 and RR11 51 recorded higher mean yield over ten years of tapping, than RR11 105 in a small scale evaluation trial. Data from a multi-locations trial revealed that among 13 clones, 82/29 and 82/30 were showing higher girth in Kanyakumari, Agarthala and Bhubaneswar whereas in Nagrakatta, RR11 105 recorded the highest girth. An on-farm trial with nine new clones and six small scale trials with ortet and hybrid clones were laid out. Budwood of eight clones in the pipeline were supplied to two large estates for trial planting. Structural studies on TPD revealed that, the regenerated bark after two years produced 13 latex vessel rows while TPD affected bark on rest showed only six rows of productive vessels. Benchgrafting with green buds was found to be feasible in rubber. Cytological investigations of somatic embryoids regenerated from immature anther revealed that it is diploid in their somatic cells.

The fourth report on the commercial yield evaluation of major planting materials covering 27 clones has been completed. Over the first ten years of tapping RR11 105 ranked first ( $1703 \text{ kg}^{-\text{ha}}$ ) followed by PB 260 ( $1607 \text{ kg}^{-\text{ha}}$ ) PB 28/59 ( $1522 \text{ kg}^{-\text{ha}}$ ) and PB 217 ( $1510 \text{ kg}^{-\text{ha}}$ ). A tobit model was used to analyse the determinants of intercropping decisions in three regions in Kerala. Availability of family labour, type of intercrops and the perception of profitability were found to influence the decision on the adoption of intercropping. The potential availability of rubber wood was estimated to be 1.35 million cu.m. during 1998-99. The production of rubber seed oil and cake was estimated to be 2300 and 3700 MT respectively and that of rubber honey 1750 MT.

Analysis of variance for the growth characters, dry rubber yield and structural characters of leaf and bark in the 80 wild genotypes in an evaluation revealed significant

difference among the clones for all the characters studied. In a study of wild *Hevea* germplasm for drought tolerance, certain genotypes possessing tolerance to drought were identified. Provenance wise comparison for growth characters showed that Rondonian accessions were more vigorous than Acre and Matto Grosso genotypes, while for dry rubber yield Matto Grosso genotypes continued to be superior to those from Acre and Rondonia. All the five clones from Ivory Coast recorded higher annual average girth, in the seventh year than the control clone, RR11 105. Screening of both wild and Wickham germplasm, for the incidence of powdery mildew disease was carried out. Genetic analysis of 45 selected wild genotypes using RAPD markers was initiated.

Using the sap flow technique it was estimated that the amount of water taken by a mature rubber tree is much less than other tree species. Ethrel application was found to lead to a loss in semi-permeability of luteoid membrane which result in free movements of ions between B and C sera in the latex. This finally leads to greater stability of luteoids and thus more flow of latex. The rate of respiration is found higher in tapped panels. Studies on TPD affected trees revealed that increased carbohydrate availability and respiratory activity leads to increased biomass production at the cost of rubber biosynthesis. Biochemical studies indicated that the stress induced free radical system was very active during the onset of TPD. Inorganic phosphorus and sucrose concentration in the latex were higher in the affected than in the normal trees. Screening of *Hevea* clones for drought tolerance revealed that clones RRIM 600 and Haiken 1 are more tolerant. Transformed *E. Coli* (strain DH 5  $\alpha$ ) with genes Ha Dhn 1 and HA Dhn 2 are ready for future studies on *Hevea* drought physiology.

Incidence of *Corynespora* disease was observed this year also in Dakshin Kannada district. Spraying was carried out in nearly 25 ha in small grower holdings in this region. A scientific evaluation of the scheme for *Corynespora* control approved under the World Bank Project is being carried out. Among 12 different clones tested, GT 1 was found to be tolerant to all the isolates of *Corynespora coccicola* tested. Oil based mancozeb was field tested for the control of abnormal leaf fall disease. Micronair atomizer attached to micron sprayer was observed to improve the efficiency of spraying. Rubber seed oil was tested as carrier for fungicide in both high and low volume spraying systems. A new carrier, vinofan was field tested with various combinations of fungicides for pink disease control.

Hexaconazole appeared to be effective for controlling patch canker and dry rot diseases. Chlorpyrifos 0.2% @ 1 per plant was effective to control termite. Lime spray is cheaper and effective control measure for slugs attacking rubber seedlings. Modifications of the anaerobic digesters were tried to improve the efficiency of effluent treatment. Testing of the preparatory product Actizyme for effluent treatment is being carried out. Preliminary work on pressure injection of tetracycline was found to show a reduction in TPD intensity.

A process was evolved for the production of styrene grafted natural rubber by gamma irradiation and 200 kg of the material was sent to different footwear manufacturing units to evaluate the feasibility of the same as stiffening agent in microcellular soles, replacing SBR 1958. Epoxidised natural rubber (ENR) was found to impart better technological properties to silica filled vulcanizates of natural rubber, SBR and nitrile rubber. A simple process to devulcanise the powdered scrap tyre crumbs was developed on a laboratory scale. Studies on the effect of exposure of sheet rubber to sun showed that the gel content and PRI of the sheets were adversely affected by sun drying.

The five Regional Research Stations in Tripura, Assam, Meghalaya, Mizoram and West Bengal continued to carry out location specific programmes. In general, RRIM 600 continued to record high yield in the clone evaluation trials in all the locations in the North East. At Agartala, among 15 clones in the 1979 clone trial, data on mean yield for eight years revealed PB 235 to be the highest yielder. SCATC 88/13 and Haiken 1 are found to be high yielder in the early mature phase among the six clones in another trial. The common facility for discriminatory fertilizer recommendation at Agartala continued to analyze soil and leaf samples based on which 325 recommendations were given to farmers from different states.

Among the 18 clones at Guwahati, mean yield over three years revealed that RRIM 600, PB 235, RRII 105 and PB 310 are the high yielders. Out of 448 polyclonal seedling trees, 10 showed promising yield trend. At Tura, among the 7 clones evaluated, RRIM 600 recorded the highest yield followed by RRII 118 and RRII 105 over the first three years of tapping. At RRS Nagrakatta, trees attained tappable size in seven years. Trees in one fertilizer trial and two clone trials were opened for tapping. Effect of different tapping systems with tapping rest based on low temperature regimes indicated that among different



treatments S/2 d/2 system with tapping rest at 15 - 15°C regime (commencing when the temperature falls below 15 °C and resuming tapping when it rises to 15° C again) was ideal considering yield and TPD incidence.

A survey of pests and diseases revealed that incidences of powdery mildew (*Oidium heavea*), secondary leaf fall (*Colletotrichum gloeosporioides*) and leaf blight (*Periconia heavea*) were severe in different rubber growing areas in the North-east region. Early yield data from a density-cum-nutritional trial showed that a higher density of 600-800 plants per hectare with higher fertilizer dose (60:30:30 NPK) gives the highest yield. Incidence of wind damage was also relatively lower in the higher densities. Glyphosate @ 5 ltr/ha. as primary spray coupled with Paraquat @ 4.5 ltr/ha as blanket spray was found to be the best for controlling the weeds with 13% cost reduction in comparison to manual weeding under Mizoram conditions. Minimum temperature below 10°C with high diurnal variation has been observed to cause cold damage to young plants. Data during cold months (December to February) revealed that growth in terms of girth increment ranged from 8% (Tura) to 14.5% (Agartala) and yield varied from 17% (Tura) to 30% (Agartala, December to January). Analysis of winter data revealed that vapour pressure deficit and soil temperatures (at 10 and 20 cms depth) of the previous afternoon were closely related to yield on the following day, followed by vapour pressure deficit at the time of tapping.

In Dapchhari, Maharashtra, irrigation trial showed a higher yield for the irrigated plots, with the difference ranging from 300 to 500 kg/ha among the clones. It was observed that 150-200 silt pits per ha is most desirable as this retained more moisture in the field. Five additional blocks were opened for tapping during the period and from a total of 23 blocks, an average yield of 1017 kg/h/yr was obtained. In Orissa three blocks were opened for tapping with an average yield of 30 g dry rubber/tree/tap.

The seven research projects under the World Bank Assisted Rubber Project progressed well during the period under report. Results obtained from field experiments so far show that low frequency tapping combined with stimulation is promising. In general, d/4 frequency gave good results. Three new experiments on low frequency tapping were laid out in Dapchhari. Latex Diagnostic (LD) studies were conducted in 36 small holdings and the results reveal that LD parameters could be used as indicators for fixing optimum



stimulation schedule in clones. Regular data recording from the various field experiments in different locations under the clone evaluation project was continued. Field planting of the wild genotypes for their screening for cold tolerance was done in RRS Nagrahatta during this period.

A few projects on molecular investigations in the wild germplasm material were initiated, using the facilities of the modern genome analysis laboratory. RAPD profile of 48 wild germplasm accessions have been developed using 12 informative primers for genetic relationship studies. Screening of RAPD markers for *Phytophthora* disease in selected clones is being continued. Isolation and purification of fungal DNA and PCR amplification using random primers have been perfected. A *Hevea* genomic library having small DNA inserts (2-6 kb) has been constructed for use as probes in RFLP studies.

An integrated smoke house has been constructed at RRII combining a system of loading the sheets on trolleys which can be rolled out of the smoke house for partial sun drying. The 96 sheets capacity solar-cum-smoke dryer was subjected to evaluation under various conditions. Contribution of the solar panel was found to reduce firewood requirement by 0.4 kg/kg of dried sheets. A sheet washing machine for upgrading low quality sheet rubber was designed and fabricated. Evaluation of epoxidised natural rubber of varying epoxy contents indicated that incorporation of calcium stearate at the preparation stage of ENR is effective in reducing the rate of degradation of ENR of low epoxy contents and for improving its processability.

Discriminatory fertilizer recommendation was extended free of cost to SC/ST growers of the north-east region. A total of 20577 soil samples, 1631 leaf samples and 8239 latex samples were analysed in the various soil/leaf testing laboratories and fertilizer recommendations offered. This is in addition to the discriminatory fertilizer recommendations issued to 970 fields in 30 large estates. Mobile soil testing camps were conducted at 70 places all over Kerala.

A good share of workers engaged in the research farm in the north-east belong to SC/ST. All the 15 workers engaged in Ganolgre farm in Tura, belongs to ST. Women workers were engaged in the research farms and in Tura, three among them were from the

tribal community. At CES Chethackal, there are 61 female workers on the permanent rolls and 96 women on the casual rolls. At present there are 10 women tappers in this station and efforts are on to engage more women for tapping work. During the period under report women workers contributed 13,600 workdays in this station.

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## **PART - VI**

### **PROCESSING & PRODUCT DEVELOPMENT**

The Board continued to provide support to the rubber processing and rubber goods manufacturing units in the areas of factory design, product development, quality improvement and in treatment and disposal of effluent. These activities were carried out through –

- 1) Engineering Division
- 2) Processing and Quality Control Division
- 3) Factory Management Division
- 4) Rubber Processing & Market Development Division

During the period, organised 2 seminars for the promotion of low ammonia preserved natural rubber latex and RVNRL. One of the seminars was organised at Bombay and the other at Kottayam. Also participated in the International Rubber Conference held at Chennai during December 1998.

#### **I Engineering activities**

Progress of different items of work undertaken as part of the World Bank Aided Rubber Development Project is dealt with below.

##### **a) Rubber Wood India Pvt. Ltd.**

Under the World Bank Aided Project, there is a proposal for setting up a company for manufacturing processed rubber wood and different items made of rubber wood. Project report for this factory was prepared and all the engineering drawings and procurement of

machinery were finalised. Applications were made for obtaining clearances from various Govt. Departments for setting up this factory.

**b) Rubber Wood Testing Laboratory**

The lay out plan for the testing laboratory was prepared and list of equipments required for the laboratory was finalised with the help of the Consultants, M/s.IPIRITI, Bangalore. The civil work for the laboratory building is progressing and steps have already been taken to procure various testing equipments. Approval for the construction of the building was obtained. M/s.Trada Technology, UK engaged as Consultant for obtaining modern technology in rubber wood processing and in wood based products gave reports on two items of the task entrusted. These were not upto the expectation and the contract for this consultancy work was terminated.

**c) Model TSR Factory**

Construction of the factory building for model TSR factory is nearing completion. Electrification work is progressing. Orders have already been placed for procuring all the items of the machinery. Steps have been taken to construct the effluent treatment plant. All the clearances required from various Govt. Agencies for the model TSR factory have been obtained.

**d) Rubber Wood Promotion Campaign**

Advertisements were issued in various magazines for promoting rubber wood among users of this product in the country. TV commercial was also prepared for telecast. Participated in the exhibitions in Industrial Expo 1998 Cochin, Index 1998 Mumbai, India International Trade Fair, New Delhi, Rubber Asia Exhibition Cochin, Index 1999 Kottayam and also the exhibition arranged at Thiruvananthapuram by Architects. A directory of Rubber Wood Processors and Product Manufacturers was prepared and mailed to Architects and Interior Designers in the country. Assistance was given to Metro Wood Ltd. for establishing show room at Kottayam for the sale of rubber wood furniture. Articles on rubber wood were published in the newsletter of IRTF, for promoting use of



rubber wood. Finalised the programme for producing 15 minute TV documentary and 2 Commercial slots for 10 to 20 seconds and work order was given to M/s.Peacock Television, Cochin.

**e) Other services**

Project Report was prepared for 3 tonnes per day Crumb Rubber Factory for M/s.Trivandrum Rubber Works. Designs were prepared for rubber wood hospital furniture for the Govt. hospital, Thottakad, Kottayam Dist. Technical advice was given to Intermix Factory of Rubber Marketing Federation for enhancing production in the unit. A project report was prepared for establishing a Creaming Unit by the Kozhencherry Rubber Marketing Society. A survey of TSR factories in the country was made to study their functioning. Technical advice was given to M/s.Tellicherry Rubber Marketing Society for establishing a precured tread factory. Project report was prepared for diversification and expansion of the activities of Kaduthuruthy Rubber Marketing Society. A design was prepared for sheeting battery and coagulation tank for use by sheet rubber processing factory.

## **II Factory Management**

The Pilot Crumb Rubber Factory procured 148 tonnes of latex and 151 tonnes of field coagulum during the year 1998-99. The factory produced 500 metric tonnes of processed rubber including 42 metric tonnes processed under job work basis. Out of this, sold 340 tonnes and realised Ra.11.86 million. The value of raw material procured during the period is Rs.6.72 million.

### **PLPC**

PLPC processes field latex as concentrated latex. The factory procured 250 tonnes of field latex from different sources produced 221 tonnes of concentrated latex. Sales realisation during the year is Rs.6.51 million.

## **RVNRL**

In RVNRL plant, 7351 kg vulcanized latex was produced of which 7081 kg was sold. The remaining was used for R&D work. Gloves manufactured using RVNRL were supplied to different buyers in America and Germany through M/s.AV Thomas & Company. Attempts are being made to popularise use of RVNRL in balloon manufacturing. Depressed condition of market adversely affected the marketing of RVNRL. Consumers are interested in using low priced raw material especially when concentrated latex market faces serious competition, both within the country and outside.

### **III Processing and Quality Control**

Details of analytical work done by the Quality Control Laboratory during the period are noted below.

No. of parameters tested in the Central Lab	35,939 Nos.
Specification laboratory	17,975 Nos.

The Laboratory has collected Rs.968,571 during the year for services rendered, out of which Rs.729,115 was as testing fees and Rs.228,456 as share of marking fee from the Bureau of Indian Standards. Samples of processed rubber were tested and the results of the analysis were communicated to BIS.

### **IV Rubber Promotion and market development activities**

Provided assistance to the State Trading Corporation and RUBCO in quality screening in the procurement of rubber. The quality screening service was rendered in grading 14,150 tonnes of natural rubber.

**Under eleven schemes for the development of rubber marketing and processing activities by the Rubber Marketing Cooperative Societies and Companies jointly promoted by Rubber Producers' Societies and Rubber Board an amount of Rs.1,10,56,926/- was disbursed.**

## **PART - VII**

### **TRAINING & TECHNICAL CONSULTANCY**

#### **A. Training Services**

Training activities undertaken were mainly on (1) Rubber Cultivation (2) Rubber Processing and (3) Rubber Product Manufacture. Programmes conducted in each are given below.

Sl. No.	Training Courses	Objective	No. of batches	No. of participants
<b>Rubber cultivation</b>				
RC 01	Rubber culture and estate management	To impart indepth understanding on scientific methods of rubber cultivation, processing and estate management	3	65
RC 02	Training on controlled upward tapping	To familiarise farmers with modern tapping methods	8	281
RC 03	Training on bee-keeping in rubber plantations	To impart knowledge in bee-keeping in rubber plantations to farmers	7	177
<b>Rubber Processing</b>				
RP 01	Grading on sheet rubber	To give knowledge in scientific methods of sheet preparation and grading of sheet rubber	2	41
<b>Rubber Products Manufacture</b>				
RM 01	Training course on latex product manufacture	To provide scientific knowledge and skills in the use of NR latex for product manufacture	4	56
RM 02	Training course on dry rubber product manufacture	To provide scientific knowledge and skills in manufacture of rubber products using NR and SR	3	43
RM 03	To impart productwise training in rubber product manufacture	For giving advanced training in product manufacture	4	4

## **B Consultancy Services**

Continued service for promotion of rubber based industrial units. Rubber compound/product samples from about 200 units were tested and technical advice for the improvement of quality was provided. Developed 30 rubber products for various units/entrepreneurs.

A scheme to promote rubberisation of roads providing the technology to local bodies was implemented with outlay of Rs.20 lakh during 1998-99. This was well received by the Panchayats, Municipalities and the Cochin Corporation and 60 km of road under various local bodies were resurfaced using rubberised bitumen.

Another scheme for setting up a rubber products testing centre in Mumbai in collaboration with All India Rubber Industries Association is being implemented, under which the Board would provide Rs.20 lakh for purchase of testing equipments for the centre.

An Export Promotion Cell for the export promotion of NR and rubber products is being set up.

### **Rubber Park Project**

Work on the Rubber Park Project is in progress. About 60 acres of land at Irapuram near Perumbavoor in Ernakulam District has already been transferred to the joint venture company, 'Rubber Park India Pvt. Ltd' and acquisition of balance 60 acres is in the final stages of completion. The total planning and design of the Park has been completed, estimates for the works were prepared and steps were initiated for inviting tenders for civil works. The Kerala State Electricity Board has agreed to put up 110 KV Sub Station for the project on cost sharing basis. Preliminary survey was completed and arrangements for water supply scheme has been finalised. The Rubber Board has invested Rs.4.67 crore as equity capital contribution to the joint venture company on 31<sup>st</sup> March 1999.

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## **PART – VIII**

### **FINANCE & ACCOUNTS**

The services in Finance & Accounts mainly consisted of designing and operating the Accounting System, preparing Budget, financial statements and reports, exercising budgetary control, effective funds management, establishing and maintaining systems and procedures, advising on financial propriety and regularity of transactions, supervising computer applications, overseeing cost control, evaluation of projects/schemes, handling tax matters etc. The following activities were undertaken during the year.

- 1) Preparation of Annual Budget, Performance Budget, Foreign Exchange Budget etc and exercising budgetary control.
- 2) Maintenance of the accounts of the Board, preparation of Annual Accounts, presentation of the accounts for audit by the Accountant General, Kerala and the audited accounts to the Rubber Board/Ministry/Parliament.
- 3) Placing demands for grant from Government from time to time, receiving funds from Govt. and releasing for rubber promotional functions.
- 4) Advising on financial propriety and regularity of transactions and regulating payments.
- 5) Assisting the Cost Accounts Branch of the Ministry of Finance in ascertaining the cost of production and in fixing price of natural rubber.
- 6) Preparation of financial statements for project reports and schemes.
- 7) Dealing with Central Income Tax, Agricultural Income Tax and Sales Tax matters relating to the activities of the Board.
- 8) Coordinating the activities of the companies jointly promoted by the Rubber Board and the RPSs
- 9) Computerised Data Processing in the field of financial accounting, payroll etc.
- 10) Preparation of detailed cost tables and other financial statements supporting the proposals presented to the World Bank Mission for Mid-Term Review and restructuring the World Bank Assisted Rubber Project.

- 11) Drawal and disbursement of pay and other entitlements of the employees
- 12) Management of Pension Fund and General Provident Fund

## **Annual Accounts 1997-98**

Statutory Annual Accounts for the year 1997-98 were prepared and presented to the AG, Kerala within the stipulated time. The Audit Report and the Audited Accounts with the certificate received from the AG Kerala were forwarded to the Central Government.

## **Revised estimates 1998-99 and Budget Estimates 1999-2000**

The Revised Budget for 1998-99 and Budget Estimate for 1999-2000 were prepared within the time frame and submitted to the Government. Budget sanctioned for the year 1998-99 both Plan & Non-Plan put together was Rs.91.94 crore. As against this, the actual expenditure was Rs.83.94 crore (provisional). The financial target could not be achieved mainly due to non-realisation of internal resources owing to steep fall in the offtake of plantation inputs consequent on decline in price of NR. The total budget estimate proposed for the year 1999-2000 was Rs.124.85 crore against which the sanctioned budget is Rs.100.57 crore including the internal resources.

## **Funds Management**

### **a) General Fund**

Funds amounting to Rs.71.20 crore was received from Government as budgetary support including Rs.43.20 crore of Foreign Aid during the year 1998-99. The internal resource generation was about Rs.11.24 crore. The total expenditure for the year was Rs.83.94 crore (provisional).

## **b) General Provident Fund/Pension Fund**

The balance under the General Provident Fund as on 31<sup>st</sup> March 1999 was Rs.979.75 lakh and that under Pension Fund Rs.1056.03 lakh. The accumulations in the funds were invested to obtain optimum returns. The Board could declare interest on GPF accumulations @ 13% for the year 1998-99 and has maintained 3021 GPF accounts.

## **c) Cost Accounts**

Continued to collect cost data for furnishing to the Government and to ANRPC. Cost tables for raising rubber plantations per hectare in different regions have been updated. Detailed study on cost of production of planting materials in own nurseries for fixing the selling price of planting materials was conducted.

Various aspects relating to Sales Tax and Agricultural Income Tax were examined in detail and appropriate advice was given. Project report for large scale planting in Tripura, Karnataka and tribal land in Kerala were prepared and a Management Information System was developed to monitor progress.

## **d) Electronic Data Processing**

Processed pay roll of approximately 1200 employees and handled the financial accounting for the year. For the purpose of preparation of Budget, Nominal Rolls were prepared. GPF Account and Bankwise statement of pensioners were also prepared. An ambitious programme of computerisation of all the key areas has been taken up under the World Bank Assisted Rubber Project.

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## **PART - IX**

### **STATISTICS AND PLANNING**

The supply, demand, stock, price etc. of raw rubber was regularly monitored and review reports were prepared to evaluate the rubber situation and plan for the future course of action in maintaining the balance between the supply and demand. During the period under report, the Statistics & Import/Export Committee met on 11.12.1998 to review the supply-demand position of rubber. The Rubber Board, which met on 20.4.1998, 29.06.1998, 19.12.1998 & 27.03.1999 also, reviewed the demand and supply. The conclusions at the meetings were forwarded to the Government with explanatory comments.

The statutory monthly returns from rubber growers, dealers, processors and manufacturers were compiled and analysed every month to ascertain the production, consumption and stock of rubber. Sample studies in the small holding sector were continued to ascertain the monthly variation in production, stock etc. The data collected from various sources were compiled and production, import and stock of rubber were worked out on monthly basis.

The statistical information covering trend in production, consumption, stock, price, import/export of natural rubber, synthetic rubber and reclaimed rubber and many other details were compiled for publishing the 'Rubber Statistical News' (monthly). Indian Rubber Statistics Vol.22 (1997) was published using in-house computer facilities. This covers data on production and consumption of natural, synthetic and reclaimed rubber, distribution of rubber manufacturing units, dealer network, diverse rubber products, labour employment price and world rubber statistics. The volume continued to attract demand from the user community. The tables are being updated to bring out the next issue.



Statistical information was furnished to various organisations connected with the rubber industry. Materials were prepared for answering Parliament questions and Legislative Assembly interpellations pertaining to the import/export, production, price etc of natural rubber and the various aspects of rubber industry.

To ascertain the production of various grade of rubber, installed capacity etc during 1998-99, annual reports were collected from processors of centrifuged latex, block rubber, PLC and crepe mills.

The census work initiated in 1988 was continued in the reporting period also for which 218 Enumerators were temporarily engaged for carrying out the field work in 99 villages.

#### **1) Planning**

Annual Plan proposal on rubber for 1999-2000 was prepared and forwarded. The monthly progress of schemes under the World Bank assisted Project was monitored. Prepared terms of reference for the study on analysis, modelling, forecasting of consumption, production etc. of rubber. Evaluated the report on the study regarding impact of productivity enhancement scheme among small rubber holdings and performance of younger rubber plantations in Tripura.

#### **2) Association with World Organisations**

Continued to supply information about the NR industry in India to world organisations like the Association of Natural Rubber Producing Countries (ANRPC), Kuala Lumpur, Malaysia and the International Rubber Study Group (IRSG), London.

India hosted the 10<sup>th</sup> meeting of the ANRPC Committee on NR Statistics at Thiruvananthapuram from 22<sup>nd</sup> to 24<sup>th</sup> September 1998. Delegates from India, Malaysia, Vietnam, Srilanka and Thailand. During the year 1998-99 a special meeting of the ANRPC was held in Bangkok (Thailand) from 19<sup>th</sup> to 21<sup>st</sup> August 1998. The 22<sup>nd</sup> session of the ANRPC Assembly and 23<sup>rd</sup> meeting of the ANRPC Executive Committee were held

in the Chi Mints City, Vietnam from 26<sup>th</sup> to 29<sup>th</sup> January 1999. The Special Executive Committee of ANRPC was held in Kuala Lumpur, Malaysia from 7<sup>th</sup> to 9<sup>th</sup> September 1998, The 38<sup>th</sup> assembly of IRSG was held in Bali, Indonesia from 26<sup>th</sup> to 30<sup>th</sup> October, 1998. The Chairman, Rubber Board represented India at the meeting.

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## **PART - X**

### **LICENSING & EXCISE DUTY**

The Rubber Board has been vested with powers of assessment and collection of duty of excise (cess) on all rubber produced in India under Section 12 of the Rubber Act, 1947. The cess is collected on the quantity of rubber purchased or otherwise acquired by the manufacturers who consume it. Transactions in rubber are regulated under licences issued under Section 14 of the Rubber Act, 1947. Every licensee is bound to furnish returns to the Board showing the quantity of rubber transacted by them. It is on the basis of these returns that the assessment of cess is normally made.

#### **(I) Issuance of Licence**

##### **a) Issuance of licence for the year 1998-99**

The function of issue of licence includes new licences to prospective manufacturing units and renewal of the existing licences for the subsequent years. The details of licences issued during 1998-99 are furnished below.

|                     |                  |
|---------------------|------------------|
| Fresh licence       | 374 Nos.         |
| Renewal of licences | 5131 Nos.        |
| <b>TOTAL</b>        | <b>5505 Nos.</b> |

During the period, licences in respect of two manufacturers were suspended on account of serious irregularities and malpractices detected in their business. At the request of the concerned units, 9 manufacturers licences were cancelled. Thus, the total number of

licensed manufacturers as at the end of 31.3.1999 was 5494. The statewide distribution of licensed manufacturers as at the end of 31<sup>st</sup> March 1999 is as follows.

| Sl.No. | Name of State/Union Territory   | No. of units |
|--------|---------------------------------|--------------|
| 01     | Kerala                          | 1026         |
| 02     | Maharashtra                     | 629          |
| 03     | Punjab                          | 572          |
| 04     | Tamilnadu                       | 523          |
| 05     | West Bengal                     | 506          |
| 06     | Uttar Prades                    | 406          |
| 07     | Gujarat                         | 422          |
| 08     | Delhi                           | 306          |
| 09     | Haryana                         | 315          |
| 10     | Karnataka                       | 249          |
| 11     | Andhra Pradesh                  | 157          |
| 12     | Rajasthan                       | 93           |
| 13     | Madhya Pradesh                  | 91           |
| 14     | Pondicherry                     | 34           |
| 15     | Bihar                           | 33           |
| 16     | Goa, Dadra, Nagarhaveli & Daman | 24           |
| 17     | Chandigarh                      | 21           |
| 18     | Orissa                          | 16           |
| 19     | Himachal Pradesh                | 7            |
| 20     | Jammu & Kashmir                 | 7            |
| 21     | Assam                           | 6            |
| 22     | Tripura                         | 4            |
| 23     | Manipur                         | 1            |
|        | <b>Total</b>                    | <b>5494</b>  |



**b) Issuance of licence for the year 1999-2000**

Licences in respect of 3838 existing manufacturers were renewed and 35 new manufacturing units were given licences for the year 1999-2000.

**2) Letter of authorisation to purchase rubber**

Registered 1073 letters of authorisation of manufacturers in favour of their agents to purchase and despatch rubber. Special authorisation to 14 organisations/institutions to acquire rubber for experimental purpose were issued in lieu of regular licence after collecting the cess in advance.

Two new branches/purchase depots of manufacturers were also registered.

**3) Assessment and collection of duty of excise (cess) on rubber**

Assessment of cess on rubber for the year was Rs.4,987.09 lakh as against Rs.4,812.51 lakh during the previous year, based on 10,513 half yearly returns (Form 'M') collected from the manufacturers.

The duty of excise (cess) on rubber collected during the year was Rs.5,005 lakh against last year's collection of Rs.4,818 lakh. Out of this, a sum of Rs.4,848 lakh was remitted to the Consolidated Fund of India after deducting the cost of collection. The penal interest collected on belated remittance of cess was to the tune of Rs.9,91,795/-. A sum of Rs.77,92,685/- was collected from dealers towards cess on account of irregularities and discrepancies in stock. An amount of Rs.70,000/- was realised on forfeiture of Bank Guarantee for violations of the conditions of the licence.

The aggregate of licence fee and service charge collected during the year was Rs.10,69,284

## II Licensing of Dealers and Processors

Licensed dealers on 31.3.1999 was 10,559 as against 10,756 dealers at the end of March 1998. Among them 911 were new dealers. New licences were granted to 3 Processors, raising the total number of Processors as on 31.3.1999 to 143.

### 1) Distribution of dealers and processors

#### a) Statewise distribution of licensed dealers and processors is given below.

| Sl.No. | Name of State     | No. of dealers | Processors |
|--------|-------------------|----------------|------------|
| 01     | Kerala            | 9320           | 22         |
| 02     | Andhra Pradesh    | 1              | -          |
| 03     | Assam             | 21             | -          |
| 04     | Andaman & Nicobar | 8              | -          |
| 05     | Bihar             | 6              | -          |
| 06     | Chandigarh        | 6              | -          |
| 07     | Delhi             | 147            | -          |
| 08     | Goa               | 2              | -          |
| 09     | Gujarat           | 34             | -          |
| 10     | Haryana           | 44             | -          |
| 11     | Jammu & Kashmir   | 1              | -          |
| 12     | Karnataka         | 117            | 7          |
| 13     | Madhya Pradesh    | 8              | -          |
| 14     | Maharashtra       | 103            | -          |
| 15     | Meghalaya         | 9              | -          |
| 16     | Orissa            | 2              | -          |
| 17     | Punjab            | 183            | -          |
| 18     | Rajasthan         | 15             | -          |
| 19     | Tamilnadu         | 220            | 12         |
| 20     | Tripura           | 138            | 1          |
| 21     | Uttar Pradesh     | 81             | -          |
| 22     | West Bengal       | 90             | -          |
| 23     | Pondicherry       | 2              | -          |
| 24     | Himachal Pradesh  | 1              | -          |
|        | <b>TOTAL</b>      | <b>10550</b>   | <b>143</b> |

**b) Districtwise distribution of dealers in Kerala**

| Sl.No. | Name of District   | No. of dealers |
|--------|--------------------|----------------|
| 01     | Alappuzha          | 124            |
| 02     | Ernakulam          | 1259           |
| 03     | Idukki             | 452            |
| 04     | Kannur             | 428            |
| 05     | Kasaragod          | 117            |
| 06     | Kollam             | 1127           |
| 07     | Kottayam           | 2543           |
| 08     | Kozhikode          | 217            |
| 09     | Malappuram         | 410            |
| 10     | Palakkad           | 328            |
| 11     | Pathanamthitta     | 1203           |
| 12     | Thiruvananthapuram | 885            |
| 13     | Thrissur           | 155            |
| 14     | Wynad              | 72             |
|        | <b>TOTAL</b>       | <b>9320</b>    |

**2) Licences for 1998-99**

Licences of 2459 dealers and of 39 processors whose validity expired on 31.3.1999 were renewed.

**3) Registration of Branches/Agents**

During the year under report, registration was granted to 506 branches of dealers/processors. As on 31.3.1999, 1098 branches of dealers/processors were in operation. A total of authorisation issued by 534 principal dealers in favour of their agents were also registered.

### III Market Intelligence

Detection of bogus/unlicensed dealing in rubber, arranging surprise inspection/squad inspection of the business premises of the dealers for verification of books of accounts for correctness of physical stock, cross verification of the statutory returns for ascertaining correctness of the quantity of rubber acquired, road checking and surprise visit to checkposts and Railway Parcel offices to prevent evasion of cess on rubber formed the important functions in market intelligence. Inspections were also conducted for ascertaining suitability of the applicants and their business premises to hold licence to deal in rubber, registration of branches of the dealers, for approval of new additional premises and for issue of special authorisation for field latex collection.

Three Inspection Squads which functioned from North Zone (Kozhikode), Central Zone (Kottayam) and South Zone (Thiruvananthapuram) and the Inspectors (Market Intelligence) helped to a great extent in arresting illicit trade in rubber and thereby improve the cess collection. The inspections also helped in collecting monthly returns from a large number of rubber dealers.

Road checking of the vehicles on the National Highway helped in detecting transportation of 6,000 kg of unaccounted rubber. Based on Court Orders, this was forfeited and sold in public auction. The sale proceeds amounting to Rs.1,68,654/- was deposited with the Court.

Inspection of the books of accounts of two dealers in Kasaragod and Palakkad Districts disclosed unaccounted despatch of 280,000 kg of rubber out of Kerala. On pointing out the irregularity they agreed to make good the cess loss. Accordingly Re.1 lakh was collected. Remittance of the balance Rs.180,000 is awaited.

Counter checking at the checkpost at Mahe of the records of a dealer in Kottayam District revealed despatch of 10,000 kg of rubber unaccounted. Following this licence of the dealer was cancelled.



Similarly, malpractice of another dealer from Kasaragod District who indulged in making corrections in the documents was detected wherein against the actual transport of 145,200 kg of rubber under 35 delivery notes only 13,720 kg was shown in the records. A show cause notice was issued for cancellation of his licence and steps were taken for initiation of prosecution.

The surprise checking at Wadakkancherry and Irinjalakkuda Railway Stations on different occasions unearthed booking of rubber consignments in the guise of waste rubber/old chappels by bogus parties. Based on the complaint filed before the Railway Police Thrissur, the rubber in question was seized and kept under their custody for further investigation under Crime No.21 & 22/98. This seizure has helped to a great extent in curtailing the flow of unaccounted rubber by train from that region.

During the period under report, the squad inspected 1606 dealers' business premises and detected 85 cases of unlicensed dealing. Irregularities in 378 cases involving 1032 MT as shortage/unaccounted stock/irregular sales were also noticed. Consequently licences of the 4 dealers were suspended and additional revenue of Rs.889,764/- was realised from the parties involved.

#### **Check Posts/Interstate Movement of Rubber**

In order to strengthen surveillance on interstate movement of rubber, regular checking of the documents accompanying the rubber consignments was done at the three check posts at Walayar in Palakkad District, Bengra Manjeswaram in Kasaragod District of Kerala and Kavalkinar in Thirunelveli District of Tamilnadu. This helped in detecting illicit transport of rubber. During the year 1998-99, the officials at Walayar, Manjeswaram and Kavalkinar checkpoints detained 22 consignments on various grounds. Of this, 12 were allowed to cross the border on producing valid documents/satisfactory explanation. Two consignments were released only after collecting Rs.20,865/- towards security deposit equivalent to the cess involved in the quantity as the consignors failed to produce convincing evidence/explanation for the lapses. As the consignors in the remaining 8 cases had caused loss of cess on account of their past irregular transactions, the consignments

were released only after collecting a sum of Rs.16,44,021/- equal to the cess amount on the rubber illegally transacted.

During the period under report 50,505 consignments of rubber passed through the three check posts as shown below.

|       | <u>Name of check posts</u>     | <u>No. of consignments</u> |
|-------|--------------------------------|----------------------------|
| (i)   | Walayar, palakkad Dist.        | 36,575                     |
| (ii)  | Manjeswaram, Kasaragod Dist.   | 8,830                      |
| (iii) | Kavalkinar, Thirunelveli Dist. | 5,100                      |
|       | <b>TOTAL</b>                   | <b>50,505</b>              |

#### **Cross checking of monthly returns**

The monthly returns and copies of Form N declarations received from 495 dealers/manufacturers/processors and estates were cross checked. Discrepancies in 15 cases involving unaccounted transaction to the tune of 3194 MT were detected. Necessary clarifications were obtained from the concerned parties and a sum of Rs.12,66,098/- was realised during 1998-99 on irreconcilable transactions.

The close monitoring of the purchases of certain upcountry dealers and manufacturers helped in assessing and collecting a sum of Rs.14 lakh towards cess on rubber. Thus, on account of the special efforts of the Inspection Squad, the checkpoint machinery and purchase monitoring cell, a sum of Rs.52 lakh could be assessed and collected during 1998.

#### **SUB/LIAISON OFFICES**

With a view to improve collection of cess on rubber and to maintain liaison with various Ministries, trade and industry, the Board maintains 9 Sub/Liaison Offices in the major consuming centres outside Kerala at Chennai, Bangalore, Secunderabad,



TABLE-1

**PART-XI**  
**STATISTICAL TABLES**

**PRODUCTION,IMPORT,EXPORT & CONSUMPTION OF NR**

(Tonnes)

| Month        |    | Production    | Import *     | Export      | Consumption<br>(Indigenous &<br>Imported) |
|--------------|----|---------------|--------------|-------------|-------------------------------------------|
| April        | 98 | 41735         | 2856         | 263         | 45190                                     |
| May          | "  | 47640         | 923          | 62          | 46020                                     |
| June         | "  | 41220         | 887          | 215         | 48250                                     |
| July         | "  | 38580         | 3070         | 302         | 47710                                     |
| August       | "  | 46790         | 3284         | 67          | 47550                                     |
| September    | "  | 48470         | 5098         | 172         | 49910                                     |
| October      | "  | 57130         | 1820         | 0           | 48590                                     |
| November     | "  | 71065         | 1382         | 135         | 52400                                     |
| December     | "  | 75750         | 1134         | 181         | 53900                                     |
| January      | 99 | 69710         | 3588         | 105         | 51155                                     |
| February     | "  | 31560         | 1375         | 126         | 48535                                     |
| March        | "  | 35395         | 890          | 212         | 52335                                     |
| <b>Total</b> |    | <b>605045</b> | <b>26307</b> | <b>1840</b> | <b>591545</b>                             |

\* Source: DGCI &amp; S, Calcutta



Table-2

**STOCK OF NATURAL RUBBER AT THE END OF EACH MONTH**

(Tonnes)

| Month     |    | Growers,dealers &<br>processors | Manufacturers | Total<br>(Rounded) |
|-----------|----|---------------------------------|---------------|--------------------|
| April     | 98 | 107265                          | 39180         | 146445             |
| May       | "  | 112330                          | 36600         | 148930             |
| June      | "  | 107575                          | 35015         | 142590             |
| July      | "  | 98895                           | 37050         | 135945             |
| August    | "  | 101550                          | 36850         | 138400             |
| September | "  | 107920                          | 33010         | 140930             |
| October   | "  | 116195                          | 35015         | 151210             |
| November  | "  | 135700                          | 35520         | 171220             |
| December  | "  | 157785                          | 36290         | 194075             |
| January   | 99 | 171745                          | 44365         | 216110             |
| February  | "  | 156560                          | 43825         | 200385             |
| March     | "  | 144465                          | 43500         | 187965             |

Table - 3

**PRODUCTION, IMPORT & CONSUMPTION OF SYNTHETIC RUBBER**

(Tonnes)

| Month        |    | Production*  | Import **    | Consumption   |
|--------------|----|--------------|--------------|---------------|
| April        | 98 | 4695         | 6783         | 11990         |
| May          | "  | 5964         | 6708         | 11740         |
| June         | "  | 5632         | 4507         | 12530         |
| July         | "  | 5793         | 10096        | 12730         |
| August       | "  | 6761         | 5956         | 12855         |
| September    | "  | 4582         | 8919         | 13680         |
| October      | "  | 4953         | 5203         | 13295         |
| November     | "  | 5827         | 6605         | 13250         |
| December     | "  | 5745         | 6746         | 14150         |
| January      | 99 | 5558         | 6509         | 13590         |
| February     | "  | 5461         | 4679         | 12705         |
| March        | "  | 6514         | 5464         | 13880         |
| <b>Total</b> |    | <b>67485</b> | <b>78175</b> | <b>156395</b> |

\* Provisional

\*\* Source: DGCI &amp; S, Calcutta.

TABLE-4

**PRODUCTION & CONSUMPTION OF RECLAIMED RUBBER**

(Tonnes)

| Month        |    | Production*  | Consumption  |
|--------------|----|--------------|--------------|
| April        | 98 | 5200         | 5015         |
| May          | "  | 5100         | 4980         |
| June         | "  | 5510         | 5480         |
| July         | "  | 5130         | 5075         |
| August       | "  | 5440         | 5330         |
| September    | "  | 5650         | 5555         |
| October      | "  | 5140         | 5050         |
| November     | "  | 5210         | 5160         |
| December     | "  | 5410         | 5350         |
| January      | 99 | 5375         | 5340         |
| February     | "  | 5320         | 5305         |
| March        | "  | 5495         | 5455         |
| <b>Total</b> |    | <b>63980</b> | <b>63095</b> |

\* Indigenous purchase by manufacturers.

TABLE-5

**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF NATURAL RUBBER IN INDIA**

(Rs/Quintal)

|                   |    | RSS-1 | RSS-2 | RSS-3 | RSS-4 | RSS-5 | Ungraded | ISNR-5 | ISNR-10 | ISNR-20 | ISNR-25 |
|-------------------|----|-------|-------|-------|-------|-------|----------|--------|---------|---------|---------|
| Month             | 98 | 3068  | 2894  | 2729  | 2653  | 2588  | 2495     | 2954   | 2746    | 2617    | 2517    |
|                   | "  | 3500  | 3400  | 2961  | 2892  | 2755  | 2655     | 3605   | 2960    | 2685    | 2585    |
|                   | "  | 3925  | 3713  | 3613  | 3457  | 3202  | 2976     | 3768   | 3530    | 3185    | 3085    |
|                   | "  | 3854  | 3700  | 3476  | 3314  | 3090  | 2898     | 3582   | 3381    | 3079    | 2979    |
|                   | "  | 3642  | 3479  | 3214  | 3022  | 2898  | 2755     | 3232   | 3037    | 2860    | 2760    |
|                   | "  | 3536  | 3377  | 3108  | 2935  | 2844  | 2757     | 3130   | 2997    | 2750    | 2650    |
|                   | "  | 3840  | 3621  | 3421  | 3338  | 3112  | 2941     | 3518   | 3315    | 2941    | 2841    |
|                   | "  | 3781  | 3600  | 3404  | 3289  | 3113  | 2792     | 3483   | 2915    | 2766    | 2666    |
|                   | "  | 3513  | 3213  | 3098  | 2968  | 2856  | 2575     | 3249   | 2834    | 2577    | 2477    |
|                   | 99 | 3451  | 3224  | 2948  | 2695  | 2608  | 2465     | 2847   | 2695    | 2531    | 2431    |
|                   | "  | 3263  | 3067  | 2788  | 2625  | 2536  | 2427     | 2656   | 2594    | 2505    | 2405    |
|                   | "  | 3261  | 3050  | 2872  | 2737  | 2672  | 2519     | 2853   | 2746    | 2607    | 2507    |
| Average (1998-99) |    | 3553  | 3362  | 3136  | 2994  | 2856  | 2689     | 3240   | 2979    | 2759    | 2659    |

Transaction



Y AVERAGE PRICE OF VARIOUS GRADES OF NR IN KUALA LUMPUR MARKET

(Rs/Quintal)

|         | RSS-1 | RSS-2 | RSS-3 | RSS-4 | RSS-5 | SMR-5 | SMR-10 | SMR |
|---------|-------|-------|-------|-------|-------|-------|--------|-----|
| 98      | 3064  | 2994  | 2988  | 2871  | 2823  | 3112  | 3015   |     |
| "       | 3173  | 3109  | 3104  | 2992  | 2939  | 3238  | 3112   |     |
| "       | 2965  | 2918  | 2912  | 2801  | 2748  | 2968  | 2802   |     |
| "       | 2986  | 2940  | 2934  | 2827  | 2776  | 2791  | 2614   |     |
| "       | 2790  | 2749  | 2744  | 2636  | 2585  | 2595  | 2468   |     |
| "       | 2872  | 2828  | 2822  | 2705  | 2650  | 2557  | 2507   |     |
| "       | 3095  | 3050  | 3044  | 2927  | 2871  | 2720  | 2610   |     |
| "       | 3057  | 3011  | 3005  | 2887  | 2831  | 2732  | 2582   |     |
| "       | 2862  | 2809  | 2804  | 2695  | 2639  | 2643  | 2545   |     |
| 99      | 3028  | 2923  | 2906  | 2783  | 2727  | 2650  | 2574   |     |
| "       | 2929  | 2771  | 2754  | 2635  | 2579  | 2676  | 2593   |     |
| "       | 2715  | 2613  | 2597  | 2478  | 2422  | 2449  | 2366   |     |
| average | 2961  | 2893  | 2885  | 2770  | 2716  | 2761  | 2649   |     |

**ANNEXURE****LIST OF MEMBERS OF THE RUBBER BOARD AS  
ON 31.03.1999**

- |    |                                                                                                                |                                                                                                                                                                                         |
|----|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Shri. KJ Mathew IAS</b>                                                                                     | <b>Chairman, Rubber Board</b>                                                                                                                                                           |
| 2. | <b>Shri. V Krishnamoorthy IAS<br/>APC, Govt. of Kerala.</b>                                                    | <b>Nominated by the Govt. of Kerala to<br/>represent that State.</b>                                                                                                                    |
| 3. | <b>Shri. PK Chithra Bhanu<br/>Chairman, PCK Ltd<br/>Kottayam,</b>                                              | <b>Nominated by the Govt. of Kerala to<br/>represent that State.</b>                                                                                                                    |
| 4. | <b>Shri. KS Sripathi<br/>Secretary to Govt. of Tamil Nadu.<br/>Environment &amp; Forest Dept.<br/>Chennai.</b> | <b>Nominated by the Govt. of Tamilnadu<br/>to represent them.</b>                                                                                                                       |
| 5. | <b>Shri. George John<br/>Kailash Rubber Co. Ltd<br/>Kottayam</b>                                               | <b>Elected by the Large Growers in the<br/>State of Kerala.</b>                                                                                                                         |
| 6. | <b>Shri. K Jacob Thomas<br/>Managing Director<br/>Vaniampara Rubber Co. Ltd<br/>Kottayam</b>                   | <b>- do -</b>                                                                                                                                                                           |
| 7. | <b>Shri. MD Joseph<br/>Manniparambil<br/>Kanjirappally.</b>                                                    | <b>- do -</b>                                                                                                                                                                           |
| 8. | <b>Shri. S Ramachandran<br/>Vaikundom Rubber Co. Ltd<br/>Pattom Palace PO<br/>Thiruvananthapuram.</b>          | <b>Elected by the Large Growers in the<br/>State of Tamilnadu.</b>                                                                                                                      |
| 9. | <b>Shri. PC Chacko MP<br/>16, Janpath<br/>New Delhi - 110 001</b>                                              | <b>Elected by Lok Sabha under Section 4<br/>(3) (e). They shall hold office for a<br/>period of 3 years or till they cease to<br/>be Member of Parliament whichever<br/>is earlier.</b> |

- 14
- |                                                                                                                                                        |                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>10. <b>Shri. Surender Singh Barwala</b><br/>19, Canning Lane<br/>New Delhi - 110 011</p>                                                            | <p><i>Elected by Lok Sabha under Section 4 (3) (e). They shall hold office for a period of 3 years or till they cease to be Member of Parliament whichever is earlier.</i></p> |
| <p>11. <b>Shri. Vayalar Ravi MP</b><br/>15, Pandit Pant Marg<br/>New Delhi - 110 001.</p>                                                              | <p><i>Elected by Rajya Sabha under Section 4 (3) (e). He shall hold office for a period of 3 years or till cease to be Member of Parliament whichever is earlier.</i></p>      |
| <p>12. <b>Prof. NM Joseph</b><br/>Neendukunnel<br/>Arunapuram PO<br/>Pala.</p>                                                                         | <p><i>Nominated by the Central Govt. to represent small growers of Kerala.</i></p>                                                                                             |
| <p>13. <b>Shri. KG Ravi</b><br/>Indira Bhavan<br/>Vellayambalam<br/>Thiruvananthapuram.</p>                                                            | <p>- do -</p>                                                                                                                                                                  |
| <p>14. <b>Shri. Kanam Rajendran</b><br/>Kanam PO<br/>Kottayam.</p>                                                                                     | <p>- do -</p>                                                                                                                                                                  |
| <p>15. <b>Shri. Suresh Elwadhi</b><br/>Chairman. AIRLA<br/>Phelps Building, 2<sup>nd</sup> floor<br/>9 - A Connaught Place<br/>New Delhi - 110 011</p> | <p><i>Nominated by the Central Govt. to represent Rubber Goods Manufacturers.</i></p>                                                                                          |
| <p>16. <b>Shri. VK Modi</b><br/>Chairman. ATMA.</p>                                                                                                    | <p>- do -</p>                                                                                                                                                                  |
| <p>17. <b>Shri. Pappanmkode Unni</b><br/>Pappanamkode House<br/>Industrial Estate<br/>Thiruvananthapuram</p>                                           | <p><i>Nominated by the Central Govt. to represent labour interests.</i></p>                                                                                                    |
| <p>18. <b>Shri. C Anantha Krishnan</b><br/>Tamil Manila Congress<br/>Kanyakumari.</p>                                                                  | <p>- do -</p>                                                                                                                                                                  |
| <p>19. <b>Shri. P Lalaji Babu</b><br/>CITU State Committee Office<br/>Deshabhimani Road<br/>Thiruvananthapuram.</p>                                    | <p>- do -</p>                                                                                                                                                                  |

- |     |                                                                                             |                                                                         |
|-----|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 20  | <i>Shri. PD George<br/>Raju Bavan<br/>Kota PO<br/>Chengannoor.</i>                          | <i>- do -</i>                                                           |
| 21. | <i>Shri. PJ Joseph<br/>6/379, Bank Road<br/>Kainady, Kozhikkode.</i>                        | <i>Nominated by the Central Govt. to<br/>represent other interests.</i> |
| 22. | <i>Shri. K Joseph Monippally<br/>Advocate, Kakkanadu PO<br/>Kochi.</i>                      | <i>Nominated by the Central Govt. to<br/>represent other interests.</i> |
| 23  | <i>Shri. K Suresh Ballal<br/>Ballal Bagh<br/>Karnataka.</i>                                 | <i>- do -</i>                                                           |
| 24. | <i>Shri. K Pankajakshan<br/>Indu Mahal Pettah PO<br/>Thiruvananthapuram.</i>                | <i>- do -</i>                                                           |
| 25. | <i>Shri. AK Krishnakumar<br/>Rubber Production Commissioner<br/>Rubber Board, Kottayam.</i> | <i>Ex-officio</i>                                                       |
| 26  | <i>Vacant</i>                                                                               | <i>Executive Director</i>                                               |

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➡



# ANNUAL REPORT

FOR  
THE YEAR 1999—2000



## THE RUBBER BOARD

[Govt. of India, Ministry of Commerce and Industry]

KEEZHKUNNU, KOTTAYAM-686 002  
KERALA STATE

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# **ANNUAL REPORT ON THE WORKING OF THE RUBBER BOARD DURING 1999-2000**

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## **PART - I INTRODUCTION**

Rubber plays an important role in the industrial and economic development of the country, being a material used to make thousands of utility products. The Government of India have constituted the Rubber Board under the Rubber Act, 1947 as a body corporate, primarily to promote natural rubber production in the country. The Board established the Rubber Research Institute of India in 1955 to undertake scientific, technological and economic research.

The research efforts have made significant contributions to the rubber industry. India evolved the high yielding clone RR II 105 with average productivity around 2,000 kg per hectare. Switch-over from seedlings to budding, discriminatory fertilizer application after soil and leaf analysis, pest and disease management practices, improved crop exploitation techniques and improved crop processing played a vital role in enhancing rubber production and upgrading quality of the processed rubber. Integrated approach to reduce the cost of production and improve quality and competitiveness, crop exploitation in association with yield stimulation, processing technically specified rubber and process aid rubbers, developing blends of NR with synthetic rubbers, developing better formulae for manufacturing processes, development of solar dryer for curing raw rubber etc. are some of the thrust areas in research and development activities.

The Rubber Plantation Development Scheme implemented from the VI Plan period is by far the largest scheme operated for development and promotion of rubber cultivation in the country. The scheme provides for technical support coupled with

financial assistance to small growers in the traditional areas and in the non-traditional areas to undertake rubber cultivation. Input subsidy and guidance for adopting scientific techniques at all stages of planting and maintenance are extended in addition.

### **Performance during 1999-2000**

The overall performance of the rubber plantation industry during 1999-2000 has been impressive. Production of natural rubber increased to 622,265 tonnes from 605,045 tonnes recording a growth rate of 2.8%. The consumption of natural rubber during the year increased by 6.2% to 628,110 tonnes from 591,545 tonnes in 1998-99.

### **Price**

During the year, the monthly average price of rubber was Rs.3,099 per quintal for RSS 4 grade as against Rs.2,994/- in the previous year. A quantity of 5,989 tonnes of different grades of NR was exported during 1999-2000.





## **PART - II**

# **CONSTITUTION AND FUNCTIONS**

### **INTRODUCTION**

The Indian Rubber Board was constituted under the Rubber (Production & Marketing) Act, 1947, which came into force on 19<sup>th</sup> April 1947 with the object of promoting the development of the rubber industry in India. The Rubber Production & Marketing (Amendment) Act of 1954 made certain changes in the constitution of the Board and its name was changed as The Rubber Board. This Act came into force on 1<sup>st</sup> August 1955. The Rubber Act was further amended by the Rubber (Amendment) Act, 1960, the Rubber (Amendment) Act, 1982 and by the Rubber (Amendment) Act, 1994. The Amendment in 1982 was to appoint a part time/whole time Chairman for the Board and an Executive Director on whole time basis (if considered necessary). The amendment in 1994 was to enhance the ceiling limit of cess from Re.0.50 to Rs.2/- per kg.

### **CONSTITUTION**

The Rubber Board functions under the Ministry of Commerce & Industry of the Government of India with a full time Chairman as principal executive, responsible for discharging the following functions under Section 8 of the Rubber Act.

- (i) **Promote by such measures as it thinks fit the development of the rubber industry. The measures 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) supply of technical advice to rubber growers;
  - d) improving the marketing of rubber;

- e) 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; and
- g) carrying out any other duties which may be vested with the Board.

**(ii) It shall also be the duty of the Board**

- a) to advise the Central Govt. on all matters relating to the development of rubber industry, including the import and export of rubber;
- b) to advise the Central Govt. with regard to participation in any international conference or scheme relating to rubber;
- c) to submit to the Central Govt. and such other authorities as may be prescribed half yearly reports on its activities and the working of the Act; and
- d) to prepare and furnish such other reports relating to the rubber industry as may be required by the Central Govt. from time to time.

**There are 25 other members consisting of –**

- a) Two members to represent the State of Tamilnadu of whom one shall be a person representing the rubber producing interests;
- b) Eight members to represent the State of Kerala, six of whom shall represent the rubber producing interests, three of such persons being representing small growers;
- c) Ten members to be nominated by the Central Govt. of whom two shall represent the manufacturers and four labour;
- d) Three members of Parliament of whom two shall be elected by the Lok Sabha and one by the Rajya Sabha;
- e) The Executive Director (ex-officio); and
- f) The Rubber Production Commissioner (ex-officio).

The position of Executive Director has not been filled up so far.

List of members of the Board as on 31.3.2000 is given at the end of this report.

Seven Committees have been formed to review the Board's activities vis-à-vis the functions as laid down under Section 8 of the Rubber Act. These are Executive

Committee, Research & Development Committee, Market Development Committee, Planting Committee, Statistics & Import/Export Committee, Labour Welfare Committee and Staff Affairs Committee.

Shri PD George, representing labour interests in the Board was elected as Vice Chairman on 20.7.1999, for the period upto 21/4/2000.

Shri KJ Mathew IAS, continued to be the Chairman of the Board.

### **MEETINGS OF THE BOARD AND ITS COMMITTEES**

The following meetings of the Board and of the Committees were held during the year.

|    |                                      |                                                                                    |
|----|--------------------------------------|------------------------------------------------------------------------------------|
| a) | <b>Board meetings</b>                | 137 <sup>th</sup> meeting on 20/07/1999<br>138 <sup>th</sup> meeting on 04/12/1999 |
| b) | <b>Committee meetings</b>            |                                                                                    |
|    | Executive Committee                  | 29/06/1999 & 27/11/1999                                                            |
|    | Market Development Committee         | 20/03/2000                                                                         |
|    | Planting Committee                   | 24/3/2000                                                                          |
|    | Research & Development Committee     | 22/3/2000                                                                          |
|    | Labour Welfare Committee             | 30/11/1999                                                                         |
|    | Statistics & Import/Export Committee | 05/07/1999, 30/11/1999 & 24/3/2000                                                 |
|    | Staff Affairs Committee              | 30/12/1999                                                                         |

### **ORGANISATIONAL SET UP**

The activities of the Rubber Board are carried out by eight departments viz. Rubber Production, Administration, Rubber Research, Processing & Product Development, Training & Technical Consultancy, Finance & Accounts, Statistics & Planning and Licensing & Excise Duty; headed respectively by the Rubber Production Commissioner, the Secretary, the Director of Research, the Director (P&PD), the Director (T&TC), the Director (Finance), the Jt. Director (S&P) and the Director (L&ED).

The Headquarters of the Board along with the Administration, Rubber Production, Statistics & Planning, Licensing & Excise Duty and Finance & Accounts Departments remained located at own premises in Keezhukunnu, Kottayam-686 002. The Department of Research, Department of P&PD and the Department of Training & Technical Consultancy are located at the Rubber Research Institute of India campus at Kottayam – 686 009.

There are nine Sub/Liaison Offices under the Licensing & Excise Duty Department. The Rubber Production Department has 3 Zonal Offices, 2 Nucleus Rubber Estate & Training Centres, 6 Supervisory Offices, 40 Regional Offices, 2 ADO's Offices, 170 Field Offices, 15 Regional Nurseries and 23 Tappers' Training Schools located at different rubber growing regions.

The Research Department runs two Regional Research Stations in Kerala and a Regional Station each in Tamilnadu, Karnataka, Maharashtra (Dapchhari), Orissa, West Bengal, Assam, Mizoram, Meghalaya and Tripura. The Pilot Block Rubber Factory located at Kottayam, the Pilot Latex Processing Factory located at the Central Experiment Station at Chethackal and the Pilot Plant for Radiation Vulcanisation of Natural Rubber at Kottayam are run by the Department of Processing and Product Development.

The Chairman exercises administrative control over all the Departments and Offices of the Board. The total number of Officers and staff under the Board as on 31/03/2000 was 2330; consisting of 246 Group 'A' Officers, 646 Group 'B' Officers, 1250 Group 'C' staff and 188 Group 'D' staff. Very cordial relations existed between the staff and the executive personnel. Their good work has resulted in the impressive record of achievement during the year.

The activities of the different departments are summarised in the following pages.





### **PART - III**

## **RUBBER PRODUCTION**

Main function of the Rubber Production Department is to implement strategies adopted for increasing production of natural rubber. The department plans and implements various programmes for increasing production of natural rubber such as -

- 1) Expansion of area under rubber by assisting newplanting by providing technical support as well as financial incentives.
- 2) Encourage replanting of old uneconomic plantations with high yielding varieties.
- 3) Assisting the rubber planters by providing technical and financial assistance to increase productivity of existing plantations through adoption of scientific management practices, improving quality of produce by better post harvest handling and processing; and
- 4) Empower the small holding sector by forming farmer groups namely, Rubber Producers Societies (RPSs) and equipping them to function as self help groups of small growers. These RPSs are helped to undertake extension services and other development activities of the Board as part of devolution of extension functions.

The Department also conducts various training programmes for farmers , tappers and workers in the field.

In order to achieve these objectives, the Department is implementing various schemes which provide for technical as well as financial assistance to the growers. A series of educational training and visit programmes for needy rubber growers are being arranged by the dept. The print media, audiovisual equipments, films on technical subjects etc. are being extensively used in the technology dissemination process. Demonstration of scientific plantation practices in farmers' fields is another programme of the Dept. Specialised schemes for pollution control in rubber plantations by generation of bio gas from rubber effluent, the gas being used for drying rubber sheets resulting in the saving of fuel wood, bee-keeping in rubber plantations for additional

income generation etc., are also being formulated and implemented by the Dept. Certain identified women development activities aimed at empowerment of the women engaged in rubber plantation and allied areas are also being undertaken by the Dept. These efforts help achieving a sustainable development in the rubber plantation sector. As a recognition and encouragement to rubber growers and Rubber Producers Societies, the Board has instituted one award each for the best rubber grower and the best RPS.

Based on the specific requirements of the growers in the non- traditional areas, separate schemes have been formulated for operation in the non-traditional region. Similarly certain specific projects such as Block plantation project and Tribal rubber plantation project and schemes to provide assistance for boundary protection, additional incentive for planting materials etc. are also being implemented exclusively for the benefit of SC/ST category of growers. Most of the schemes were funded under the World Bank Assisted Rubber Project while a few other schemes are funded out of the cess collected by the Board.

A gist of the various projects/schemes operated through the Dept. and the progress achieved during the financial year 1999-2000, are given below.

**Rubber Plantation Development Scheme.** – This is the most important scheme of the Board and is mostly funded from World Bank Assisted Rubber Project. Details of applications received, area, permits issued, permitted area etc., during 1999-2000 are as follows.

| Sl. No. | Particulars               | Units                 |
|---------|---------------------------|-----------------------|
| 1       | No. of applications.      | 17187                 |
| 2       | Area as per applns. (ha.) | 12921                 |
| 3       | No. of permits issued.    | 11763                 |
| 4       | Permitted area (ha.)      | 7755                  |
| 5       | Amount disbursed          | <b>Rs 19.89 crore</b> |

Field inspection and processing of applications are continuing and permits will be issued in all eligible cases within the next few months. Due to low price of rubber, there was a decline in the planting tempo during the year.

**Tribal Rubber Plantation Project** – This project is aimed at rehabilitation of selected tribal families of Kerala and is funded out of cess collection and contribution from Govt. of Kerala. The area planted under the project during 1999-00 was 210.00 hectares and the cumulative area planted under the project upto 31.3.2000 was 1683.00 hectares.

**Block Rubber Plantation Project** – This project was formulated for the economic settlement of SC/ST category of people in non-traditional areas who practice shifting cultivation. The project is currently operated in Tripura, Orissa, Andhra Pradesh and Karnataka with financial support from the concerned State Govts. Details of planting under this project are as follows.

| State           | Planting<br>during 1999-00 | Cumulative Total<br>upto 31.3.2000 |
|-----------------|----------------------------|------------------------------------|
| Tripura         | 136.00 ha.                 | 2054.00 ha.                        |
| Orissa.         | 10.00 ha                   | 76.00 ha.                          |
| Andhra pradesh. | 17.00 ha.                  | 72.00 ha.                          |
| Karnataka       | 57.00 ha                   | 57.00 ha.                          |
| <b>Total</b>    | <b>220.00 ha.</b>          | <b>2259.00 ha.</b>                 |

In the State of Assam also a new scheme for Block planting in around 200 ha. under the Karbi Anglong District Council area was proposed. But the implementation of the project is pending because the Karbi Anglong District Council could not yet identify and hand over the required land in trouble free area.

**Insurance of Rubber Plantations** – Rubber plantations are insured against natural calamities. Small plantations coming under rubber plantation development scheme are compulsorily insured. Insurance of mature plantations and also immature plantations

coming outside the RPD Scheme, is optional to the growers. This scheme is operated with the support of nationalised insurance companies. Details of plantations insured and compensation paid are given below.

| Item                         | During<br>1999-00 | Cumulative total<br>upto 31.3.2000 |
|------------------------------|-------------------|------------------------------------|
| Immature area insured. (ha.) | 13050.00          | 76808.00                           |
| Mature area insured. (ha)    | 480.00            | 9645.00                            |
| Compensation paid (Rs.Lakh.) | 21.27             | 132.39                             |

**Schemes operated through Extension wing** – These need based schemes funded out of cess collection are formulated and implemented for providing financial and technical assistance for construction of smoke houses, purchase of rollers, beekeeping in rubber plantations etc. The targets and achievements under these schemes during 1999-2000 are given below.

| Sl.<br>No | Scheme                                       | Target   |                           | Achievement |                           |
|-----------|----------------------------------------------|----------|---------------------------|-------------|---------------------------|
|           |                                              | Physical | Financial<br>(Rs.in lakh) | Physical    | Financial<br>(Rs.in lakh) |
| 1         | Assistance for purchase of rubber roller     | 2000     | 20.00                     | 2000        | 20.00                     |
| 2         | Assistance for Construction Of smoke house   | 666      | 20.00                     | 666         | 19.98                     |
| 3         | Assistance for bee keeping                   | -        | 6.00                      | 250         | 6.04                      |
| 4         | Distribution of leguminous Cover seeds       | 8.00 mt  | 5.00                      | 7.8 mt.     | 2.84                      |
| 5         | Assistance for purchase of Sprayer /Duster   | 40       | 3.00                      | 32          | 2.58                      |
| 6         | Assistance for construction of Bio gas plant | -        | 20.00                     | 714         | 20.10                     |

In addition to the above, certain other schemes were also operated exclusively for the non-traditional areas as detailed below. The targets and achievements for 1999-00 are as follows.



| Sl No | Scheme                                                    | Target        | Achievement            |
|-------|-----------------------------------------------------------|---------------|------------------------|
| 1     | Assistance for purchase of Roller to individuals          | 100 Nos..     | 98 Nos..               |
| 2     | Free supply of rollers for N.G.Os                         | 12 "          | 12 Nos..               |
| 3     | Boundary protection (SC / ST.)                            | Rs.15.00 lakh | 15.66 lakh.(1146 Nos.) |
| 4     | Boundary protection (general category)                    | Rs.6.00 lakh. | 4.57 lakh. ( 560 Nos.) |
| 5     | Assistance for Irrigation                                 | Rs.3.00 lakh  | 2.72 lakh. ( 41 Nos.)  |
| 6     | Assistance for Transportation of estate Inputs to NT area | Rs.4.00 lakh. | 3.63 lakh              |
| 7     | Assistance for construction of Smoke house.               | Rs.3.00 lakh  | 3.00 lakh. (60 Nos.)   |

There is yet another scheme exclusively for non-traditional area for setting up demonstration plantations in the farmer's fields. Under this scheme, the Board meets the entire expenditure for planting and upkeep of such plantations. During 99-2000, 8 such plots were developed.

**Planting material generation.** In order to generate good quality planting materials for distribution to growers at reasonable price and also to check the monopoly and unscrupulous trading practices, the Board is maintaining its own nurseries and promoting nurseries sponsored by Rubber Producers Societies. Out of the Board's nurseries 11.82 lakh budded stumps were raised during the period as against the target of 12 lakh.

### **TAPPERS' TRAINING**

**Regular course** – Board is running its own tappers' training schools where owners/ workers of rubber plantations are given training in rubber tapping on a regular basis for

30 days. From the 23 Tappers' Training Schools run by the Board, training in tapping was imparted to 2209 persons in 155 batches.

**Short term course** - Short term training for 5 days for rubber tappers is also arranged by the Board in selected plantations for improving their skill in tapping. 4404 tappers were given such training during the period.

### **NRETC & DISTRICT DEVELOPMENT CENTRES**

The Nucleus Rubber Estate and Training Centre in Tripura state and the District Development Centres in Assam and Meghalaya, were maintained satisfactorily. Tapping has been started in the D.D.Cs. The facilities available in these centres are being utilised for providing training to the growers in the respective regions. During the year about 100 persons were trained in these centres.

**Rubber Plantation Training and Research Centre.** - A new scheme for setting up a rubber plantation training and research centre in Assam State was prepared and forwarded to the Ministry for approval. The proposal is to raise demonstration plantation and experimental plantations in 150 ha. of land given by the Govt. of Assam on nominal rate of lease to the Board. Planting is proposed in a phased manner. The centre will meet the training requirements of growers/plantation workers. Ministry's sanction for creation of essential staff to operate the scheme is awaited.

### **World Bank Aided Rubber Project**

The World Bank Assisted India Rubber Project was formally started in January 1994 after signing the agreement with International Development Association (IDA) in 1993. As per the agreement Govt. of India was eligible for a credit of US\$ 92 million. Since there was under utilization of IDA credit to NABARD to refinance loans for processing factories and plantation development, US\$ 36.5 million was cancelled during the Mid term evaluation in April 1996. Hence the total IDA credit at present is only US\$ 55.5 million and out of this US\$ 35.42 million is for Rubber Board and the NABARD

refinance is US \$ 20.08 million. At a variable exchange rate of US \$ against Indian rupee during the Project period, the total investment cost of the project now is Rs.6074 million. This includes Rs.1731 million of IDA credit through Rubber Board (RB), Rs.522 million Govt. of India fund, Rs.669 million IDA credit through NABARD and Rs.3152 million contribution from beneficiaries and participating banks. The IDA credit to Rubber Board constitutes 28.5% of the total investment cost. The total expenditure to be committed by the Rubber Board under the project is Rs.2253 million.

Originally, the project was expected to close on September 30, 1999. However, as requested, the World Bank extended the credit closing date by one-year ie. upto **September 30, 2000.**

The Project consists of 6 major components viz. Replanting, Newplanting, Processing, Productivity enhancement, Institutional development and Women & Tribal development in Tripura and the percentage of the Investment cost are 31, 41, 4, 9, 15 & 1 respectively. The Institutional development has 5 sub components, namely, Research, Extension, Training and Technical Consultancy, Rubber Board organization and Project Co-ordination Unit. Good progress has been achieved in all the 6 components.

The expenditure upto March 31, 2000 is Rs.1737.29 million. The balance fund of Rs.515.71 million is expected to be expended by the closing date of September 30, 2000. Upto March 31, 2000 US \$ 41.62 million was disbursed by the World Bank against the fund of US\$ 55.5 million, out of this, US\$ 30.89 million was for the Rubber Board and US\$ 10.73 million for NABARD. So far RB has claimed from IDA Rs.1518.83 million and IDA released Rs.1060.44 million.

Out of the 6 major components of the project, replanting, newplanting, productivity enhancement and women and tribal development in Tripura and two sub components under Institutional Development viz. Extension and Rubber Board organization are implemented through Rubber Production Department.

**(A) Replanting and Newplanting**

Creditable achievement was made under replanting and newplanting. During the year 4080 ha. was replanted and 6549 ha. was newly planted. As on 31<sup>st</sup> March, 2000 34094 ha was replanted and 50702 ha was newly planted against the target of 30,500 and 45,000 respectively. The corresponding amount disbursed for replanting and newplanting was Rs.235.52 million and Rs.350.92.

**(B) Productivity Enhancement**

Fertilizers, spraying and rainguarding materials worth Rs.7.73 crore were procured in bulk and distributed to small rubber growers through Rubber Producers Societies.

**(C) Women and Tribal Development:**

3,891 families were included under the scheme against the target of 3,000 families. Financial aid for rubber supported income generating activities has been distributed to 3019 families. The Project impact study conducted by a consultant indicate that the Project has benefited the tribals by weaning them away from jhuming cultivation, indulging them in income generation activities, inculcating banking and saving habits and realisation of infrastructure developments. The financial achievement was Rs.31.53 million against the target of Rs.56.85 million.

13 different income generating activities such as goat rearing, toy making, etc, 4 types of training programmes like tapping, embroidery etc, and 3 types of health and hygiene activities like sanitary latrines, health camps etc. were taken up for implementation through Non-governmental organizations and Rubber Producers Societies. 9021 women were benefited out of the project.



### Tripura Component

As the farmers in Tripura were considered not creditworthy, alternate Credit Financing Scheme was introduced through the Tripura State Cooperative Bank and Development Unit and a sum of Rs.36.46 million was refinanced by NABARD. 742 Rubber Growers could avail themselves of the benefit.

#### (D) Institutional Development

Scientific methods of tree exploitation (controlled upward Tapping – CUT), discriminatory fertilizer application (D.F.A.), soil and moisture conservation (SMC.), disease control and all these practices together, are demonstrated in selected farmers' fields. Financial incentives are provided for adopting the recommended practices in a scientific manner. Targets assigned for the project period and achievement upto the end of March 2000, are given below.

| ITEM            | TARGET       |                 | ACHIEVEMENT AS ON |                    |
|-----------------|--------------|-----------------|-------------------|--------------------|
|                 | No.          | Area            | 31-3-2000         |                    |
|                 | No.          | Area            | No                | Area               |
| C.U.T.          | 4000         | 2000 ha.        | 8027              | 3493.60 ha.        |
| D.F.A.          | 6000         | 3000 ha         | 12334             | 5391.78 ha         |
| S.M.C.          | 12000        | 6000 ha         | 16514             | 6889.00 ha         |
| Disease Control | 300          | 1500 ha         | 5911              | 2825.00 ha         |
| All Practices   | 275          | 138 ha          | 581               | 276.60 ha          |
| <b>TOTAL</b>    | <b>25275</b> | <b>12638 ha</b> | <b>43367</b>      | <b>18875.98 ha</b> |

Achievements in all the 5 items have exceeded the targets. These demonstration plots are being used as training centres for the neighbouring farmers.

(i) **Rubber Board Organization:**

**Computer Facility:** In the first phase of computerisation, 26 Regional Offices were computerised with connectivity to Head Office and data on plantation development schemes are processed and transferred to Head Office. For the second phase of computerisation, bid evaluation of the hardware and software required was completed and approved by the World Bank. Orders are being placed for hardware and software. The second phase of computerisation will be completed by the end of August 2000.

All the 25 Regional Offices in traditional area have started processing applications under RPD Scheme and other schemes through computers.

69 Officers of the department were provided training in extension methodologies, communication skill, formation and maintenance of farmers' groups etc. in reputed national institutes like I.I.P.M., MANAGE, and I.A.R.I. Base level computer training was also given to the staff as per requirement.

**Diploma course in NR Production** -- One batch of 17 tribal students from Tripura have already completed the diploma course in NR production in the Kerala Agricultural University under the World Bank Aided Rubber Project. The second batch of 20 students are now undergoing the course.

**Sastradarsan** - 227 Growers from non-traditional areas in 18 batches were taken to traditional regions for providing them with first hand information about rubber plantations.

**Campaign meetings** - 2305 Nos. of half a day meetings were conducted on a campaign basis throughout the traditional area during May 1999 to deliver the message of scientific plant protection and agro-management practices in which 67651 growers/workers participated. Another 1460 meetings for technology transfer were also held during the year in which 43800 participated. Thus, during 1999-2000, Board's

technical officers had direct interaction with 111451 rubber growers/workers in 3765 meetings.

**Consultancy studies.-** Around 10 consultancy studies on subjects like assessment of the impact of different programmes and activities of the dept., development of computer software, measures to be adopted for strengthening RPSs, strengthening the extension delivery system of the Board etc. are being undertaken by the dept. The consultancy work is entrusted with institutes of national recognition. Apart from this, the dept. is directly undertaking impact assessment studies relating to certain schemes implemented through the Dept. Action is being taken to test/verify the findings/recommendations of the consultants in the field.

## RUBBER PRODUCERS' SOCIETIES

The Board has been promoting the culture of self-reliance and mutual help among rubber growers by encouraging them to form self help groups viz. Rubber Producers Societies. RPSs help the growers in group procurement of plantation inputs, group processing and sale of rubber avoiding middle men, technology transfer in areas of plantation maintenance, harvesting, processing etc. Approval was granted to 218 new RPSs during the year making the total number of RPSs to 2026 at the end of March 2000. Efforts were also made to revitalise the 157 defunct RPSs.

| Region         | No. of approved RPSs |
|----------------|----------------------|
| Kanhangad      | 97                   |
| Taliparamba    | 77                   |
| Sreekandapuram | 80                   |
| Thalassery     | 72                   |
| Kozhikode      | 61                   |
| Nilambur       | 39                   |
| Manjeri        | 50                   |
| Palakkad       | 55                   |
| Mannarkkad     | 56                   |
| Thrissur       | 71                   |
| Ernakulam      | 89                   |
| Muvattupuzha   | 80                   |
| Kothamangalam  | 66                   |

|                    |             |
|--------------------|-------------|
| Thodupuzha         | 96          |
| Pala               | 109         |
| Erattupetta        | 62          |
| Kanjirappally      | 107         |
| Kottayam           | 114         |
| Changanassery      | 104         |
| Pathanamthitta     | 111         |
| Punalur            | 74          |
| Kottarakkara       | 84          |
| Adoor              | 88          |
| Thiruvananthapuram | 52          |
| Nedumangad         | 67          |
| Nagarcoil          | 24          |
| Mangalore          | 39          |
| Goa                | 1           |
| Port Blair         | 1           |
| <b>Total</b>       | <b>2026</b> |

**MODEL RPSs.** Out of the total 2026 RPSs, all are not functioning in the desired manner. Therefore a new scheme has been formulated to support selected RPSs for setting up infrastructure for developing those RPSs into model ones with facilities for community processing of latex, effluent treatment, training of growers from nearby RPSs etc. Financial requirement estimated for setting up these facilities by each RPS, is Rs.12.5 lakh, out of which assistance from Board is around 80%. 10 RPSs (in traditional region) selected in the first phase have already completed the work. Another 25 RPSs (20 in Kerala, 3 in NE region and 2 in Karnataka ) selected under phase-II, have entered into an agreement with the Board and civil construction work is progressing fast.

Item of works connected with the monitoring of RPSs viz, Periodical inspections of RPSs, scrutiny of the reports on executive and general body meetings of the RPSs submitted by the Field Officers and follow up action thereon, issuing necessary guidance to the Executive Committee members in the management of RPSs, supply of forms and registers required by them, ensuring statutory requirements such as convening general body and executive committee meetings at regular intervals, arranging auditing of the accounts of the RPSs etc. were also attended by the Department.



**Communication equipments** – For more effective transfer of technology to the farming community, audio-visual aids and other communication equipments were purchased under the World Bank Aided Rubber Project.

These equipments are being used in the field while conducting seminars and group meetings of farmers.

**Films on rubber** – Under the World Bank Aided Rubber Project, 5 films on various technical subjects are proposed to be made. Four films on the following subjects have been completed.

**NURSERY MANAGEMENT**  
**PLANTING AND MAINTENANCE**  
**PRODUCTIVITY ENHANCEMENT**  
**TAPPING AND PROCESSING**

Work on another film on the subject, '**Diseases, pests and control measures**' is in progress.

These films are being used as very effective tools for information, dissemination especially in the non-traditional regions.

**CORYNESPORA LEAF DISEASE.**

Awareness about the possible damages the disease can cause and the necessity of prophylactic spraying with copper fungicides could be created among the planters of Kerala-Karnataka border and the spread of the disease could be controlled as a result of the intensive spraying carried out during previous years. All arrangements have been made to check the spread of the disease further. About 12,000 ha. in the Kerala-Karnataka border has been sprayed and the disease is now brought under control.



## **PART – IV ADMINISTRATION**

Important functions in Administration consists of constitution/reconstitution of the Board and its Committees, monitoring implementation of the Board's decisions, recruitment of personnel for different Departments, proper maintenance of the establishment through house keeping operations, disbursement of employees entitlements including retirement benefits, price collection and marketing, collection of statistics, publicise Board's schemes and activities, carryout labour welfare measures, attend to vigilance and legal functions and official language implementation.

The functions were carried out through the following Sections/ Divisions/ Offices.

- 01 Establishment (General Administration, Personnel Administration & Entitlement)**
- 02 Marketing**
- 03 Publicity & Public Relation**
- 04 Labour Welfare**
- 05 Internal Audit**
- 06 Legal**
- 07 Vigilance**
- 08 Official Language Implementation**

### **General Administration**

The activities of the Board for the year 1998-99 were documented through the Annual Report which was presented to the Government as required under Clause 8 (3) (c) of the Rubber Act, along with the Annual Accounts. The implementation of the decisions of the 2 meetings of the Board held during the year were monitored.

### **Entitlement**

During the period 52 employees were given financial assistance for construction of own house by advancing Rs.1,19,35,886/-. Vehicle advances amounting to Rs.7,75,000/- were given to 23 employees (Rs.3,71,000 as Car Advance to 3,

Rs.3,95,000 as two wheeler advance to 14 and Rs.9,000 as cycle advance to 6). In addition an amount of Rs.5,31,394 was advanced to 16 officials as two wheeler advance under the World Bank Scheme.

Service books, leave accounts and personal files of employees were properly maintained. Retirement benefits were given to 11 employees including 10 who left on voluntary retirement and one on compulsory retirement. Besides, compassionate allowance was given to one employee who was removed from service in the past. In addition there was one case of family pension of an employee who died in harness.

### Personnel Administration

Selection of suitable personnel to vacant positions for smooth functioning of the Board was ensured following recognised recruitment rules and statutory provisions relating to reservation of posts for candidates from SC/ST/OBC communities. There were properly constituted Selection Committee/DPCs for selection of personnel befitting job recruitments. Periodical returns on the personnel recruited at reservation points were sent to the Government.

The total number of Officers and staff under the Board as on 31.3.2000 was 2330 as detailed below.

| Sl. No       | Name of Department               | Group A    | Group B    | Group C     | Group D    | TOTAL       |
|--------------|----------------------------------|------------|------------|-------------|------------|-------------|
| 1.           | Rubber Production                | 101        | 386        | 796         | 112        | 1395        |
| 2.           | Research                         | 79         | 146        | 215         | 39         | 479         |
| 3.           | Licensing & Excise Duty          | 17         | 35         | 80          | 10         | 142         |
| 4.           | Administration                   | 15         | 29         | 64          | 16         | 124         |
| 5.           | Processing & Product Dev.        | 15         | 22         | 35          | 4          | 76          |
| 6.           | Finance & Accounts               | 7          | 8          | 27          | 2          | 44          |
| 7.           | Training & Technical Consultancy | 6          | 12         | 21          | 3          | 42          |
| 8.           | Statistics & Planning            | 6          | 8          | 12          | 2          | 28          |
| <b>TOTAL</b> |                                  | <b>246</b> | <b>646</b> | <b>1250</b> | <b>188</b> | <b>2330</b> |

## **Marketing**

The price of various grades of natural rubber like RSS, PLC, EBC, Scrap rubber, block rubber and centrifuged latex at Kottayam and Kochi and also at Kuala Lumpur were collected and compiled and the average prices were reported to the press for publication. The price information was intimated to the Ministry of Commerce & Industry, Public Sector Plantations etc. on a regular basis.

The 5<sup>th</sup> edition of the Directory of Rubber Goods Manufacturers in India was brought out during the period under report. Data on import and export of natural rubber were also collected.

## **Publicity and Public Relations**

The Publicity/Publication activities mainly consist of publishing journals and other publications on various aspects of rubber cultivation. Twelve issues of the Malayalam Magazine, "**Rubber**" were brought out and distributed among the 5678 life members and 8822 ordinary members. Besides 9,250 copies of the Rubber Growers Companion, 3000 copies of Rubber and its cultivation, 12 issues of the Rubber Statistical News and 3 issues of Inside Rubber Board were brought out during the year.

Press handouts on various topics were released to the National as well as the local dailies which obtained wide coverage. 23 Press releases and 74 Advertisements were issued. Farm features on subjects of seasonal importance were published in the Karshikarangam pages of various Malayalam dailies. The Officers arranged 15 seminars, one meeting and also took part in one exhibition at Coonoor. Utilizing the service of AIR and Doordarshan, 4 talks were recorded and broadcast. Apart from this, 1767 press cuttings were taken and preserved.



## **Labour Welfare**

Section 8 (2) (f) of the Rubber Act empowers the Board to undertake measures for better working condition and improvement of amenities and incentives for rubber plantation workers.

The Board had devised many schemes for the welfare of the workers for which an amount of Rs.1, 06,98,582 was spent during the year under report.

### **a) Educational Stipend Scheme**

The scheme provides for financial assistance for educating the children of rubber plantation workers at the primary, secondary, graduation/postgraduation levels.

The assistance consists of payment of tuition fee, hostel/boardings fee and lumpsum grant for purchase of books, instruments etc.

An amount of Rs.10,32,680/- was spent under this scheme during 1999-2000.

### **b) Educational Scholarship Scheme**

The scheme provides children of rubber plantation workers incentive for high performance in academic courses under educational stipend scheme. Scholarships ranging from Rs.250/- to Rs.2,000/- is paid per student. An amount of Rs.23,050/- was spent during the year.

### **c) Group Insurance-cum-Deposit Scheme (9 Phases)**

This is a social security measure for the workers not covered by the Plantation Labour Act against death and injuries caused by accidents. This scheme also encourages the habit of saving. The first phase was started in 1986-87. Each phase continues to be in operation for a period of 10 years. The workers enrolled have to renew membership every year by remitting their share of insurance premia. During 1999-2000 the Board

remitted Rs.9,04,500/- as Board's share favouring 9,045 workers after ensuring that they have remitted equal amount as their share. The insurance company paid compensation to 45 workers amounting to Rs.81,226/- for injuries/death by accident.

**d) Housing Subsidy Scheme (Unorganised Non-marginal holdings)**

This scheme provides assistance to rubber plantation workers not covered by the Plantation Labour Act, 1951 for construction of own house. The assistance is limited to Rs.7,500/- per worker for house built in brick and mortar. For house built with mud walls and grass thatch, the assistance would be Rs.4,000/- only. For houses with mud wall and tin or aluminium roof, the assistance would be Rs.5,000/-. An amount of Rs.20,62,500/- was disbursed during 1999-2000 in favour of 275 applicants.

**e) Housing Subsidy Scheme (Unorganised Sector Marginal holdings)**

This scheme provides for assistance in house construction for workers employed in holdings, each with area between 0.75 ha and 1 ha. All other conditions of the scheme for housing subsidy for rubber plantation workers in the unorganized sector (non-marginal holdings) are applicable to this scheme. Amount disbursed during 1999-2000 was Rs.21,58,750/- in favour of 288 applicants.

**f) Housing Subsidy Scheme (Organised Sector)**

This scheme provides financial assistance to workers covered by the Plantation Labour Act, 1951 for the construction of own house. The assistance is limited to Rs.7,500/- per worker or 25% of the estimated cost of construction. Amount disbursed during 1999-2000 was Rs.8,45,000/- in favour of 114 applicants.

**g) Scheme for providing Sanitary facilities**

The scheme provides assistance to build latrines by the rubber plantation workers as per prescribed plan and estimate. The assistance payable under the scheme is 75% of

the cost of construction or Rs.3,000/- whichever is less. Total amount paid under the scheme during 1999-2000 was Rs.20,90,625/- in favour of 697 applicants.

**i) Medical Attendance Scheme**

The scheme assists plantation workers of unorganised sector with reimbursement of medical expenses and subsistence when unable to work due to illness. Workers who undergo sterilization operation for promotion of small family are also given assistance. During 1999-2000 an amount of Rs.5,67,977/- was disbursed to 488 workers.

**j) Housing and Sanitary Scheme for SC/ST Rubber Plantation Workers**

This scheme was implemented on a pilot basis exclusively for SC/ST workers of rubber plantations through the Rubber Producers' Societies. Assistance limited to Rs.14,000/- is granted to the worker for construction of house with latrine. The scheme was financed from the SCP/TSP fund. An amount of Rs.10,03,500/- was disbursed in favour of 133 workers.

**Internal Audit**

The main function of the Internal Audit Division is Inspection/Audit of various offices/establishments of the Board. During the period under report Internal Audit/Inspections were conducted in 55 offices/establishments spread all over the country.

Special audits of RRII canteen and Maintenance Wing of RRII were conducted during the year. The review of operating costs of vehicles attached to Head Office was also undertaken.

Replies to AG's Audit objections were sent in time. In addition, replies to audit paras in inspection reports of the Internal Audit Wing of Ministry of Commerce were also given.

Advice was given in 192 cases on various service matters including 36 pension cases.

Economy in the use and maintenance of vehicles and consumption of fuel was ensured by follow up procedures based on Government Orders.

Annual physical verification of stock was brought updated by initiating follow up action with concerned offices/units and ensured the disposal of unserviceable items.

Follow up actions were also initiated for liquidation of pendency of TA/ LTC/ Contingent advances and the outstanding was brought down substantially.

## **Legal**

Legal functions include rendering advice/opinion on matters referred to, drafting legal documents, initiating steps for prosecution under the Rubber Act, 1947, assisting the departments in conciliation proceedings in labour matters, tax cases and instructing and assisting the lawyers of the Board in conducting the litigations of the Board.

During the year under report timely action/advice was rendered in 746 files referred to Legal Section. Documents in the case of 20 applications for House Building Advances were scrutinized for determining the eligibility of applications under Rules. Legal documents to be executed by Board during the year under report were drafted/prepared as and when required. Appropriate steps were taken through lawyers to safeguard the interest of the Board in pending cases in various courts and 30 new cases originated during the year. Necessary assistances were given to Standing Counsels of the Board and the Central Government pleaders in cases pending in High Court. In consumer disputes files before Redressal Forum in various districts the section prepared and filed replies and represented the Board during the hearing.



Necessary assistance was given to RRS, Dhenkanal RRDS, Andamans, Central Experiment station, Chethackal, RRII Farm, HBSS at Nettana and Paraliar, Nurseries/Farms under RP Department etc. in dealing with labour matters. The section prepared draft amendments proposed by the Board to Rubber Act, Rubber Rules, Rubber Board Employees Conduct Rules and Rubber Board Service (Classification, Control and Appeal) Rules.

### **Vigilance**

During the period under report, enquiry/investigations in 51 complaints containing allegations against 22 Group A & B officers and 29 Group C & D employees were undertaken. The allegations contained in these complaints mainly related to attempting to prevent the Chairman and the Board Members from participating in the Committee/Board meetings, attempting to smuggle out controlled commodity from the premises of the Board, securing of outside employment while continuing in the service of the Board, habitual unauthorised absence and failure to respond to the directions of the Board, recommending ineligible assistance to the applicants towards construction of smoke house, collection of money from the growers under the pretext of arranging subsidised inputs, unruly/threatening behaviour disrupting the smooth functioning of the office, mismanagement of the affairs of the departmental canteen causing financial loss to the Board. All these complaints were enquired into and appropriate action including punitive actions were taken against the erring Board's employees wherever found necessary.

Major penalty proceedings against 6 officials were instituted during the year under report.

Annual statements of Immovable property as on 31.12.99 were called for from all officers of Group A & B status. The statements thus received from the officers have been properly dealt with. The Vigilance Division also processed 138 applications

pertaining to transactions in immovable property and 86 applications relating to transactions in movable property.

Parawise comments of the Board in 4 appeal petitions received from the employees were forwarded to the Ministry for appropriate action.

### **Official Language Implementation**

Two meetings of the Official Language Implementation Committee of the Board were held during the year. Annual Programme for the year was discussed and approved in the meeting

Hindi Week was celebrated from 14<sup>th</sup> September 99 to 18<sup>th</sup> September 1999 at the Head Office and RRII premises. Competitions were conducted for the employees and their children. The prizes were awarded to the winners. Hindi day was celebrated in subordinate offices of the Board. Different competitions were arranged for the employees and winners were given away prizes.

An Official Language Conference was held on 27<sup>th</sup> March 2000 at the Silver Jubilee Hall of the Rubber Board, RRII, Kottayam-9. Prizes to the winners of competitions held in connection with the Hindi fortnight celebration were distributed in the meeting.

Six issues of the bimonthly Hindi bulletin "Rubber Samachar" were brought out during the year. Technical articles on rubber farming, research, technology and literary writings of employees and articles promoting the use of Hindi as official language were published.

Hindi Praveen and Pragya classes were conducted at Head office. Training in Hindi Typewriting was also given to Board's employees.

Hindi workshops were conducted in the Board's Regional Offices at Nagercoil, Thiruvananthapuram, Nedumangad, Adoor, Punalur, Kanjirappally, Pathanamthitta, Changanacherry, Kottarakkara and Moovattupzha. Training in Noting and Drafting in Hindi, Technical Terms, Correspondence in Hindi etc. was given to the employees.

The joint meeting of the Hindi Salahkar Samithi of the Department of Commerce and Department of supply held on 17<sup>th</sup> February 2000 at New Delhi was attended by Shri. K.J. Mathew, Chairman and Smt. P.K. Santhakumari, Hindi Officer.

The first meeting of the newly constituted Kottayam Town Official Language Implementation Committee was held on 27<sup>th</sup> March 2000 at Conference Hall of the Rubber Board. Shri. K.J.Mathew, Chairman of the Board was appointed as the Chairman of TOLIC and Smt. P.K. Santhakumari, Hindi Officer as Member Secretary.



## **PART - V**

### **RUBBER RESEARCH**

The Rubber Research Institute of India, the research wing of the Board has a Central Experiment Station at Ranni in Kerala, nine Regional Research Stations and two Hevea Breeding Sub-stations at different regions in the country. The Central Experiment Station has a 254 ha, experimental rubber plantation, while the Regional Research Stations have experimental plantations with area ranging from 20 to 77 ha. A research complex has been established at Agartala with five Regional Research Stations in Tripura, Assam, Meghalaya, Misoram and West Bengal. For other non-traditional areas there are three Regional Research Stations located in Maharashtra, Madhya Pradesh and Orissa. In the traditional region, another Regional Research Station was established at Padiyoor in Kerala in 1994. The research highlights during the year under report are furnished below:

In an intercropping system experiment conducted in a field with less than 5% slope having about 410 rubber trees per hectare, 1560 kg of amorphophallus and 400 kg of arrow root were harvested from one hectare of rubber plantation during the 6<sup>th</sup> year of planting rubber. The growth of rubber plants continued to be superior compared to that in a monoculture system. In a silt pit experiment 5 to 14 tonnes of soil per hectare could be conserved by 100 to 250 pits dug in the field. In the absence of the pits, this much soil would have been washed out from the field. Experiments to compare two types of fertilizer recommendation viz Discriminatory Fertilizer Recommendation (DFR) and Diagnosis and Recommendation Integrated System (DRIS) have been in progress. Survey of rubber growing soils of Kerala and Tamil Nadu have been conducted by National Bureau of Soil Science and Land Use Planning, ICAR Nagpur. They have identified 16 major soil series. On the basis of this report a project on "the refinement of DFR" was initiated by selecting two major soil series under two landforms viz Khondalite and Charnokite. Latex samples were also analysed in all the laboratories for estimation of dry rubber content (DRC) and volatile fatty acids (VFA). A total of



14736 soil and 1312 leaf samples were analysed and offered 8000 discriminatory fertilizer recommendation. In addition to this, discriminatory fertilizer recommendation was offered to 695 fields belonging to 23 large estates, based on the analysis of 1123 soil and 660 leaf samples.

The effect of polyamines, glutamine, casein hydrolysate, gibberellic acid, the effect of light etc. on the frequency of somatic embryogenesis and plant regeneration was extensively studied with the callus derived from immature anther explants. Incorporation of low levels of gibberellic acid (2.0 mg/l) stimulated embryo induction and plant regeneration. As a continuation of the collaborative research project on transgenic plant synthesis with the University of California, experiments were continued to produce plantlets transformed with the gene coding for sorbitol-6-phosphate dehydrogenase, superoxide dismutase, isopenenyl transferase and antisense gene for ACC synthase. Transgenic plantlets were produced with the gene coding for superoxide dismutase and the antisense gene coding for ACC synthase gene. For the identification of disease tolerant genes RAPD analysis were carried out with random primers using total DNA isolated from tolerant and susceptible lines. Initially DNA samples from selected tolerant and susceptible clones were pooled into two batches (preparation of DNA bulks) and RAPD analysis was carried out with 100 random 10 mer primers. With 8 primers polymorphic bands were obtained between bulked DNA of tolerant and susceptible plants. Further RAPD analysis was carried out with the individual samples using the 8 primers, which gave polymorphic bands in bulked DNA samples. It was found that the markers associated with these primers were always found in most of the resistant lines and were absent in the susceptible clones.

Research activities on genetic improvement programmes, propagation, anatomy and cytogenetics were continued. During the sixth year of tapping the ten hybrid clones in the pipeline continued to show superiority in yield over RR II 105, the yield improvement ranging from 10 to 56%. In the 1989 small scale trial 20 hybrid clones out yielded RR II 105, the yield improvement ranging from 3% to 68% during the second year of tapping. In another small scale trial 4 hybrid clones excelled RR II 105 in yield

during the second year of tapping. Test tap yield of the 1997 HP progenies showed that the cross RRIM 600 x MT 999 and RRIM 600 x RO 380 recorded comparatively more yield than the other combinations. Scrutiny of yield data of eight clones during the 6th year of tapping at Manikal estate revealed RR11 105 (1846 kg/ha/yr) to be the highest yielder followed RR11 4 (1385 kg/ha/yr) and PB 310 (1124 kg/ha/yr). GT 1 recorded the lowest yield (849 kg/ha/yr).

Steps were taken to enlarge the existing Wickham gene pool in the clone museum and also to import other species. Annual girth as well as monthly cup lump yield was recorded from four germplasm gardens. The IRCA clones continued to show good growth compared to the control RR11 105, with two clones (IRCA 130 and IRCA 111) showing significantly superior girth. Analysis of the data on morphological, biochemical and physiological traits showed significant clonal variability and inter se correlation among the 25 clones in the mature phase. The first preliminary evaluation trial of wild germplasm planted in 1990 was opened for regular tapping in 1999. Yield over two seasons indicate promising performance of four accessions comparable with RR11 105, which have to be evaluated further. A field trial consisting of 46 wild ortets and 3 popular controls was laid out in a simple lattice design. 400 accessions have been multiplied and established in polybag at RRS, Padiyoor for the next four preliminary evaluation trials to be planted in 2000. A disease screening project was formulated for screening the wild germplasm for sources of resistance to the major diseases *oidium*, *phytophthora*, *corynespora* and *Gloeosporium*. A laboratory is being set up at CES, Chethackal for the laboratory screening work.

Field studies from the drought - prone North Konkan have clearly established that the high intensity of solar radiation aggravated the adverse effects of drought on rubber plants. Experiments to determine the minimum irrigation (quantity and frequency) for optimum yield in the North Konkan was continued.

Field experiments were laid out on low frequency tapping systems involving third, fourth daily and weekly tapping frequencies with stimulation. Various exploitation

trials laid out in estates, medium holdings and Experimental Farm Unit, Rajiv Gandhi Institute of Technology, Kottayam progressed well during the period under report. In general under d/3 frequency of tapping, the yield increase observed under stimulation was statistically significant. Comparison of yield under d/3 and d/4 frequencies of tapping in RRII 105 (Vennimala estate) did not show any statistically significant difference. Two year data on yield performance in the rainguarding experiment showed a significant yield reduction of 47% in the absence of rainguard under d/2 frequency of tapping. By stimulation loss could be reduced to 52%. Similar reduction in yield under d/3 stimulation was 36% in the absence of rainguard, which could be significantly reduced to 18% by stimulation. Data from Controlled Upward Tapping (CUT) experiments show that, under monthly stimulation, alternate daily tapping of 1/4S cut was more productive than third daily tapping. Results of the minicut experiment showed promising results and the yield from stimulated minicuts were comparable to that of 1/2S d/3. Exploitation experiments were laid out, one each in RRS Agartala, RRS Dapchari and RRS Guwahati. Adhoc recommendation for stimulation under d/3 and d/4 systems was formulated and on-farm trials were initiated in Karnataka, Northern Kerala and Central Kerala.

New fungicides including systemics were tested for their efficacy against diseases like *Phytophthora* leaf fall disease, shoot rot, powdery mildew, *Corynespora* and *Gloeosporium* leaf disease, bark rot, pink disease, etc. Special attention was given to *Corynespora* leaf disease which was having a havoc in South Karnataka and adjoining areas of Kerala for the last two years. The results of the experiment have proved the effectiveness of dust formulation of Hexaconazole (Contaf) against *Corynespora*.

Pilot plant scale production of styrene grafted natural rubber (SGNR) was initiated. Close interaction was maintained with the footwear manufacturing units for evaluation of the same as stiffening agent in microcellular soles. A laboratory process was standardised for deprotenisation of natural latex using the enzyme Anilozyme P. Incorporation of about 15 parts of epoxidised natural rubber in nitrile rubber – silica composites is found to improve the technological properties significantly, with



CBS/DPG accelerator system. Necessary technical assistance was offered to M/s. Cochin Refineries Ltd for the commercial production of modified bitumen at the refinery. About 950 samples received from the industry were tested for various quality parameters.

Studies on sun-cum-smoke drying of sheet rubber revealed more than 50% firewood saving during summer and 15-20% in rainy season. Civil construction work of solar-cum-smoke dryer at HBSS Nettana was completed and the solar panels installed. Steps were taken for the civil construction work of the dryer at RRS, Dapchhari. The evaluation of the sheet cleaning machine was done. The sheets were graded before and after the cleaning. A remarkable improvement in the quality of sheets could be achieved at reasonable cost. For optimising the conditions of drying of rubber an experiment has been in progress to study the effect of temperature and humidity. A study was undertaken to develop thermoplastics. Two different grades of PP and HDPE were used for dynamic melt blending with natural rubber having two different levels of molecular weight.

A new methodology has been developed to assess the comparative commercial yield performance of planting materials which is a composite measure incorporating the influence of variables such as extent of immature phase, share of field coagulum, yield per tree, stand per ha, tapping intensity and the pattern of the yield profile. A comprehensive report on the profitability of various intercrops in different agro-climatic regions in the traditional rubber growing belt has been completed. A study analysing the consequences of economic liberalisation on Indian automotive tyre industry has been completed.

In the Central Experiment Station, Chethackal, the entire area has been utilised for different trials which include progeny trials, exploitation trials, intercropping trials, density trials etc. In addition, the screening of over 4000 genotypes of wild Brazilian germplasm as well as its conservation, is being undertaken in this station. During the period under report, the total crop realised was 147239 kg. A dispensary with a full time Doctor and a part time Lady Doctor caters to the needs of the workers and the total patients attended during the reporting year is 9742.



Nutritional studies conducted in the North East yielded positive response on growth and yield upto 60:60:40 kg/ha/year NPK . Pests and disease survey was carried out in 988 locations covering 24 different rubber growing tracts in Assam, Meghalaya, Tripura, Arunachal Pradesh and Northern parts of West Bengal. High incidence of powdery mildew disease caused by *Oidium hevea* and SLF disease caused by *gloeosporium alborubrum* was noticed in most part of the private plantations surveyed. Brown root disease caused by *Phellinus noxius* was also noticed in some locations. Regional isolates of *gloeosporium alborubrum* causing SLF disease was brought under further studies. Rubber growers in Arunachal Pradesh, Tripura and Assam were provided with advisory services in respect of disease management by the Plant Pathology.

At RES, Nagrakatta main emphasis was given on evaluation of clones and nutritional studies. Out of the ten ongoing trials, four are on clone evaluation, two on nutritional studies and one each on clone blending , Genotype x Environment interaction and Exploitation System. One nutritional trial – 1989, two clone trials planted in 1990 and polyclonal population attained maturity during the year and plants were opened for tapping. From the preliminary yield observation the performance of SCATC 88/13, SCATC 93/114, PB 235, RRII 118, RRII 105, GL 1 and PB 86 was better. Rubber yield (g/tree/tap) was significantly influenced by the interaction between phosphorus and potash levels. Application of 20 kg phosphorus and potash recorded higher yield and nitrogen application did not show any effect.

In RRS, Agartala the intercropping of banana and pineapple with rubber is found to be profitable. In nutrient trial, the higher fertiliser dose up to 60:60:40 NPK/ha has a positive response on growth and yield in normal stand. However, the higher fertiliser dose upto 80:80:40 NPK/ha has also positive response when the stand has been increased upto 824 trees. There is substantial build up in organic carbon available phosphorus and calcium under rubber plantation compared to Teak, Gamai and barren lands with passage of time. It is observed that the better nutrient status of rubber plantation, over the years, may be due to external application of fertiliser. Yield over eight years revealed clone PB 235 as the top yielding clone in a small scale trial. Effect of different tapping

systems with tapping rest based on low temperature regimes indicated that among different treatments S/2 d/2 system with tapping rest at 15°C - 15°C appears to give higher yield and low incidence of TPD. On biochemical aspect of yield revealed that the concentration of SOD bands decreased with progression of TPD in affected plants.

In the non-traditional tract in Dapchhari (Maharashtra) 23 blocks were being tapped in S/2 d/3 system and an average yield of 1280 kg/ha/annum was obtained. New clone trial was started in 4.5 ha area with World Bank aid and another 2 ha area was planted for the experiment NPK + higher phosphorus source in RRS, Orissa. In RRS, Sukma (MP) performance of the germplasm materials planted has been monitored. In the experiment on screening of *Hevea* germplasm for cold tolerance planted at RES, Nagrakatta the Brazilian genotype Acre 607 has been succumbed to frost injury. In RRS, Padiyoor tree felling and land preparation for starting new experiments during July 2000 has been in progress in 14 ha area.

The seven research projects under the World Bank Assisted Rubber Project progressed well during the period. Under exploitation studies one-year results from the experiment on evaluation of mini-cuts and reduced spiral cuts gave promising results and the yield from stimulated mini-cuts were comparable to that of 1/2S d/3. In connection with a Tapping Panel Dryness (TPD) survey work in small holdings, a collaborative programme with RP Department has been initiated and the study is in progress. Studies on intra-clonal variations and associations in RR11 105 were initiated. Several parameters were evaluated to enhance the frequency of somatic embryogenesis and plant regeneration using immature anther and immature flower buds as the initial explants. The "Hot spot trial" laid out at RRS, Sukma, a drought prone area was maintained well and regular recording of growth parameters continued. The trial laid out at RES, Nagrakatta for screening of germplasm for cold tolerance was maintained. Genomic characterisation wild *Hevea* germplasm using random amplified polymorphic DNA technique has been continued.



## **PART - VI**

### **PROCESSING & PRODUCT DEVELOPMENT**

Department of Processing and Product Development continued to provide support to Rubber Processing and Rubber Goods Manufacturing Industries in the areas of Factory design, product development, quality improvement and in treatment and disposal of effluent from rubber processing factories. During the year the Department also concentrated on implementation of processing component of the World Bank Aided Rubber Development Project. The important activities of the Department performed through its four Divisions during the period are summarised under.

#### **I Engineering Division**

During the year under report, the Engineering Division focussed attention in completing the civil construction work envisaged in the World Bank Assisted Rubber Project. A report of the construction work undertaken is given below in brief.

(i) The detailed estimate and drawings for the construction of factory building of Model Rubber Wood Factory were prepared. Tender documents for Civil Works and Machinery were also prepared and quotations were invited and work awarded for construction of factory building and for procuring machinery. All the applications and details connected with obtaining clearances from various Government agencies for establishing the factory at manganam were submitted and approvals obtained from the local Panchayat and pollution Control Board. A Consultant was selected for reducing Noise Pollution from the Model Rubber Wood Factory and the RRDTTC Campus. The work was awarded to the Consultant who have started the work.

(ii) The Laboratory Building for establishing Rubber Wood Testing Laboratory was almost completed. All the necessary equipments for starting the laboratory were procured and were almost installed.



(iii) The construction work of the Model TSR Factory was completed and the machineries were set up. However the work of electrification and the Effluent Treatment Plant could not be completed during the reporting period.

(iv) Though the Contractor who was awarded the work of various civil structures for the Rubber Training Centre abandoned the work unfinished, half way, the remaining work was undertaken departmentally. The construction of the building was completed and ready for occupation.

(v) For promoting wider use of rubber wood and its products, promotional campaigns and exhibitions were conducted. A short advertisement film was also prepared.

(vi) The development of a suitable Burner for the biogas produced from the sheet rubber processing factories was a noteworthy achievement. The information relating to this technology was transferred to Rubber Producers Societies. Further modifications in the design of the Burner are being made.

Project reports for setting up different types of processing factories were prepared and supplied to various agencies like M/s.Tripura Plantation Corporation Ltd, Kozhencherry Marketing Cooperative Society Ltd. etc.

## **II Factory Management Division**

Pilot Block Rubber Factory is engaged in the production of speciality rubbers like ISNR 3CV and ISNR 5 against order of customers. During the period, the Unit produced 307.115 tonnes of TSR valued Rs.115.23 lakh.

The PLPC had produced 152.434 tonnes of Cenex valued Rs.84.11 lakh.

The quantity of Radiation Vulcanised natural rubber latex produced in the RVNRL Unit was 4 tonnes. Various processing steps were standardized for producing



RVNRL of consistent quality. A new product namely Styrene Grafted Natural Rubber (SGNR) is developed for production in the radiation facility based on R&D work done in the plant using the small irradiation source. Regular production of SGNR had been started in the RVNRL plant. This product is used in footwear and there is market for the product. Two research papers were published on standardization of RVNRL and on processing of products from RVNRL using the facilities in the plant. These papers were presented in different national seminars. Three other papers are now ready for publication.

### **III Processing & Quality Control Division**

The details of analytical work done by the Division in the Quality Control Laboratory during the period are noted below.

**Number of parameters tested on the samples produced by the public.**

**30958**

**Number of parameters tested on the samples collected by the Board's Officials.**

**17975**

The Division has collected an amount of Rs.6,79,410/- for the different types of services provided to them. A sum of Rs.4,92,130/- was received from the Bureau of Indian Standards as the share of marking fee. Officers of the Division conducted 566 inspections during the period in different Rubber Processing Units. Samples collected during inspections were tested and test reports sent to BIS.

### **IV Rubber Promotion and Market Development Activities**

The Division provided quality screening assistance to State Trading Corporation and RUBCO in procuring 9361 tonnes sheet rubber.

Under 14 schemes operated for the development of rubber marketing and processing activities an amount of Rs.70,15,633/- was disbursed to various Co-operative Societies, Rubber Board Companies, RPSs and exporters of rubber.



## **PART - VII**

### **TRAINING & TECHNICAL CONSULTANCY**

The Department of Training & Technical Consultancy consists of two Divisions, namely Training Division & Technical Consultancy Division. The Training Division conducts various training programmes while the Technical Consultancy Division promotes the Development of rubber based industrial units.

#### **A. Training Division**

The Division conducted various training programmes on different aspects of Rubber Plantation Industry. Total beneficiaries during the year were 3525. The training programmes undertaken include Rubber Culture and Estate Management, Short-term training on rubber cultivation and processing, grading of sheet rubber, rubber processing & quality control, short-term training on latex goods manufacture, short-term training on dry rubber goods manufacture, training on testing and quality control in product manufacture, specialised training in subjects like foam rubber, gloves, hawai chappel, training on beekeeping mushroom culture, training for RPS leaders on plantation management. Apart from this, regular training programmes are arranged for Officers/employees of the Board to improve their functional efficiency.

Dr.NR Peethambaran, Dy.Director was sent to the Asian Institute of Technology, Thailand for undergoing two weeks training in Executive Development for Higher Education and Training Administrators. Apart from this, 14 Sr.Scientists were trained in IIPM and another 10 were trained at Manage, Hyderabad.

#### **B. Technical Consultancy Division**

Preparing Project Report of rubber products for supply to prospective entrepreneurs, preparing market survey reports, development of new rubber products, testing/evaluation of rubber compounds and rendering consultancy service to the industry are the thrust areas of work.

During the period under report, the Division developed the following rubber products.

1. Rubber coupling (Import Substitution)
2. Conductive Pad ( " " )
3. Industrial Moulded items ( 8 Nos.) using EPDM, Viton & Hypalon rubber
4. Auto bushes & Flexible Matting
5. Rubber Gaskets for thermal cooker and packing sheets
6. Cabin & Radiator Mountings and centre bearing rubber
7. Rubber Gaskets for LPG Cylinders
8. Radiator Hoses
9. Marine Impeller and Busher (Import substitution)
10. Dust Seal and bellows
11. Transparent and coloured High Bouncing ball (Import substitution)
12. Rubber Tubes for Water/air bed
13. LPG Tubings & Mats for LPG loading vehicles
14. Bushes and boots
15. Auto Rubber Components
16. Tread materials (BVC, Cushion, Gum, etc.)
17. Tread Rubber (Conv. & Precured)
18. Bonding Gum-90°C Vulcanisable
19. Precured Tread
20. Hawaii/MC Sheets

Detailed project report of the Rubber Park to be established by Tamilnadu Industrial Development Corporation at Nagercoil was prepared. Also continued to provide the required Consultancy Service for the Rubber Park India (P) Ltd, Project at Perumbavoor. In collaboration with the Engineering Institute at Peechi, Thrissur, a study on the effect of latex coating on canal beds to reduce seepage of water was undertaken and the initial results were positive.

A scheme for establishing a rubber testing centre at Mumbai in collaboration with All India Rubber Industries Association was started. Another scheme for rubberisation of roads was implemented and about 50 km of road in various Panchayats, Municipalities and Corporation was ~~one done~~.

The other activities of the Division includes an online service for providing export information to clientele, scheme for market identification and exploration of NR/NR products export, updating the directory of world importers of Rubber Products.

A sum of Rs.8,08,035/- was collected on the various consultancy services.

With a view to promoting rubberisation of extensive stretches of roads, a conference was organised at the Rubber Board on 10<sup>th</sup> December 1999 which was inaugurated by the Minister of Public Works and Education, Kerala State in which the Chief Engineers/Senior Officials of the Public Works Departments from Pondicherry, Tamilnadu High Way Research Station (TN), Cochin Refineries Ltd and Indian Oil Corporation apart from the officials of the Board attended.

Under the "*Institutional Development*" component of the World Bank Aided Rubber Project establishment of two Training Centres, one at Kottayam and the other at Agartala were provided. The civil construction work of the Buildings were completed. Furniture for Training Institute at Kottayam has been ordered and being delivered. Furniture for Agartala institute are being procured. Equipment for both these Institutes have been procured. 25 consultants engaged have either submitted the reports or in the process of furnishing the final reports. Action is in progress on adopting the recommendations of accepted reports. The consultancy study on Soil Survey and Resource Mapping by NBSS was completed and a workshop was conducted on March 20, 2000 at RRII with the participation of 200 delegates interested in using the report of NBSS. Out of this 120 delegates were from Soil Survey Department, Agricultural Department, Kerala Agricultural University, Fertiliser companies, Plantation companies, Agricultural consultants etc. 26 scientists, 2 technical officers, 56 extension officers, 10 technicians of rubber wood industry and 62 rubber growers underwent training abroad under the Project.

The procurement of equipment for rubber product testing, costing Rs.20 million is also in progress. The expenditure for training component was Rs.106.43 million against the target of Rs.223.39 million.





## **PART – VIII**

### **FINANCE & ACCOUNTS**

The Finance & Accounts Department is concerned with designing and operating the Accounting system, preparing budget, financial statements and reports, exercising budgetary control, effective Funds Management, establishment and maintaining systems and procedures, overseeing internal audit and arranging for Statutory audit, advising on financial propriety and regularity of transactions, supervising computer applications, overseeing cost control, evaluation of projects/schemes, handling tax matters etc. The following activities were undertaken by the department during the year.

1. Preparation of Annual Budget, Performance Budget, Foreign Exchange Budget etc and exercising budgetary control.
2. Drawal and disbursement of money against the sanctioned budget of the Board.
3. Maintenance of the accounts of the Board, preparation of Annual Accounts and Balance Sheet presentation of the accounts for audit by the Accountant General Kerala and the audited accounts to the Rubber Board/Ministry/Parliament.
4. Placing demands for grant from Govt. from time to time, receiving funds from Government and ensuring its optimum utilization.
5. Advising on financial propriety and regularity of transactions and regulating payments.
6. Assisting the Cost Accounts Branch of the Ministry of Finance in ascertaining the cost of production and in fixing price of Natural Rubber.
7. Preparation of financial statements for project reports and schemes.
8. Dealing with Income Tax, Agricultural Income Tax and Sales Tax matters relating to the activities of the Board.
9. Coordinating the activities of the companies jointly promoted by the Rubber Board and RPSs.
10. Computerized Data Processing in the field of financial accounting, pay roll etc.
11. Preparation of detailed cost tables and other financial statements supporting the proposals periodically presented to the World Bank Mission for Review.

12. Drawal and disbursement of pay and other entitlements of the employees of the Board based on the orders issued by GOI time to time.
13. Management of Pension Fund and General Provident Fund and regulating disbursements therefrom.
14. Implementation of the Scheme of Computerisation and Networking of all departments of the Board.

### **Annual Accounts 1998-99**

Statutory Annual Accounts for the year 1998-99 was prepared and presented to AG Kerala within the stipulated time. The Audit Report and the Audited Accounts with the certificate received from the AG Kerala were placed before the Board and forwarded to the Ministry.

### **Revised Estimates 1999-2000 and Budget Estimates 2000-01**

The Revised Budget for 1999-2000 and Budget Estimates for 2000-01 were prepared within the time frame and submitted to the Government. Budget sanctioned for the year 1999-2000 both Plan & Non plan put together was Rs.100.57 crore. As against this the actual expenditure for the year was Rs.91.11 crore (provisional). The financial target originally set could not be achieved due to reduction of Budgetary Support by the Government. The total budget estimates proposed for the year 2000-01 was Rs.117.67 crore against which the sanctioned budget is Rs.112.45 crore including the internal resources.

### **Management of Funds**

#### **(i) General Fund**

Funds amounting to Rs.82.60 crore was received from Government as budgetary support including Rs.51.47 crore of Foreign Aid during the year 1999-2000. The

internal resources during the year was about Rs.11.30 crore (Provisional). The total expenditure for the year was Rs.91.11 crore (provisional).

**(ii) General Provident Fund/Pension Fund**

The balance under the General Provident Fund as on 31<sup>st</sup> March 2000 was Rs.1230.15 lakh and that under Pension Fund Rs.1147 lakh. The accumulations in the funds were invested to obtain optimum returns. The Board is maintaining 3120 GPF accounts. Pension is given to 354 pensioners during the year.

**(iii) Cost Accounts**

Continued to collect and analyze cost data. Information sought for from the Government and ANRPC are furnished as and when required. Cost tables for raising rubber plantation per hectare in different regions has been updated. Detailed study was conducted on the cost of production of planting materials in own nurseries for regulating the selling price of planting materials by private approved nurseries.

Various aspects relating to Sales Tax and Agricultural Income Tax matters were examined in detail and appropriate advice were given. Project report in respect of large scale plantations in Tripura, Karnataka and in tribal land in Kerala were prepared and a Management Information System was developed and monitored.

**(iv) Electronic Data Processing**

Processed pay roll of approximately 1200 employees and handled the financial accounting for the year. For the purpose of preparation of Budget, Nominal Rolls were prepared. GPF Account of all employees and Bankwise statement of pensioners were also prepared. The ambitious programme of computerization of all Departments of the Board is in progress.



## **PART - IX**

### **LICENSING & EXCISE DUTY**

The Rubber Board is vested with powers of assessment and collection of duty of excise (cess) on all rubber produced in India under Section 12 of the Rubber Act, 1947. Cess is to be remitted to the Consolidated Fund of India. All transactions in rubber are regulated under licences issued by the Board as provided in Section 14 of the Rubber Act, 1947. The quantity of rubber transacted by every licensee is to be furnished to the Board through periodical returns. Interstate transport of rubber is regulated by a declaration in Form 'N'. Periodical inspections are also conducted to verify the correctness of the accounts maintained and stock held by the manufacturers/dealers/processors. These functions are discharged/monitored by the Licensing & Excise Duty Department, which consists of the following Divisions & Offices.

#### **I EXCISE DUTY DIVISION**

The issuance of licence to manufacturers to acquire rubber, assessment, collection and remittance to the consolidated Fund of India of the duty of excise (Cess) on rubber are the chief functions.

##### **(1) Issuance of licence**

##### **(a) Issuance of licence for the year 1999-2000**

The function of issue of licence includes new licences to prospective manufacturing units and renewal of the existing licence for the subsequent year. The details of licences issued during 1999-2000 are furnished below.

|                    |                  |
|--------------------|------------------|
| Fresh licence      | 288 Nos.         |
| Renewal of licence | 5024 Nos.        |
| <b>TOTAL</b>       | <b>5312 Nos.</b> |



During the period, licences in respect of 9 units were cancelled on the basis of their request. Thus, the total number of licensed manufacturers as at the end of 31.3.2000 was 5303. The statewise distribution of licensed manufacturers as at the end of 31<sup>st</sup> March 2000 is detailed hereunder.

| Sl.No.       | Name of State/Union Territory   | No. of units |
|--------------|---------------------------------|--------------|
| 01           | Kerala                          | 974          |
| 02           | Maharashtra                     | 623          |
| 03           | Punjab                          | 534          |
| 04           | Tamilnadu                       | 506          |
| 05           | West Bengal                     | 484          |
| 06           | Uttar Pradesh                   | 450          |
| 07           | Gujarat                         | 395          |
| 08           | Delhi                           | 297          |
| 09           | Haryana                         | 311          |
| 10           | Karnataka                       | 249          |
| 11           | Andhra Pradesh                  | 140          |
| 12           | Rajasthan                       | 92           |
| 13           | Madhya Pradesh                  | 91           |
| 14           | Pondicherry                     | 34           |
| 15           | Bihar                           | 33           |
| 16           | Goa, Dadra, Nagarhaveli & Daman | 28           |
| 17           | Chandigarh                      | 18           |
| 18           | Orissa                          | 16           |
| 19           | Himachal Pradesh                | 8            |
| 20           | Jammu & Kashmir                 | 8            |
| 21           | Tripura                         | 7            |
| 22           | Assam                           | 5            |
| <b>Total</b> |                                 | <b>5303</b>  |

The Division also prepared and supplied a list of licensed manufacturers for reference to the various offices of the Rubber Board, Rubber Dealers and other public. A sum of Rs.4,250/- was collected towards price of the list of licensed manufacturers supplied from the Division.

**b) Issuance of licence for the year 2000-01**

The licences in respect of 3320 existing manufacturers were renewed for the year 2000-2001.

**(2) Letter of authorisation to purchase rubber**

Registered 681 letters of authorisation of manufacturers in favour of their agent dealers to purchase and despatch rubber on their behalf.

Five new branches/purchase depots of manufacturers were registered during the year.

Special authorisation to 5 Organisations/Institutions to acquire rubber for experimental purposes were issued in lieu of regular licence, after collecting the relevant cess in advance.

**(3) Assessment and collection of duty of excise (cess) on rubber**

The assessment of cess on rubber during 1999-2000 was Rs.7790.96 lakh based on 11381 half yearly returns (Form M) as against Rs.4987.09 lakh during 1998-99. The Liaison officers and the Inspecting staff functioning at various parts of the country have furnished 1687 individual inspection reports, on which appropriate actions were taken.

The duty of excise (cess) on rubber collected during the period was Rs.7556.25 lakh against Rs.5005 lakh during 1998-99. Out of this, a sum of Rs.7428 lakh was remitted in to the Consolidated Fund of India after deducting the cost of collection.

Reconciliation of CFI remittance with Central Bank of India, Kottayam and Regional Pay & Accounts Officer, Chennai were completed. The demand, collection and balance (DCB) statement for 1998-99 and final account of cess collection during the period under report were prepared.

The aggregate of licence fee and service charge collected during 1999-2000 was Rs.10,28,320. Besides a sum of Rs.8,86,206/- was collected towards penal interest on belated remittance of cess.

## **II Licensing Division**

Licensing of Rubber Dealers and Processors and registration of their branches and agents, initiation of punitive action against erring dealers and processors are the main functions of the Licensing Division situated at Kochi.

(i) The number of Licensed dealers which stood at 10,559 at the beginning of the year marginally came down to 10514 at the end of the year. During the period under report, 839 new licences were issued. Out of 1526 dealers whose period of validity expired on 31/3/1999, the licences of 910 dealers were renewed. Besides, 506 licences were renewed, the validity of which commencing from 1/4/2000 during the period January to March 2000. Rest of them did not apply for getting their licence renewed.

(ii) Licensing of processors

58 licences were renewed and their branches numbering 67 were also registered.

(iii) Suspension and Revocation of licence of dealers and processors

During the year under report 257 licences of dealers and 3 licences of processors were cancelled. Besides, 13 licences of dealers were suspended due to violations of the provisions of the Rubber Act & Rules. Three licences of dealers were also revoked. However, the order of suspension of licences of 2 dealers was rescinded and their

licences were restored after getting satisfactory explanation for the lapses committed by them.

(iv) Registration of branches and agencies

During the year under report, 209 branches of dealers and processors were newly registered making the total number of branches to 1105 as at the end of March, 2000. Besides, letters of authorisation issued by 354 principle dealers in favour of their agents to purchase and despatch rubber on their behalf were registered during 1999-2000.

(v) Collection of cess from dealers

On account of irregularities and discrepancies in stock, a sum of Rs.9,53,453.50 was collected from dealers towards the amount equivalent to Cess on rubber. Besides, a sum of Rs.2,33,433/- was collected from Banks towards forfeiture of Bank Guarantee furnished by certain erring dealers.

(vi) Supply of 'N' Form

6290 books of 'N' forms were supplied to various estates, dealers, processors and Manufacturers in Kochi area to transport rubber out of the State.

(vii) Distribution of dealers and processors

| Sl. No. | Name of State     | No. of dealers | Processors |
|---------|-------------------|----------------|------------|
| 01      | Kerala            | 9281           | 118        |
| 02      | Andhra Pradesh    | 2              | -          |
| 03      | Assam             | 24             | -          |
| 04      | Andaman & Nicobar | 8              | -          |
| 05      | Bihar             | 7              | -          |
| 06      | Chandigarh        | 6              | -          |
| 07      | Delhi             | 148            | -          |
| 08      | Goa               | 2              | -          |
| 09      | Gujarat           | 36             | -          |
| 10      | Haryana           | 43             | -          |
| 11      | Jammu & Kashmir   | 1              | -          |
| 12      | Karmataka         | 117            | 7          |



|              |                  |              |            |
|--------------|------------------|--------------|------------|
| 13           | Madhya Pradesh   | 7            | -          |
| 14           | Maharashtra      | 106          | -          |
| 15           | Meghalaya        | 9            | -          |
| 16           | Orissa           | 1            | -          |
| 17           | Punjab           | 176          | -          |
| 18           | Rajasthan        | 18           | -          |
| 19           | Tamilnadu        | 223          | 12         |
| 20           | Tripura          | 125          | 1          |
| 21           | Uttar Pradesh    | 85           | -          |
| 22           | West Bengal      | 85           | -          |
| 23           | Pondicherry      | 2            | -          |
| 24           | Himachal Pradesh | 1            | -          |
| 25           | Nagaland         | 1            | -          |
| <b>TOTAL</b> |                  | <b>10514</b> | <b>138</b> |

**a) Districtwise distribution of dealers in Kerala**

| Sl.No.       | Name of District   | No. of dealers |
|--------------|--------------------|----------------|
| 01           | Alappuzha          | 130            |
| 02           | Ernakulam          | 1252           |
| 03           | Idukki             | 458            |
| 04           | Kannur             | 454            |
| 05           | Kasaragod          | 113            |
| 06           | Kollam             | 1135           |
| 07           | Kottayam           | 2536           |
| 08           | Kozhikode          | 215            |
| 09           | Malappuram         | 415            |
| 10           | Palakkad           | 323            |
| 11           | Pathanamthitta     | 1148           |
| 12           | Thiruvananthapuram | 869            |
| 13           | Thrissur           | 162            |
| 14           | Wynad              | 71             |
| <b>TOTAL</b> |                    | <b>9281</b>    |

### **III MARKET INTELLIGENCE DIVISION**

Detection of bogus/unlicensed dealing in rubber, arranging surprise inspection/squad inspection at the business premises of the dealers for checking the correctness of their books of accounts and physical stock, cross verification of the statutory returns filed by the dealers/manufacturers and processors for ascertaining the correctness of the quantity of rubber acquired, road checking and surprise visit to check post and Railway Parcel Office with a view to prevent evasion of cess on rubber and thereby improve cess collection from the important functions in Market Intelligence Division. Inspections are also conducted for ascertaining the suitability of the applicants and their business premises to issue licence to deal in rubber, registration of branches of the dealers and approval of new/additional premises and for issue of special authorisation for field latex collection.

The inspection squad which functioned from Kozhikode, Kochi, Kottayam and Thiruvananthapuram and the Inspectors (Market Intelligence) helped to a great extent in arresting illicit trade in rubber and thereby improve the cess collection. The inspection also helped in collecting monthly returns from a large number of rubber dealers.

During the period under report, the squad spent several days on tour and inspected 2963 licensed dealers, 86 unlicensed dealers and detected irregularities in 599 cases involving 614 MT as shortage/unaccounted stock/irregular sale. A sum of Rs.9,76,058/- was also collected towards cess on rubber from the parties involved. The squad also conducted 29 road checking and surprise visits to the check posts and border areas which made an impact in reducing illicit trading and smuggling of rubber across the border to some extent.

Special attention was also given for scrutiny of inspection reports, form N declarations/daily statement of check posts and wherever irregular despatches were made such cases were timely referred to Liaison Officers/Inspectors (MI Squad) for arranging

inspection. Based on such reports licence of 13 dealers were suspended and that of 2 manufacturers not renewed, which helped in collecting a sum of Rs.30,71,948/- including old arrears of Rs.26,948/-

In order to strengthen surveillance of interstate movement of rubber, regular checking of the documents accompanying the rubber consignments were done at the three check posts at Walayar, in Palakkad District, Bengra Manjeswaram in Kasargod District of Kerala and Kavalkinar in Thirunelveli District of Tamilnadu.

The surveillance exercised through the three check posts helped in detecting illicit transport of rubber. During the period under report, the officials at Walayar, Manjeswaram and Kavalkinar check posts detained 24 consignments of rubber for various reasons. Of this 17 consignments were allowed to cross the border on production of valid documents/satisfactory explanations and 7 consignments weighing 22300 kgs of rubber were released after collecting a sum of Rs.47,515/- towards the amount of cess/full value of the goods/security deposit.

During the period under reports, as per daily statement received from the three check posts 42353 consignments of rubber had passed through these check posts alone. The number of consignments passed through each of the check posts are as shown below.

|      |                               |   |       |
|------|-------------------------------|---|-------|
| i)   | Walayar, Palakkad Dist.       | : | 29753 |
| ii)  | Manjeswaram, Kasargode Dist   | : | 7476  |
| iii) | Kavalkinar, Thirunelveli Dist | : | 5124  |

**Total : 42353**

During 1999-2000, 17000 books of form N declaration under different categories were got printed and 13527 form N books were supplied to various estates, processors, dealers and manufacturers. 66831 copies of form N declarations were received at

Market Intelligence Division and most of them were scrutinised. Wherever discrepancies were noticed, explanations/clarifications were called for from the concerned parties and appropriate action taken.

The monthly returns and copies of form 'N' declarations received from various dealers/manufacturers/processors/estates were cross checked and detected discrepancies in 148 cases involving unaccounted transactions to the tune of 7156 Tonnes. A sum of Rs.28,05,190/- was also realised in the case of irreconcilable transactions.

Detected the malpractice of two dealers based at Nagarcoil and Sullia reporting despatch of only one ton rubber each in the copy of Form N2 declaration meant for the Board against the despatch of 10 tons of rubber under the originals of 13 Form N2 declaration to their consignees in Jalandhar/Delhi. A sum of Rs.1,75,500/- was collected towards cess on the suppressed quantity of 117 tonnes from the consignees concerned.

Thus on account of special efforts of the inspection Squad, the check post machinery and purchase monitoring cell in the Market Intelligence Division a sum of Rs.70,76,211/- could be collected additionally.

Further as per court order a bogus consignment of rubber seized by the Board in 1995 from the Railway Station was disposed by public auction and the sale proceeds of Rs.88,109/- credited to Consolidated Fund of India.

#### **IV SUB/LIAISON OFFICES**

With a view to improve collection of Cess on rubber and to maintain liaison with various Ministries, trade and industry, Board maintains 9 Sub/Liaison offices in the major consuming centres outside Kerala at Chennai, Bangalore, Secunderabad, Ahmedabad, Kanpur, Mumbai, Calcutta, Jalandhar and New Delhi. These offices function mainly to assess the suitability of applicants to hold licences to deal in rubber or acquire rubber for rubber goods manufacture. The purchase made by the rubber goods



manufactures and dealers and the stock held by them were verified at random. Verifications of the books of accounts and records of the licence holders were also done to ensure that all rubber <sup>procured</sup> produced by them were properly accounted and subject to assessment of Cess. Surprise inspections were conducted to detect unlicensed dealing in rubber and unlicensed manufacturing of rubber goods in contravention of the provisions of the Rubber Act and Rules in order to prevent loss of revenue towards cess.



## **PART - X STATISTICS AND PLANNING**

### **1 General Statistics**

Monitoring of the data on supply, demand, stock and price of rubber was done regularly and periodic reports on demand-supply position of rubber were prepared periodically for review by the Statistics & Import/ Export Committee, which met on 5/7/99, 30/11/99 & 24/3/2000 and the meetings of the Board held on 20/7/99 and 4/12/99. The recommendations/conclusions of these meetings were forwarded to the government with explanatory comments.

The statutory monthly returns from rubber growers, dealers, processors and manufacturers were compiled and analyzed every month to ascertain production, consumption and stock of rubber. Sample studies in small holding sector were continued to ascertain the monthly variations in production, stock etc. The data collected from various sources were compiled and production, consumption, import and stock of rubber were worked out on monthly basis. The statistical information covering trend in production, consumption, stock, price, import, export of natural rubber, synthetic rubber, reclaimed rubber and many other details were compiled for publishing the 'Rubber Statistical News' (monthly). 'Indian Rubber Statistics Vol.23' (1999) was published using in-house computer facilities. The publication covers detailed information on area under rubber, production, consumption, import, export, stock, etc of natural, synthetic and reclaimed rubber, manufacturers, dealers, rubber products, labour, price, etc besides world rubber statistics.

Relevant statistical information was furnished to the various organizations connected with the rubber industry. Materials were prepared for answering Parliament questions and Legislative Assembly interpellations pertaining to

import/export, production, price etc of natural rubber and the various aspects of rubber industry.

To ascertain the installed capacity and production of various grades of rubber etc. during 1998-99, annual reports were collected from processors of centrifuged latex, block rubber, PLC and crepe mills.

The census work initiated in 1988 was continued in the reporting period also. The census reports received for the year 1998 were processed. For selection of enumerators, training and assignments of work etc the technical officers of the Department have assisted the field staff and coordinated the census work.

## **II Planning**

Annual Plan proposal on rubber for 2000-01 was prepared.

Prepared monthly performance reports of each of the schemes under the World Bank Assisted Rubber Project for monitoring the progress of various schemes under the project.

Necessary assistance for the preparation of the forecasting models for price, production and consumption of tyre and nontyre were rendered to Mr. Takamasa Akiyama, Principal Commodity Specialist of the World Bank. Necessary details required for the study conducted by the consultant (Centre for Management Development, Thiruvananthapuram) to assess the impact of rubber plantation development scheme (RPD) operated by the Board under the World Bank Assisted Rubber Project, with special reference to the socio-economic status of the small growers and the impact of extension services of the Board were collected and processed and suitable comments/observations were given to the consultant.

### **III Supply of information to World Organizations**

Continued to supply information about the NR industry in India to world organizations like the Association of Natural Rubber Producing Countries (ANRPC), Kuala Lumpur, Malaysia and International Rubber Study Group (IRSG), London.

India hosted the “Eighth meeting of the ANRPC Coordinating Committee on Production and Marketing Strategies” which was held on 4<sup>th</sup> to 6<sup>th</sup> May 1999 at New Delhi. Delegates from India, Indonesia, Malaysia, Thailand, Sri Lanka and Vietnam attended the meeting.

During the year 1999-2000 Chairman, Rubber Board attended two international meetings ie., (1) International Marketing Conference 1999 conducted by Thai Rubber Association in co-operation with International Rubber Organizations from 23<sup>rd</sup> to 25<sup>th</sup> June 1999 at Hat Yai, Thailand; and (2) 102<sup>nd</sup> Annual meeting of the member governments of IRSG from 4<sup>th</sup> to 8<sup>th</sup> October '99 at Mexico.





## PART XI STATISTICAL TABLES

*Table-1*

**PRODUCTION, IMPORT, EXPORT & CONSUMPTION OF NR**  
(Tonnes)

| Month        |      | Production    | Import*      | Export      | Consumption<br>(Indigenous & imported) |
|--------------|------|---------------|--------------|-------------|----------------------------------------|
| April        | 1999 | 43355         | 589          | 152         | 49705                                  |
| May          | "    | 37665         | 890          | 153         | 51290                                  |
| June         | "    | 38990         | 1252         | 0           | 50315                                  |
| July         | "    | 40220         | 1936         | 189         | 52115                                  |
| August       | "    | 50870         | 3679         | Neg         | 49775                                  |
| September    | "    | 58250         | 1958         | 26          | 53460                                  |
| October      | "    | 60555         | 1617         | 22          | 50315                                  |
| November     | "    | 76225         | 1228         | 648         | 53670                                  |
| December     | "    | 77430         | 809          | 1577        | 56505                                  |
| January      | 2000 | 70365         | 935          | 1042        | 54310                                  |
| February     | "    | 32190         | 700          | 380         | 53195                                  |
| March        | "    | 36150         | 843          | 1800        | 53455                                  |
| <b>Total</b> |      | <b>622265</b> | <b>16436</b> | <b>5989</b> | <b>628110</b>                          |

\* Source: DGCI & S, Calcutta

Neg – Negligible

*Table-2*

**STOCK OF NATURAL RUBBER AT THE END OF EACH MONTH**  
(Tonnes)

| Month     |      | Growers, Dealers &<br>Processors | Manufacturers | Total  |
|-----------|------|----------------------------------|---------------|--------|
| April     | 1999 | 138135                           | 44025         | 182160 |
| May       | "    | 129230                           | 40040         | 169270 |
| June      | "    | 120263                           | 38932         | 159195 |
| July      | "    | 110875                           | 38160         | 149035 |
| August    | "    | 114780                           | 39030         | 153810 |
| September | "    | 120850                           | 39385         | 160235 |
| October   | "    | 139755                           | 32045         | 171800 |
| November  | "    | 156365                           | 38570         | 194935 |
| December  | "    | 177290                           | 37800         | 215090 |
| January   | 2000 | 184000                           | 47040         | 231040 |
| February  | "    | 156015                           | 54255         | 210270 |
| March     | "    | 140470                           | 52100         | 192570 |

Table-3

**PRODUCTION, IMPORT & CONSUMPTION OF SYNTHETIC RUBBER  
(Tonnes)**

| Month        |      | Production*  | Import**     | Consumption   |
|--------------|------|--------------|--------------|---------------|
| April        | 1999 | 4861         | 3853         | 12950         |
| May          | "    | 5453         | 3804         | 12715         |
| June         | "    | 5528         | 4862         | 13065         |
| July         | "    | 5943         | 8737         | 14275         |
| August       | "    | 5540         | 5701         | 13555         |
| September    | "    | 5321         | 15018        | 14580         |
| October      | "    | 4390         | 4292         | 14060         |
| November     | "    | 5067         | 6610         | 14150         |
| December     | "    | 5362         | 6771         | 14755         |
| January      | 2000 | 4001         | 5901         | 14650         |
| February     | "    | 3995         | 6156         | 14490         |
| March        | "    | 4832         | 8334         | 13975         |
| <b>Total</b> |      | <b>60293</b> | <b>80039</b> | <b>167220</b> |

\* Provisional

\*\* Source: DGCI &amp; S, Calcutta

Table-4

**PRODUCTION & CONSUMPTION OF RECLAIMED RUBBER  
(Tonnes)**

| Month        |      | Production*  | Consumption  |
|--------------|------|--------------|--------------|
| April        | 1999 | 5505         | 5445         |
| May          | "    | 5285         | 5230         |
| June         | "    | 5405         | 5365         |
| July         | "    | 5400         | 5380         |
| August       | "    | 5210         | 5265         |
| September    | "    | 5205         | 5250         |
| October      | "    | 5255         | 5305         |
| November     | "    | 5250         | 5150         |
| December     | "    | 5420         | 5310         |
| January      | 2000 | 5450         | 5360         |
| February     | "    | 5395         | 5345         |
| March        | "    | 5300         | 5045         |
| <b>Total</b> |      | <b>64080</b> | <b>63450</b> |

\* Indigenous purchase by manufacturers.

Table-5

**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF NATURAL RUBBER IN INDIA**  
(Rs/ctl.)

| Month                      | RSS-1 | RSS-2 | RSS-3 | RSS-4 | RSS-5 | Ungraded | ISNR-5 | ISNR-10 | ISNR-20 | ISNR-50 |
|----------------------------|-------|-------|-------|-------|-------|----------|--------|---------|---------|---------|
| Apr-99                     | 3312  | 3124  | 2995  | 2818  | 2713  | 2585     | 2900   | 2810    | 2680    | 2575    |
| May-99                     | 3623  | 3512  | 3335  | 3190  | 3078  | 2976     | 3235   | 3151    | 3015    | 2764    |
| Jun-99                     | 4102  | 3918  | 3704  | 3408  | 3242  | 3119     | 3524   | 3457    | 3205    | 3114    |
| Jul-99                     | 3794  | 3667  | 3524  | 3360  | 3189  | 2983     | 3476   | 3382    | 3113    | 2969    |
| Aug-99                     | 3744  | 3628  | 3520  | 3318  | 3128  | 2822     | 3422   | 3322    | 3114    | 2821    |
| Sep-99                     | 3408  | 3265  | 3135  | 2951  | 2863  | 2660     | 3070   | 2970    | 2810    | 2642    |
| Oct-99                     | 3350  | 3250  | 3127  | 2958  | 2833  | 2723     | 3016   | 2915    | 2758    | 2665    |
| Nov-99                     | 3381  | 3281  | 3160  | 3036  | 2869  | 2751     | 3181   | 3077    | 2831    | 2744    |
| Dec-99                     | 3268  | 3168  | 3001  | 2865  | 2730  | 2627     | 3016   | 2916    | 2710    | 2630    |
| Jan-00                     | 3489  | 3389  | 3228  | 3099  | 2905  | 2749     | 3216   | 3116    | 2916    | 2751    |
| Feb-00                     | 3529  | 3429  | 3278  | 3133  | 2972  | 2751     | 3251   | 3151    | 2950    | 2740    |
| Mar-00                     | 3454  | 3354  | 3254  | 3049  | 2943  | 2831     | 3172   | 3072    | 2943    | 2816    |
| Yearly Average (1999-2000) | 3538  | 3415  | 3272  | 3099  | 2955  | 2798     | 3207   | 3112    | 2920    | 2769    |

Table-6

**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF NATURAL RUBBER  
IN KUALALUMPUR MARKET**  
(Rs/ctl.)

| Month                      | RSS-1 | RSS-2 | RSS-3 | RSS-4 | RSS-5 | SMR-5 | SMR-10 | SMR-20 |
|----------------------------|-------|-------|-------|-------|-------|-------|--------|--------|
| April, 1999                | 2531  | 2451  | 2434  | 2315  | 2259  | 2354  | 2311   | 2289   |
| May, "                     | 2570  | 2491  | 2474  | 2355  | 2298  | 2509  | 2455   | 2433   |
| June, "                    | 2615  | 2536  | 2518  | 2398  | 2341  | 2581  | 2462   | 2440   |
| July, "                    | 2470  | 2399  | 2381  | 2261  | 2203  | 2370  | 2260   | 2238   |
| August, "                  | 2451  | 2382  | 2364  | 2243  | 2185  | 2451  | 2381   | 2361   |
| Sept. , "                  | 2594  | 2530  | 2513  | 2391  | 2334  | 2727  | 2679   | 2658   |
| Oct. , "                   | 2825  | 2767  | 2750  | 2628  | 2571  | 2963  | 2901   | 2877   |
| Nov. , "                   | 3219  | 3150  | 3133  | 3013  | 2955  | 3427  | 3359   | 3336   |
| Dec. , "                   | 2985  | 2919  | 2902  | 2781  | 2723  | 3239  | 3113   | 3091   |
| Jan., 2000                 | 2836  | 2779  | 2762  | 2641  | 2583  | 3237  | 3129   | 3106   |
| Feb., "                    | 3278  | 3197  | 3180  | 3058  | 3000  | 3482  | 3335   | 3312   |
| March "                    | 3104  | 3050  | 3032  | 2911  | 2853  | 3206  | 3009   | 2986   |
| Yearly Average (1999-2000) | 2790  | 2721  | 2704  | 2583  | 2525  | 2879  | 2783   | 2761   |

**ANNEXURE**

**LIST OF MEMBERS OF THE RUBBER BOARD  
AS ON 31.03.2000**

- |    |                                                                                                                 |                                                                 |
|----|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. | Shri. KJ Mathew IAS                                                                                             | Chairman, Rubber Board                                          |
| 2. | Shri. PK Sivanandan<br>APC, Govt. of Kerala.                                                                    | Nominated by the Govt. of Kerala to<br>represent that State.    |
| 3. | Shri. PK Chithra Bhanu<br>Chairman, PCK Ltd<br>Kottayam,                                                        | Nominated by the Govt. of Kerala to<br>represent that State.    |
| 4. | Shri. K Rajarethinam<br>Secretary to Govt. of Tamil Nadu.<br>Environment & Forest Dept.<br>Chennai.             | Nominated by the Govt. of<br>Tamilnadu to represent that State. |
| 5. | Shri. George John<br>Kailas Rubber Co. Ltd<br>Kottayam                                                          | Elected by the Large Growers in the<br>State of Kerala.         |
| 6. | Shri. K Jacob Thomas<br>Managing Director<br>Vaniampara Rubber Co. Ltd<br>Kottayam                              | - do -                                                          |
| 7. | Shri. MD Joseph<br>Manniparambil<br>Kanjirappally.                                                              | - do -                                                          |
| 8. | Shri. S Ramachandran<br>Vaikundom Rubber Co. Ltd<br>Pattom Palace PO<br>Thiruvananthapuram.                     | Elected by the Large Growers in the<br>State of Tamilnadu.      |
| 9. | Shri. Pon Radhakrishnan MP<br>Chanakyapuri, No.6<br>Kautilya Marg<br>Opp.Samrat Hospital<br>New Delhi - 110 001 | Elected by Lok Sabha under Section<br>4 (3) (e).                |



- |                                                                                                                                       |                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 10. Shri. Tarlochan Singh Tur, MP<br>Punjab Bhawan<br>Copernicus Marg<br>New Delhi - 110 011                                          | Elected by Lok Sabha under Section 4 (3) (e).                           |
| 11. Shri. Vayalar Ravi MP<br>15, Pandit Pant Marg<br>New Delhi - 110 001.                                                             | Elected by Rajya Sabha under Section 4 (3) (e).                         |
| 12. Prof. NM Joseph<br>Neendukunnel<br>Arunapuram PO, Pala.                                                                           | Nominated by the Central Govt. to represent small growers of Kerala.    |
| 13. Shri. KG Ravi<br>Indira Bhavan<br>Vellayambalam<br>Thiruvananthapuram.                                                            | - do -                                                                  |
| 14. Shri. Kanam Rajendran<br>Kanam PO, Kottayam.                                                                                      | - do -                                                                  |
| 15. Shri. Suresh Elwadhi<br>Chairman. AIRIA<br>Phelps Building, 2 <sup>nd</sup> floor<br>9 - A Connaught Place<br>New Delhi - 110 011 | Nominated by the Central Govt. to represent Rubber Goods Manufacturers. |
| 16. Shri. VK Modi<br>Chairman. ATMA.                                                                                                  | - do -                                                                  |
| 17. Shri. Pappanmkode Unni<br>Pappanamkode House<br>Industrial Estate<br>Thiruvananthapuram                                           | Nominated by the Central Govt. to represent labour interests.           |
| 18. Shri. C Anantha Krishnan<br>Tamil Manila Congress<br>Kanyakumari.                                                                 | - do -                                                                  |
| 19. Shri. P Lalaji Babu<br>CITU State Committee Office<br>Deshabhimani Road<br>Thiruvananthapuram.                                    | - do -                                                                  |

- |     |                                                                                  |                                                                 |
|-----|----------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 20  | Shri. PD George<br>Raju Bavan<br>Kota PO<br>Chengannoor.                         | - do -                                                          |
| 21. | Shri. PJ Joseph<br>6/379, Bank Road<br>Kainady, Kozhikkode.                      | Nominated by the Central Govt. to<br>represent other interests. |
| 22. | Shri. K Jospheh Monippally<br>Advocate, Kakkanadu PO<br>Kochi.                   | Nominated by the Central Govt. to<br>represent other interests. |
| 23. | Shri. K Suresh Ballal<br>Ballal Bagh<br>Karnataka.                               | - do -                                                          |
| 24. | Shri. K Pankajakshan<br>Indu Mahal Pettah PO<br>Thiruvananthapuram.              | - do -                                                          |
| 25. | Dr. AK Krishnakumar<br>Rubber Production Commissioner<br>Rubber Board, Kottayam. | Ex-officio                                                      |
| 26  | Vacant                                                                           | Executive Director                                              |



# **ANNUAL REPORT**

FOR  
**THE YEAR 2001-02**



**THE RUBBER BOARD**

(Ministry Of Commerce & Industry)

**KEEZHUKUNNU, KOTTAYAM-686 002**  
**KERALA STATE**

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# **ANNUAL REPORT ON THE WORKING OF THE RUBBER BOARD DURING 2001-02**

## **PART-I I N T R O D U C T I O N**

The Rubber Board was constituted by the Government of India as a body corporate under the Rubber Act 1947 with the primary objective of the overall development of the rubber industry in the country. Natural rubber often referred to as nature's most versatile raw material is obtained from the latex produced by "*Hevea brasiliensis*". This raw material finds its use in about 35,000 products and contributes substantially to the industrial and economic development of the country. The Board established a strong development and extension network and as a result, the rubber plantation sector achieved an impressive all-round growth in expansion of area and in the increase in production and productivity. Simultaneously, the Board gave thrust to research also and the Rubber Research Institute of India (RRII) was established in 1955 for carrying out research on biological and technological improvement on rubber.

The Board has been encouraging scientific planting of rubber right from its inception and since the sixth plan period, an integrated scheme for development of rubber plantations, namely, the Rubber Plantation Development Scheme for promoting both newplanting and replanting has been in operation and this is rated by the World Bank as one of the highly successful schemes. Besides, development and extension support is given to growers for increasing productivity, improving the quality of produce through individual as well as community efforts, facilitating formation of grass root level organizations of growers and empowering them to ensure sustainable development through rubber cultivation. The development of rubber plantation in non-traditional region, especially in north-eastern states has also achieved significant growth where rubber development is taken up adopting an integrated approach. Special mention needs to be made about the rubber based settlement programmes for tribal shifting cultivators in the north-east and in other states such as Orissa, Andhra Pradesh, Karnataka and Kerala ensuring overall socio-economic development/eco-restoration.

The Board has also been adopting several measures to promote diversified as well as non-conventional uses of natural rubber by supporting rubber products manufacturing sector, extending assistance in skill upgradation and infrastructure development.

The Rubber Research Institute of India has made significant contributions by breeding and releasing the popular clone RR II 105, one of the highest yielding clones in the world. Research is at a final stage in developing five more high yielding clones which will be released in near future. The RR II also evolved agro-technologies on various cultural practices on '*Hevea*'. The Institute made substantial contribution in improving the processing of rubber and evolving speciality rubbers, which can effectively substitute synthetic rubbers. Research on special environment protection systems to check pollution in processing factories, energy saving mechanisms for processing, processing of rubber wood, ancillary income generation activities and rubber based cropping system has yielded useful results.

## **Performance during 2001-02**

The production of NR during 2001-02 was 631,400 tonnes as against 630,405 tonnes during 2000-01. The growth rate in production of NR, which was 2.8% during 1999-2000, declined to 1.3% during 2000-01, and further to 0.2% during 2001-02.

The growth in consumption of NR during 2001-02 was 1.1% as against 0.5% during 2000-01 and 6.2% during 1999-2000. The gross consumption of NR during 2001-02 was 638,210 tonnes as against 631,475 tonnes during 2000-01. Consumption of NR in the Auto Tyre Manufacturing Sector declined during the year 2001-02 which was to the extent of 0.4% as against the decline of 1.7% during the previous year. On the other hand, the general rubber goods sector, registered a growth rate of 2.5% during 2001-02 as compared to 2.7% during 2000-01.

## **Price**

The Govt. of India by Gazette Notification dated 12<sup>th</sup> September 2001 fixed statutory minimum price for RSS 4 and RSS 5 grades of sheet rubber at Rs.3209 and Rs.3079 per quintal respectively. The yearly average price for RSS 4 grade rubber was Rs.3223 per quintal as against Rs.3036 during 2000-01.

## **PART - II**

# **CONSTITUTION AND FUNCTIONS**

### **CONSTITUTION OF THE BOARD**

As per Section 4 (3) of the Rubber Act 1947, the Board shall consist of -

- a) A Chairman to be appointed by the Central Government;
- b) Two members to represent the State of Tamilnadu, of whom one shall be a person representing the rubber producing interests;
- c) Eight members to represent the State of Kerala, six of whom shall represent the rubber producing interests, three of such six being persons representing the small growers;
- d) Ten members to be nominated by the Central Govt., of whom two shall represent the manufacturers and four labour;
- e) Three members of Parliament of whom two shall be elected by the Lok Sabha and one by the Rajya Sabha;
- f) The Executive Director (ex-officio); and
- g) The Rubber Production Commissioner (ex-officio).

The position of Executive Director has not been filled so far.

List of members of the Board as on 31.3.2002 is given at the end of this report.

### **Functions of the Board**

The functions of the Board as laid down under Section 8 of the Rubber Act 1947 are -

- (i) **Promote by such measures as it thinks fit the development of the rubber industry. The measures may provide for –**
  - a) undertaking, assisting or encouraging scientific, technological and economic research;
  - b) training students/growers 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; and
- g) carrying out any other duties which may be vested with the Board.

**(ii) It shall also be the duty of the Board -**

- a) to advise the Central Govt. on all matters relating to the development of rubber industry, including the import and export of rubber;
- b) to advise the Central Govt. with regard to participation in any international conference or scheme relating to rubber;
- c) to submit to the Central Govt. and such other authorities as may be prescribed half yearly reports on its activities and the working of the Act; and
- d) to prepare and furnish such other reports relating to the rubber industry as may be required by the Central Govt. from time to time.

Seven Committees have been formed to review the Board's activities vis-à-vis the functions as laid down under Section 8 of the Rubber Act. These are Executive Committee, Research & Development Committee, Market Development Committee, Planting Committee, Statistics & Import/Export Committee, Labour Welfare Committee and Staff Affairs Committee.

Shri A Jacob, representing the large rubber growers in the State Constituency of Tamilnadu was elected as Vice-Chairman of the Board on 03.11.2001, for the period upto 02.11.2002.

Shri SM Desalphine IAS, continued as the Chairman of the Board during 2001-02.

## **MEETINGS OF THE BOARD AND ITS COMMITTEES**

The following meetings of the Board and of the Committees were held during the year.

- |                          |                                        |
|--------------------------|----------------------------------------|
| a) <b>Board meetings</b> | 142 <sup>nd</sup> meeting - 23.06.2001 |
|                          | 143 <sup>rd</sup> meeting - 03.11.2001 |

In addition, two special meetings of the Board, one on 21.07.2001 and the other on 13.10.2001 were also held.



**b) Committee meetings**

|                                        |                         |
|----------------------------------------|-------------------------|
| ♦ Planting Committee                   | 19.04.2001              |
| ♦ Research & Development Committee     | 20.04.2001              |
| ♦ Labour Welfare Committee             | 21.04.2001              |
| ♦ Statistics & Import/Export Committee | 21.04.2001 & 15.02.2002 |
| ♦ Executive Committee                  | 21.08.2001              |
| ♦ Staff Affairs Committee              | 16.03.2002              |

**ORGANISATIONAL SET UP**

The activities of the Rubber Board are carried out through eight Departments viz. Rubber Production, Administration, Rubber Research, Processing & Product Development, Training & Technical Consultancy, Finance & Accounts, Statistics & Planning and Licensing & Excise Duty; headed respectively by the Rubber Production Commissioner, the Secretary, the Director of Research, the Director (P&PD), the Director (T&TC), the Director (Finance), the Jt. Director (S&P) and the Director (L&ED). During the year under report, as the post of Secretary was lying vacant, the Director (L&ED) held additional charge of the post of Secretary.

The Headquarters of the Board along with the Administration, Rubber Production, Statistics & Planning, Licensing & Excise Duty and Finance & Accounts Departments are located at own premises in Keezhukunnu, Kottayam-686 002. The Department of Research, Department of P&PD and the Department of Training & Technical Consultancy are located at the Rubber Research Institute of India campus at Kottayam – 686 009.

There are nine Sub/Liaison Offices under the Licensing & Excise Duty Department. The Rubber Production Department has 5 Zonal Offices, 2 Nucleus Rubber Estate & Training Centres, 40 Regional Offices, 1 ADO's Office, 189 Field Stations, 14 Regional Nurseries including 2 District Development Centres, one Central Nursery and 23 Tappers' Training Schools located at different rubber growing regions.

The Research Department runs two Regional Research Stations in Kerala and a Regional Station each in Tamilnadu, Karnataka, Maharashtra, Orissa, West Bengal, Assam, Mizoram, Meghalaya and Tripura. The Pilot Block Rubber Factory located at Kottayam, the Pilot Latex Processing Factory located at the Central Experiment Station at Chethackal and the Pilot Plant for Radiation Vulcanisation

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of Natural Rubber latex at Kottayam are run by the Department of Processing and Product Development. The Model TSR factory established under the World Bank Assisted Rubber Project is also run by the Department of Processing and Product Development.

The Chairman exercises administrative control over all the Departments and Offices of the Board. The total number of Officers and staff under the Board as on 31.3.2002 was 2193 consisting of 290 Group 'A' Officers, 637 Group 'B' Officers, 1040 Group 'C' staff and 226 Group 'D' staff. Very cordial relations existed between the staff and the executive personnel. Their good work has resulted in taking the Board to greater heights.

The activities of the different departments are summarized in the following pages.

## **PART III**

# **RUBBER PRODUCTION**

Based on the strategies adopted by the Board, the Rubber Production Department plans and implements various schemes and projects for increasing production of natural rubber and improving the quality of sheet rubber as well as field coagulum in the small holding sector which accounts for 88% of the area and production in the country. In the year 2001-02, the following major programmes were formulated and implemented by the Department.

- 1) Scientific replanting of low-income plantations with high yielding varieties.
- 2) Newplanting that would result in expansion of rubber planted area.
- 3) Encouraging and assisting adoption of scientific agro-management practices in mature plantations to increase productivity.
- 4) Supporting primary processing for quality upgradation of rubber in the small holding sector.
- 5) Pollution control programmes in the plantation sector.
- 6) Economic settlement of tribal families through rubber planting.
- 7) Promotion of extra income generation activities in rubber plantations.
- 8) Empowerment of the small holding sector by forming farmer groups namely, Rubber Producers Societies (RPSs) and equipping them to function as self help groups of small growers.
- 9) Supporting the women empowerment programmes started with the involvement of RPSs.

For achieving these objectives, the Department is implementing various schemes, which provide for technical as well as financial assistance to the growers. A series of educational training and visit programmes for needy rubber growers have also been arranged by the Dept. The print media, audiovisual equipment, films on technical subjects etc. are being extensively used in the technology dissemination process. Demonstration of scientific plantation practices in farmers' fields is another programme of the Dept. Specialized schemes for pollution control in rubber plantations by generation of biogas from rubber effluent, (the gas being used for drying rubber sheets resulting in saving of fire wood), beekeeping in rubber plantations for additional income generation etc. have also been formulated and implemented by the Dept. The women empowerment activities for the women engaged in rubber plantation and allied areas, started during the World Bank Project period, were further supported by the Department. The Department also monitored and guided the technology transfer, community processing, pollution control

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and other activities of the model RPSs assisted by the Board under the World Bank Project. These efforts help in achieving a sustainable development in the rubber plantation sector.

Based on the specific requirements of the growers in the non-traditional areas, separate schemes have been formulated for operation in that region. Similarly, certain specific projects such as Block Plantation Project and Tribal rubber plantation project and schemes to provide assistance for boundary protection, additional incentive for planting materials etc. are also being implemented exclusively for the benefit of SC/ST category of growers.

A gist of the various projects/schemes operated through the Dept. and the progress achieved during the financial year 2001 - 02, is given below.

- **Rubber Plantation Development Scheme** – This is the most important scheme of the Board and was implemented successfully during the year under report also. Details of applications received, area, permits issued, permitted area etc. during 2000-01 and 2001-02, are as follows.

| DETAILS                                         | 2000-01 | 2001-02 |
|-------------------------------------------------|---------|---------|
| No. of applications                             | 13618   | 12922   |
| Area as per applns. (ha.)                       | 10040   | 9513    |
| No. of permits issued                           | 10482   | 9635    |
| Permitted area (ha.)                            | 7074    | 6577    |
| Amount disbursed as assistance<br>(Rs.in crore) | 14.45   | 15.33*  |

\* Including spill over payment for the previous years' planting.

Due to low price of rubber, there was a slight decline in the planting tempo during the year.

- **Tribal Rubber Plantation Project** – This project is aimed at the economic settlement of selected tribal families of Kerala and is financed jointly by the Board and the Govt. of Kerala. Progress of implementation of the project is indicated below.

|                                               |           |
|-----------------------------------------------|-----------|
| Area planted under the project during 2001-02 | 82.00 ha. |
| Cumulative area planted upto 2001-02 (ha.)    | 1899 ha.  |
| No. of beneficiary families 2001-02           | 200       |
| Total No. of beneficiaries under the project  | 5628      |



- **Block Rubber Plantation Project** – This is formulated for the rehabilitation of SC/ST category of people in the non - traditional areas who practise shifting cultivation. The project is currently operated in Tripura, Orissa, Andhra Pradesh and Karnataka, with financial support from the State Governments concerned. Details of planting under this project are as follows.

| STATE          | Area planted during 2001-02<br>(area in hectares) | Cumulative area<br>planted upto<br>2001-02 (in hectares) |
|----------------|---------------------------------------------------|----------------------------------------------------------|
| Tripura        | 407                                               | 2605                                                     |
| Orissa         | 40                                                | 175                                                      |
| Andhra Pradesh | Nil                                               | 76                                                       |
| Karnataka      | 28                                                | 187                                                      |
| <b>TOTAL</b>   | <b>475</b>                                        | <b>3043</b>                                              |

- **Insurance of Rubber Plantations** – Rubber plantations are insured against natural calamities. Small plantations coming under Rubber Plantation Development Scheme are compulsorily insured. Insurance of mature and immature plantations coming outside the Rubber Plantation Development Scheme is optional to the growers. This scheme is operated with the support of nationalized insurance companies. Details of plantation insured and compensation paid are given below.

| Item                            | 2001-02 | Cumulative total upto<br>2001-02 |
|---------------------------------|---------|----------------------------------|
| Immature area insured (ha.)     | 9044.00 | 92637.00                         |
| Mature area insured. (ha.)      | 368.00  | 11005.00                         |
| Compensation paid (Rs. in lakh) | 23.20   | 189.42                           |

- **Schemes operated through Extension wing** – These are schemes formulated and implemented on a need basis for providing financial and technical assistance for construction of smoke houses, purchase of Rubber rollers, beekeeping in rubber plantations etc. The physical & financial targets and achievements for various schemes during the year 2001-02 are given below.

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| SCHEME                                         | TARGET                                |                           | ACHIEVEMENT                           |                           |
|------------------------------------------------|---------------------------------------|---------------------------|---------------------------------------|---------------------------|
|                                                | Physical<br>(No. of<br>beneficiaries) | Financial<br>(Rs.in lakh) | Physical<br>(No. of<br>beneficiaries) | Financial<br>(Rs.in lakh) |
| (i) Purchase of Rubber Roller                  | 2000                                  | 20.00                     | 1954                                  | 19.54                     |
| (ii) Construction of Smoke houses              | 667                                   | 20.00                     | 665                                   | 19.95                     |
| (iii) Bee keeping                              | -                                     | 10.00                     | -                                     | 5.95                      |
| (iv) Distribution of leguminous<br>cover seeds | -                                     | 4.00                      | -                                     | -                         |
| (v) Purchase of Sprayer/duster                 | -                                     | 3.00                      | 16                                    | 0.60                      |
| (vi) Setting up of Biogas plant                | -                                     | 20.00                     | 701                                   | 19.40                     |

In addition to the above schemes, certain other schemes for providing assistance as detailed below have been formulated for operation in the non-traditional areas alone. The targets and achievements for 2001-02 are as follows.

| SCHEME                                      | TARGET        | ACHIEVEMENT  |
|---------------------------------------------|---------------|--------------|
| i) Rubber Roller to individuals             | 189 Nos.      | 101 Nos.     |
| ii) Supply of rubber rollers for NGOs       | 18 Nos.       | 18 Nos.      |
| iii) Boundary protection (general category) | Rs.9.00 lakh  | Rs.3.81 lakh |
| iv) Providing Irrigation                    | Rs. 6.00 lakh | Rs.2.81 lakh |
| v) Construction of Smoke house              | 77 Nos.       | 81 Nos.      |
| vi) Transportation of estate inputs.        | Rs.3.00 lakh  | Rs.5.20 lakh |

- **Planting material generation** - In order to generate good quality planting materials for distribution to growers at reasonable price and also to check the monopoly and unscrupulous trading practices of private nursery owners, the Board is maintaining its own nurseries. The details are given below.

No. of nurseries owned by the Board  
Total area of nurseries

**15**  
**72.17 ha.**

## PRODUCTION TARGET AND ACHIEVEMENT DURING 2001-2002

|                     | <u>Target</u>     | <u>Achievement</u> |
|---------------------|-------------------|--------------------|
| Green budded stumps | 1.15 lakh         | 1.21 lakh          |
| Brown budded stumps | 9.04 lakh         | 10.42 lakh         |
| <b>TOTAL</b>        | <b>10.19 lakh</b> | <b>11.63 lakh</b>  |

In the production of good quality planting materials, the achievements have exceeded the targets. The planting materials produced have been distributed to the needy growers for raising plantations and source bush nurseries.

## TAPPERS' TRAINING

- **Regular course** – The Board is running its own tappers' training schools where owners/ workers of rubber plantations are given training in scientific rubber tapping on a regular basis for 30 days duration.

|                                              |                              |
|----------------------------------------------|------------------------------|
| <b>No. of TT Schools</b>                     | <b>23</b>                    |
| <b>No. of tappers trained during 2001-02</b> | <b>2101 (in 136 batches)</b> |

- **Short term course** - Short term training for 8 days is arranged by the Board in selected plantations for improving the skill of tappers working in rubber plantations and 5703 tappers completed such training during 2001-02 (in 386 batches).

## RUBBER PRODUCERS' SOCIETIES

With a view to providing better extension support to the small growers, the Board has adopted a strategy of group approach instead of concentrating on individual growers. As a shift from individual approach to group, the department has been promoting formation of voluntary organizations of small rubber farmer groups at village level namely, Rubber Producers Societies from 1986 onwards, RPSs help the growers in group procurement of plantation inputs, group processing and sale of rubber avoiding middle men, technology transfer in areas of plantation maintenance, harvesting, processing etc. Efforts are also being made by the Board to revitalise the defunct RPSs. Details of RPSs newly formed and rejuvenated, are furnished below.

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| <b><u>RPSs formed/revitalised</u></b> | <b><u>2001-02</u></b> | <b><u>Cumulative upto 2001-02</u></b> |
|---------------------------------------|-----------------------|---------------------------------------|
| RPSs newly formed                     | 22                    | 2124                                  |
| RPSS rejuvenated                      | 24                    | 795                                   |

### **Model RPSs**

Under the World Bank Assisted India Rubber Project, 35 RPSs, 30 in traditional area and 5 in non traditional region, have been selected as model societies and supported by the Board financially and technically to set up infrastructure required for functioning as centres for technology transfer and community processing. The Department monitored the activities of these societies and supported them to ensure effective utilization of the facilities provided by the Board.

In addition to community processing and marketing, these societies conducted training programmes on subjects like plantation management, sheet processing, beekeeping, manuring, tapping, marketing and plant protection. Altogether 259 such training programmes were conducted and 4381 growers were trained by RPSs, under the technical guidance of Board's extension officers. Out of these training programmes around 200 were conducted by Model RPSs.

### **Primary Processing**

Schemes for supporting RPSs to set up facilities for primary processing of latex have been implemented by the Department.

Technical as well as financial support is given for construction of smoke houses, group processing centres, latex collection centres, effluent treatment plants etc. purchase of rubber sheeting batteries/generators and setting up of training facilities. During the year under report, 220 RPSs have been supported and an amount of Rs.112.00 lakh was reimbursed to them.

### **Women empowerment programmes**

The Department, through its Development Officer (Women Development) in the central office and nodal officers in Regional Offices continued to provide logistic support to the women empowerment programmes (income generation as well as training activities) initiated by RPSs during the world Bank Project. The women self help groups were supported strongly in the areas of training and marketing products.



### **Group meetings**

As an ongoing activity under its farmer education programme, the Department used to conduct small group meetings of rubber growers in interior villages with the assistance of RPSs. These meetings were carried out on a regular as well as campaign basis to discuss selected themes. During the year the major theme discussed in campaign meetings was 'importance of replanting the uneconomic rubber plantations'. Details of meetings conducted in the traditional region including Karnataka during 2001-02 are given below.

| <b>Type of meeting</b> | <b>No. of meetings</b> | <b>Participants</b> |
|------------------------|------------------------|---------------------|
| Full day seminars      | 76                     | 3339                |
| Half day meetings      | 1943                   | 38392               |
| Campaign meetings      | 2607                   | 58077               |
| <b>TOTAL</b>           | <b>4626</b>            | <b>99808</b>        |

### **Market support activities**

In order to ensure the minimum notified price, the department assisted the trading and processing companies promoted jointly by the Board and RPSs to procure rubber from the small rubber growers at the minimum notified price. The extension machinery of the department coordinated the market support activities. Around 1200 MT of RSS 4 grade sheet rubber was purchased as a crisis management measure. The department played a major role in the purchase of export quality sheet rubber by the companies, from the small holdings through RPSs.

#### **• COMPUTERISATION**

All the 25 Regional Offices in traditional area have completed entry of all applications under RPD Scheme for the years 1999, 2000 & 2001. Processing of applications for generation of permits, sanction intimations and the relevant statements has also been done almost in all cases. The 2<sup>nd</sup> and 3<sup>rd</sup> years' assistance cases are also being processed through computers in Regional Offices in the traditional region.

In the 2<sup>nd</sup> phase of computerisation, machines have been purchased and supplied to 4 more Regional Offices namely Nagercoil, Mangalore, Kundapura and Baripada. Installation of the application software and 1<sup>st</sup> round of training of staff in these offices have been completed.

Computers have been purchased and supplied to all offices of the Board in the northeastern states also.

## **RUBBER DEVELOPMENT IN THE NORTH EAST**

Outside the traditional rubber growing belt in the country, the north eastern region comprising of 7 States namely Tripura, Assam, Meghalaya, Manipur, Mizoram Nagaland and Arunachal Pradesh is found to be best suited for planting rubber. So the department's development and extension activities have been more concentrated in this region. As a result, out of the total potential area of 4.5 lakh hectares in the NE region, 50610 ha. (provisional) could be planted with rubber, despite constraints such as unfamiliarity of the farmers with the crop, insufficient communication facilities, insecure law and order situation etc. The block plantation project implemented with the financial support of the Govt. of Tripura and also the group plantation projects implemented in different states are yielding good results in terms of increasing the area of rubber plantation as well as maintaining the quality of plantations.

During the year under report, 3999 growers applied for grant for planting rubber in an area of 3725 ha. in the NE region. Permits issued and assistance granted to 3480 growers covering an area of 2669 ha. In order to raise polybagged plants for next year's planting, polybags have been supplied to 2916 growers in the region.

A total amount of Rs.432.21 lakh has been disbursed to the growers in the NE region alone during 2001-02, under the Rubber Plantation Development/other schemes.

### **NRETC and DDCs**

The Dept. is maintaining a Nucleus Rubber Estate and Training Centre (NRETC) in Tripura State and 2 District Development Centres (DDCs) in the States of Assam and Meghalaya, to cater to the training requirements of the local growers who are not familiar with the cultural practices of rubber. The facilities available in these centres are being utilized for providing training to the growers in areas of raising rubber nurseries and polybagged plants, planting rubber in the field, tapping and post harvest processing operations.

The NRETC/DDCs in the region together produced 19.4 MT of sheet rubber and 4.90 MT of field coagulum during 2001-02.

In addition to this, a full-fledged residential training centre has been established at Agartala in Tripura State, with financial support under the World Bank Assisted Rubber Project. The centre, meant for training farmers, plantation executives, workers, Govt. officials, representatives of NGOs etc. was effectively utilized for conducting various training programmes.

In the year 2001-02, 50 batches of trainings were conducted in the NE region in which 1052 persons were trained on various subjects. 485 educational group meetings of farmers, in which 8006 people participated, were also conducted in the region during the year.

The Board also participated in 4 state level exhibitions/seminars conducted by the Agriculture Department and Agriculture Universities in the NE region. Publication of the Assamees newsletter about rubber was continued.

Under the 'Sasthradarsan' programme of the Dept., 123 selected rubber growers from the non-traditional region have been brought to the traditional rubber growing areas of Kerala and Tamilnadu in 5 batches, on study tour to impart first hand information about various economic and social aspects of rubber cultivation.

#### **RUBBER DEVELOPMENT IN NON-TRADITIONAL AREA OTHER THAN NORTHEAST.**

The dept. continued its activities for servicing the existing plantations and also area expansion in non traditional regions such as Orissa, Andhra Pradesh, Goa, Maharsashtra, Andaman & Nicobar islands etc. Apart from the Rubber Plantation Development Scheme and other extension support schemes, Block Plantation Projects aimed at economic settlement of tribal growers etc. were also under implementation in these regions. Progress of planting in this region is included in the figures furnished elsewhere in this report.

## **PART – IV**

# **ADMINISTRATION**

The Administration Dept. consists of the following Sections and Divisions.

- 01 Establishment Section (General Administration, Personnel Administration & Entitlement)**
- 02 Marketing Division**
- 03 Labour Welfare Section**
- 04 Legal Section**
- 05 Hindi Section**

### **1. Establishment Section**

#### **(a) General Administration**

The important functions of the General Administration includes constitution/ reconstitution of the Board and its Sub Committees, convening the meetings of the Board and its Committees, monitoring implementation of the decisions of the Board, managing the house keeping activities etc.

#### **(b) Entitlement**

During the period, 52 employees were given financial assistance for construction of own house by advancing Rs.1,16,07,350/-. In addition, Vehicle advances amounting to Rs.35,14,650/- were given to 186 employees (Rs.6,05,200/- as Car Advance to 5, Rs.27,86,450/- as two wheeler advance to 99 and Rs.1,23,000/- as Cycle advance to 82) Computer advance to 4 employees amounting to Rs.1,96,800/- and Rs.1000/- as Fan advance to one employee were also given.

Service books, leave accounts and personal files of employees were properly maintained. Retirement benefits were given to 59 employees on superannuation, 2 on voluntary retirement and one on compulsory retirement. Family pension was also granted in 9 eligible cases.

#### **(c) Personnel Administration**

Selection of suitable personnel to vacant positions for smooth functioning of the Board was ensured following recognized recruitment rules and statutory provisions relating to reservation of posts for candidates from SC/ST/OBC communities. There were properly constituted Selection Committee/ DPCs for selection of personnel befitting job requirements. Periodical returns on the personnel recruited at reservation points were sent to the Government.



The total number of Officers and staff under the Board as on 31.3.2002 was 2193 as detailed below.

| Sl. No       | Name of Department               | Group A    | Group B    | Group C     | Group D    | TOTAL       |
|--------------|----------------------------------|------------|------------|-------------|------------|-------------|
| 1.           | Rubber Production                | 164        | 394        | 541         | 122        | 1221        |
| 2.           | Research                         | 70         | 140        | 190         | 66         | 466         |
| 3.           | Administration                   | 12         | 16         | 121         | 18         | 167         |
| 4.           | Licensing & Excise Duty          | 17         | 32         | 81          | 9          | 139         |
| 5.           | Processing & Product Dev.        | 14         | 21         | 37          | 5          | 77          |
| 6.           | Finance & Accounts               | 5          | 18         | 29          | 3          | 55          |
| 7.           | Training & Technical Consultancy | 2          | 9          | 23          | 3          | 37          |
| 8.           | Statistics & Planning            | 6          | 7          | 18          | 0          | 31          |
| <b>TOTAL</b> |                                  | <b>290</b> | <b>637</b> | <b>1040</b> | <b>226</b> | <b>2193</b> |

## 2. Marketing Division

Collection, compilation and dissemination of natural rubber prices were the important items of work attended to by the Division. Daily prices of RSS-4 and RSS 5 grades of sheet rubber at Kottayam and Kochi were collected, compiled and reported to the press for publication, to the Ministry of Commerce & Industry, Govt. of India, as well as to other agencies. Similarly, prices of ISNR-20 and 60% centrifuged latex were also collected and given for publication. The price of scrap rubber was also collected and published twice a week. Weekly prices of all grades of sheet rubber, pale latex crepe, estate brown crepe, ISNR 20 were collected and compiled. The Division also collected, compiled and published the daily price of various grades of sheet rubber and centrifuged latex in the Kuala Lumpur market and Singapore Commodity Exchange. The domestic and international prices of various grades of rubber were also loaded in the Website of the Board on a daily basis.

## 3. Labour Welfare Section

One of the important functions of the Board as laid down under section 8, sub section 2, clause "f" of the Rubber Act 1947 is to "secure better working conditions and the provisions and improvement of amenities and incentives for workers". These functions are envisaged as a measure fit for the development and promotion of the rubber plantation industry, and to inculcate and generate an interest in and among the workers of the rubber plantation industry who are indispensable for the development and promotion of rubber cultivation.

The Board carries out the above functions through different welfare schemes. The total budget allotted for 2001-02 was Rs.123 lakh while the actual expenditure was Rs.1,22,16,277/-. The details of the schemes operated are given below. The amount disbursed under each of the schemes is depicted in the Table.

#### **A. Non-Plan Schemes**

##### **1. Educational stipend scheme**

Under the Scheme, financial assistance was provided to the children of rubber plantation workers for different courses of studies undergone by them both in colleges and schools.

The stipend consists of

- Tuition fee
- Hostel/Boarding fee
- Lumpsum grant for purchase of Books, instruments etc.

##### **2) Educational Scholarship Scheme**

Under the scheme, Scholarship amount ranging from Rs.250/- to Rs.2000/- was given to the children of rubber plantation workers who pass out meritoriously the concerned course of study.

##### **3) Group Insurance cum Deposit scheme**

This scheme is intended for providing social security to the workers employed in rubber plantations including holdings where Plantation Labour Act is not applicable. It also encourages the habit of saving among the workers.

#### **B. PLAN SCHEMES**

##### **1. Housing subsidy scheme (Organised sector)**

Under the scheme, financial assistance to a maximum of Rs.7500/- or 25% of the estimated cost of the construction of house whichever is less, is provided to the employees who are working in estates covered by the Plantation Labour Act, 1951.

##### **2. Housing Subsidy Scheme (Unorganised - non-marginal holdings)**

The scheme is intended to help tappers of holdings not covered by the Plantation Labour Act 1951, to acquire one of the basic minimum necessities in life i.e., shelter. To become a beneficiary under this scheme the area of the estate in which the applicant is employed should not be less than 1.25 ha.

Such a tapper if constructing an own house in the manner stipulated in the scheme, will be granted a subsidy subject to a maximum of Rs.7500/- or 25% of the estimated cost whichever is less. In north-eastern region, houses built with mud walls and grass would also be eligible for a maximum subsidy of Rs.4000/-. In the case of houses with mud walls and tin or aluminum roof, the maximum subsidy would be Rs.5000/-.

**3. Housing subsidy scheme (Unorganised - marginal holdings)**

Under this scheme, the tappers employed in small rubber holdings, admeasuring an area between 0.75 ha. and 1.25 ha. are eligible for assistance. All other stipulations and conditions with regard to the scheme for tappers in the small holding sector (non-marginal holdings) are applicable to this scheme also.

**4. Scheme for providing sanitary facilities**

The purpose of this scheme is to stimulate an interest in hygienic environment among the rubber tappers of unorganised sector. This scheme assists the tappers to build latrines as per the plan and estimate prescribed by the Board.

The financial assistance is limited to 75% of the cost of construction or Rs.3000/- whichever is less.

**5. Medical Attendance Scheme**

This scheme is limited to tappers in the unorganized sector. The scheme provides for reimbursement of medical expenses incurred for treatment of the tappers suffering from illness, and also compensation to the tappers in lieu of their inability to attend duty because of illness. Workers who undergo sterilization operation for promotion of small family are also given assistance.

**6. Housing and sanitary subsidy scheme for SC/ST/OBC**

This scheme is exclusively for SC/ST/OBC tappers who are employed in the unorganised rubber holdings. Assistance under this scheme is granted for construction of a house with latrine to the extent of Rs.14,000/- per applicant. The scheme is financed from Special Component Plan/Tribal Sub Plan.

**7. Group Insurance cum deposit scheme (New phase) Phase I (2001)**

A new Group Insurance cum Deposit Scheme has been introduced to provide insurance coverage exclusively for tappers in the small holdings for an amount of Rs.50,000/- with a higher contribution of Rs.250/- each per year. The scheme provides higher compensation against accidents and also promotes the habit of saving among the tappers. The Board contributes Rs.150/- per member annually.

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Performance of the schemes for the year 2001-02 is shown below.

(a) **Non-plan schemes**

| Name of the Scheme                                              | Total No. of beneficiaries during 2001-02 | Total amount disbursed (Rs.) |
|-----------------------------------------------------------------|-------------------------------------------|------------------------------|
| 1) Educational Stipend                                          | 5433                                      | 1462571                      |
| 2) Educational Scholarship                                      | 112                                       | 39300                        |
| 3) Group insurance-cum-deposit scheme<br>(From IV to XI phases) | 7482                                      | 7482000                      |
| <b>Total</b>                                                    | <b>13027</b>                              | <b>2250071</b>               |

(b) **Plan schemes**

| Sl. No.      | Name of the scheme                      | Total No. of beneficiaries | Amount disbursed (Rs.) |
|--------------|-----------------------------------------|----------------------------|------------------------|
| 1.           | Housing subsidy (organised)             | 147                        | 1101000                |
| 2.           | Housing subsidy (un-organised-Marginal) | 265                        | 1993750                |
| 3.           | Housing subsidy (Unorg.-Non-marg)       | 266                        | 1995000                |
| 4.           | Sanitary subsidy                        | 664                        | 1998250                |
| 5.           | Medical Attendance                      | 453                        | 669206                 |
| 6.           | Housing & Sanitary subsidy (SC/ST/OBC)  | 254                        | 2002000                |
| 7            | Group Insurance cum Deposit Scheme      | 1380                       | 207000                 |
| <b>Total</b> |                                         | <b>3429</b>                | <b>9966206</b>         |

## **4. LEGAL SECTION**

Legal Section discharges the function of rendering advice/opinion to various departments/sections/divisions of the Board, drafting legal documents, initiating steps for prosecution under the Rubber Act 1947, assisting the departments in conciliation proceedings in labour matters, tax cases and instructing and assisting the lawyers of the Board in conducting the litigations of the Board.



During the year under report timely action/advice was rendered in 960 files referred to the Legal Section. Scrutiny of documents for determining the eligibility under the Rules was done in the case of 58 applications for House Building Advances. Legal documents to be executed by Board during the year under report were drafted/prepared as and when required. Appropriate steps were taken through lawyers to safeguard the interest of the Board in pending cases and 45 new cases pending in various courts. Parawise comments and necessary instructions were given to Standing Counsels of the Board and the Central Government pleaders in cases pending in High Court. In consumer disputes files before Redressal Forum in various districts the section prepared and filed replies and represented the Board during the hearing.

Necessary assistance was given to RRS Dhenkanal, RRDS Andamans, Central Experiment Station, Chethackal, RRII Farm, HBSs Nettana and Paraliar, Nurseries/farms of RP Dept. etc. in dealing with labour matters. The Section prepared draft amendments proposed by the Board to Rubber Act, Rubber Rules, Rubber Board Employees' Conduct Rules and Classification (control and appeal) Rules.

## **5. HINDI SECTION**

The Rubber Board is a notified Office under Rule 10(4) of Official Language Rules. The Hindi Section is responsible for the implementation of the official language in accordance with the policy of the Govt. of India.

The following activities were undertaken by the Hindi Section of the Board during the reporting year.

### **Rajbhasha Trophy**

The Board received Rajbhasha Trophy from the Minister of State for Commerce and Industry, Shri Rajiv Pratap Rudy for winning the second place in the effective implementation of Official Language Policy in the Board during the year 2000-01 among the Central Govt. offices/Autonomous Bodies/Undertakings working under the Ministry of Commerce. Shri SM Desalphine, Chairman, Rubber Board received the trophy at a function organized at Udyog Bhavan, New Delhi.

### **1. Official Language Implementation Committee**

Four meetings of the Official Language Implementation Committee of the Board were held during the year. Quarterly progress report were presented in the meetings and discussed.

## **2. Hindi Advisory Committee meeting**

Shri SM Desalphine, Chairman and Smt PK Santhakumari, Asst. Director (OL) attended the Hindi Advisory Committee meeting of the Department of Commerce, Ministry of Commerce & Industry held at Udyog Bhavan.

## **3. Hindi Fortnight/Hindi Day Celebration**

Hindi fortnight was celebrated from 14<sup>th</sup> September 2001 to 27<sup>th</sup> September 2001 in the Headquarters of the Board and at the RRIL. Various competitions were conducted for the Officers/employees of the Board and the winners were awarded prizes. Hindi day was also celebrated in the different subordinate offices of the Board.

## **4. Publication of Hindi bimonthly bulletin**

All the issues of the Hindi bimonthly bulletin 'Rubber Samachar' were brought out during the year.

## **5. Hindi Teaching Scheme**

As per the policy of the Govt. of India, Hindi teaching (Pragya and Typewriting classes) were conducted during the year and 28 officials passed the Pragya examination and 5 officials passed in the Typewriting examination.

## **6. Hindi Workshop**

Hindi workshops were conducted in the Regional Offices and total of 439 officers/employees were given training.

## **7. Town Official Language Implementation Committee**

Two meetings each of the Kottayam Town Official Language Implementation Committee and TOLIC Core Committee were conducted during the year. Joint Hindi Week Celebration was conducted for the officials of the member organizations.

## **8. General**

The Parliamentary Committee on Official Language headed by Smt Kanti Singh MP, visited the Regional Office of the Board at Thiruvananthapuram and had discussion on Official Language Implementation in the offices of the Board.

**DIVISIONS FUNCTIONING UNDER THE DIRECT CONTROL OF CHAIRMAN**

1. Publicity & Public Relations Division
2. Vigilance Division
3. Internal Audit Division

**1. Publicity and Public Relations Division**

The P&PR Division functions directly under the Chairman with Deputy Director as its head. The functions of the P&PR Division cover a wide range of publicity and public relation activities. These are carried out in close association with the concerned departments.

1. Overall public relations activities of the Rubber Board.
2. Transfer of knowledge, dissemination of information and diffusion of innovation to rubber planting community and rubber goods manufacturing industry all over the country, utilizing all the available channels of communication including mass media, electronic media, and print media.
3. Editing, printing publishing and distribution of bulletins, booklets, leaflets etc. as a communication support for the development of rubber plantation industry in India.
4. Arranging conferences, meetings and seminars to educate the growers on new developments in rubber cultivation, and
5. Involving external agencies including social and voluntary agencies in rubber development activities.

The PR Division published the following journals and other publications on various aspects of rubber cultivation during the period.

**1. Rubber Magazine**

12 issues of the magazine were brought out during the year. The circulation position is -

|                                      |                   |
|--------------------------------------|-------------------|
| <b>Average monthly subscriptions</b> | <b>14159 Nos.</b> |
| <b>Life subscriptions</b>            | <b>5946 Nos.</b>  |

**2. Rubber Statistical News**

12 issues of the 'RS News' were brought out during the year 2001-02.

**3. Press Release**

54 Press Releases were issued from the Division.

**4. Advertisements**

88 advertisements (including display and classified) were issued.

**5. All India Radio**

2 talks were recorded and broadcast through the AIR by the Officers of the Division.

**6. Seminars & Meetings**

The Officers of the Division participated and spoke in 23 seminars, meetings and other public functions connected with the Board, Companies, Rubber Producers' Societies, Inter Media Publicity Co-ordination Committee and All India Radio etc.

**7. Exhibition**

The Division participated in 4 exhibitions – at Coonoor, Thodupuzha, Kottayam and Kalamasserry.

**8. Articles**

Officers of the Division published 18 Nos. of technical articles in various dailies, agricultural magazines and the "Rubber" Magazine.

**9. Inside Rubber Board**

3 issues of 'Inside Rubber Board' were published.

**10. Rubber Grower's Companion 2002**

9750 copies of "Rubber Grower's Companion 2002" and 1000 Nos. of "Rubber and its Cultivation" were printed and distributed.

**11. Leaflet in Malayalam on "Road Rubberization"**

The Division published a leaflet on "Road Rubberization" in Malayalam.

**2. VIGILANCE DIVISION**

In order to maintain purity in public service and to implement the anti-corruption measures in the Board, the Board has a Vigilance Division headed by a Vigilance Officer functioning directly under the control of the Chairman, who will look into the preventive, detective and punitive aspects of vigilance. The Division also deals with all types of complaints against the staff of the Board from the public as well as from other affected persons. The Division also conducts surprise checks/inspections for ascertaining proper working of the offices of the Board. Any irregularities detected are immediately taken up for corrective action and results followed up to their logical end.



During the year under report, the Vigilance Division took up for enquiry/investigation 25 complaints containing allegations against 10 Group A & B Officers and 15 Group C & D employees. The allegations in the complaints generally related to irregularities in the electrification works carried out in the Rubber Wood India Pvt.Ltd, submission of false inspection reports and tour reports indicating protracted timings with a view to prefer/claim inflated TA bills, submission of false income certificate with a view to get appointment in the reserved category, submission of false degree certificate with a view to get promotion in service, failure to respond to the directions of the Board and intentionally neglecting duties by unauthorised absence and convictions imposed by courts on Board's employees for moral turpitude and bouncing of negotiable instruments. All these complaints were properly enquired into and appropriate action was recommended/taken against the erring Board's employees wherever found necessary.

Major penalty proceedings against 6 officials and minor penalty action against one official were instituted during the period under report.

Annual statements of Immovable property as on 31.12.2001 were called for from all officers of Group A & B status. The statements thus received from the officers have been properly dealt with. The Vigilance Division also processed 73 applications relating to transactions in immovable property and 90 applications pertaining to transactions in movable property.

During the period under report, 203 files/cases were referred to the Vigilance Division for comments/advice and all these files have been properly dealt with and returned to the concerned Divisions/Sections promptly with observations/comments thereon.

The Division also dealt with/processed 2 appeal petitions received from the employees of the Board and these were forwarded to the authorities concerned with necessary parawise comments and other connected papers/documents for appropriate further action.

As per instructions received from the Central Vigilance Commission, the Board observed the "Vigilance Awareness Week" during the period from 31.10.2001 to 6.11.2001 by taking the pledge by all officers and employees of the Board, exhibiting posters and banners in and around the office premises, organizing meetings & elocution competition for the staff of the Board and college students, distributing prizes and certificates to the successful ones and by conducting a valedictory function in which eminent personalities have participated.

### **3. INTERNAL AUDIT DIVISION**

The Internal Audit Division is headed by the Internal Audit Officer. An important instrument of control for ascertaining the state of affairs and the conditions of the working of different departments/divisions/sections/offices/establishments and for setting matters right by taking prompt remedial measures, the Division is under the direct control of the Chairman. It also assists the various departments in the effective discharge of their responsibilities by furnishing the correct analysis, appraisal, recommendations and pertinent comments on the activities of the Board. Additionally it carries out liaison work between the Audit department of the AG's office in Kerala and the Board.

The main functions of the Internal Audit Division are Inspection/Audit of various offices/establishments of the Board, verification of pension/retirement/ absorption cases, and other referred cases conducting special audits as directed by Chairman etc. During the period under report, Internal Audit/ Inspection was conducted in 52 offices/establishments spread all over the country.

Audit of the Accounts of the Board for the year 2000-01 was taken up by Accountant General, Kerala and their report containing 36 paras received. Replies to 34 paras included in the report have been prepared and sent. The total number of outstanding audit paras as on 31.3.2002 is 87 including the 36 paras for 2000-01. Similarly, the inspection report of the Internal Audit Wing of the Ministry of Commerce is also handled by the Division. Nine paras in the report are outstanding as on date. Replies for the remaining paras were furnished to the Ministry. Advices were given in 162 cases including 68 pension cases and other 94 cases for pay fixation, leave encashment, service matters etc.

Economy in the use and maintenance of vehicles and consumption of fuel was ensured by follow up procedures based on Government Orders.

Annual physical verification of stock was brought updated by initiating follow up action with concerned offices/units and ensured the disposal of unserviceable items.

Follow up action was initiated for liquidation of pendency of TA/LTC/Contingent advances and the outstanding was brought down substantially.

## **PART V**

# **RUBBER RESEARCH**

The Rubber Research Institute of India (RRII) was established in 1955 with Headquarters at Kottayam. Its main research farm of 250 ha. is at Ranni in Pathanamthitta District. The Institute has 13 Regional Research Stations spread over the states of Kerala, Tamil Nadu, Karnataka, Maharashtra, Chattisgarh, Orissa, West Bengal, Assam, Meghalaya, Tripura and Mizoram. Five Regional Research Stations in the North-East form the North-Eastern Research Complex with headquarters at Agartala. The Institute has 129 Scientists and 328 supporting staff. Research work was continued in the fields of Plant Breeding, Germplasm, Biotechnology, Exploitation, Agronomy, Soil Science, Plant Pathology, Plant Physiology, Economics and Rubber Processing Technology.

All the research programmes for evolving high yielding clones, breeding for biotic and abiotic stresses, propagation studies, anatomy and cytogenetics progressed as per schedule. Nine promising selections from the RRII 400 series excelled RRII 105 in yield during the 8<sup>th</sup> year of tapping. Five of the promising clones viz. RRII 414, RRII 417, RRII 422, RRII 429 and RRII 430 were included in Category III of recommended planting materials and nucleus quantities of budwood of the clones were issued to rubber growers. In the 1993 large scale trial of the 400 series clones, four out of the five recommended clones showed higher yield compared to RRII 105. In the multidisciplinary evaluation trial, the clones RRII 5, PB 314, PB 312, PB 260, PB 255 and PB 280 exhibited significantly better yield than RRII 105. In the north Konkan in Maharashtra, clones RRII 208, PB 260 and RRII 105 were found to be high yielders.

Activities related to conservation, characterization and evaluation of 4426 wild Brazilian germplasm accessions and 177 domesticated clones were continued. Eleven preliminary evaluation trials involving 100 wild accessions were continued in different locations. Out of the wild germplasm collection 58 accessions, initially conserved in Northeast, were replicated in the Central Experiment Station in Kerala. Among the 25 domestic clones subjected to factor analysis, clone RRII 105 ranked first with respect to performance index. DNA extraction of selected genotypes were completed. Quantification and quality testing of 70 samples of wild germplasm were completed. RAPD profiling of a sample set of 39 wild accessions for 4 informative primers were carried out.

In Biotechnology, development of transgenic plants, shoot tip culture, somatic embryogenesis, identification of genes etc. were continued. About 300 plantlets obtained through somatic embryogenesis were hardened and were made ready for field planting. Healthy transgenic plants integrated with superoxide dismutase (SOD) gene are now growing in the glass house. Transgenic callus with the gene showed 50% more expression of SOD enzyme. Genomic DNA and cDNA sequences coding for the enzymes rubber elongation factor and  $\beta$ -1,3 - glucanase were elucidated.

Low frequency tapping (LFT) systems were officially recommended to planters for achieving reduction in cost of production of NR. There was good response. More than 30 estates covering over 20,000 ha. have started implementing the systems. Extensive data were being collected on the onfarm performance of LFT. Experiments were initiated for low frequency controlled upward tapping of short cuts in high panels. Latex diagnosis studies for optimizing the intensity of crop harvesting were continued.

More than 50 experiments under 14 research projects were in progress in the field of agronomy/soils. Areas of research comprised weed management, density of planting, soil and water conservation, cropping systems integrating annual and perennial intercrops including timber species, fertilizer use efficiency etc. Silt pits at the rate 100 to 250/ha. helped to conserve 5 to 13 tonnes soil/ha. annually. In the traditional region, irrigation requirement of young rubber plants was found to be 50% of the potential evapotranspiration. Advisory service to smallholdings and estates on fertilizer application was continued. During the year, 8220 soil and 953 leaf samples were analysed and around 5000 fertilizer recommendations issued. In addition to soil and leaf testing, 15,950 latex samples were analysed for dry rubber content and 107 latex samples for volatile fatty acid (VFA) number.

All the experiments in Plant Pathology Division under 29 projects progressed well during the period. Addition of rubber seed oil to Bordeaux paste was found to give prolonged protection from pink disease. Inoculation of VAM fungi was found to reduce the requirement of phosphatic fertilizer by 25%. Incidence of tapping panel dryness was found to have possible association with a low molecular weight RNA.

The research projects in Plant Physiology progressed well during the period. Powdery mildew attack was found to significantly inhibit photosynthesis and there was carbohydrate drain also. Studies on low temperature tolerance showed that some clones are tolerant to low temperature and frost. In connection with the studies on drought tolerance, enzyme markers that appear to be associated with drought tolerance were identified. Action was taken to develop necessary infrastructure to carry out molecular biology studies on stress and tapping panel dryness.



All the research projects in the rubber processing technology field progressed well during the period. Efforts were made to improve the grafting efficiency of styrene grafted natural rubber. Enzymatic deproteinised natural rubber latex (EDPNRL) was prepared at pilot plant level and the same was under evaluation. Around 600 kg of epoxidised natural rubber latex (ENR 50) was supplied to a prominent industrial group for R&D trials. Studies on the effect of maturation on the properties of radiation vulcanized natural rubber latex (RVNRL) were completed. In connection with the studies on quality status of sheet rubber, periodic collection and testing of samples from various locations were continued. Installations of solar-cum-smoke driers at RRS Dapchari (Maharashtra) and Hevea Breeding Sub Stations (HBSS) Nettana (Karnataka) were completed. Rubber compounds suitable for axil pad and rubber grip used in cruches were developed and the know-how transferred to a small scale manufacturing unit.

Studies conducted by the Economic Research Division showed that even though the export earnings of major natural rubber producing countries increased over time, the share of elastomers and products in global export earnings exhibited a decline. Another study showed that area expansion of rubber cultivation in Kerala was on account of R&D support, extension programmes of Rubber Board and the protected price regime. A survey showed perceptible decline in important cultural practices like fertilizer applications, disease control, rainguarding, labour use etc. on account of the low price of NR. The study on status of tappers in smallholdings in Kerala showed movement of tappers to better alternative occupations.

All the research programmes in the northeast India under Regional Research Stations at Agartala, Guwahati, Tura (Meghalaya) and Nagrakatta (North Bengal) progressed well during the period. At Regional Research Station, Agartala, intercropping experiments with tea and pineapple progressed well confirming the earlier results. Clone trials showed better performance of clones PB 235, RR II 203 and RRIM 600. Exploitation trial showed the highest yield from third daily (d/3) tapping without rest. Around 400 recommendations were given for discriminatory fertilizer application.

At Regional Research Station, Guwahati, all the trials progressed well. Clones RR II 600, RR II 203 and RR II 118 continued to show good performance. There was positive response in terms of yield upto  $N_{60}P_{40}K_{40}$  kg/ha/yr. Data from exploitation trial showed the highest yield under third daily tapping with 2 months rest (2018 kg/ha).

At Regional Research Station Nagrakatta, clones SCATC 93-114 and Hiken-1 showed better growth performance. In the mixed crops comprising tea and rubber, growth of both the crops was satisfactory.

At Regional Research Station Tura (Meghalaya), clones RRIM 600, PB 235, RRII 203, RRII 118, PB 311, RRIC 105 and PB 310 showed better growth. Clones RRIM 600, PB 235, RRII 105, RRII 203 and PB 311 showed better yield performance.

Experiments and trials in the Regional Research Stations and breeding stations in the other States also showed good progress. At Regional Research Station, Dapchari, (Maharashtra) effective rate of partial irrigation for mature trees was found to be 20 per cent of PET. All the ten ongoing research projects progressed well during the period.

At Regional Research Station, Orissa (Dhenkanal) clone RRIM 600 showed the highest girthing. This was followed by clone GT1 and RRII 105. At Regional Research Station, Sukma (Chattisgarh), there were seven ongoing experiments showing good progress. At Regional Research Station, Padiyoor (North Kerala), there were 10 ongoing research projects. Good results were obtained on irrigation requirements of nursery plants. Work at Hevea Breeding Sub Stations at Nettana in Karnataka and Paraliar in Tamilnadu also progressed well during the year.

Annual Review Meetings (ARM) for the year 2001 were held in two sessions. Each Scientist made presentation on the progress of projects/experiments undertaken. External experts for various disciplines also participated and gave valuable suggestions. The Institute conducted 12 internal seminars where 32 research papers were presented by Scientists of the Institute. Five invited talks were also arranged. Prof.CNR Rao was one of the invitees. Volume 14 (No.1) of the Indian Journal of Natural Rubber Research and Annual Reports of RRII for the years 1998-99 and 1999-2000 were published during the period. A directory of Rubber And Allied Organizations (272 Nos.) was prepared. During the period, 154 journals were subscribed to and 51 were received as gift/exchange.

A training programme on project planning, research methodology and data analysis was conducted in three batches in which 60 scientists from RRII Headquarters and Regional Stations participated.

## **PART VI**

# **PROCESSING AND PRODUCT DEVELOPMENT**

The year marked lifting of Quantitative Restrictions (QR) on natural rubber from 1/4/01 throwing new challenges before the rubber producing sector in the country. The domestic NR producers have to compete with other NR producing countries both in quality and price. Since the consuming industry need not depend on the domestic market alone the producing sector has to get into the export market also.

The activities of the department have been focusing on this vital issue during the current year. A scheme for providing financial assistance to TSR factories to improve quality, reduce cost and strengthen environmental protection measures was submitted to the Government of India for approval in August 2001. The scheme also included a small component for providing financial assistance for quality improvement and value addition for the rubberwood processing factories in the RPS sector. The scheme was approved by the Government of India on 5/2/02 for implementation during the year 01-02. 62 applications were received and an amount of Rs.48.03 lakh was released as financial assistance to 6 TSR factories and one rubber wood processing unit during the year.

Under a scheme already in operation by the Board an amount of Rs.790,900 was released as financial assistance to three TSR processors for quality improvement and for ISO 9000 / ISO 14000 system certification.

Steps were taken to improve the quality standards of natural rubber as prescribed by the BIS and an interactive meeting was held among TSR processors, BIS, Rubber Board and representatives of the consuming industry.

Further steps were taken to get the standards for TSR amended by the BIS in their designated committee. Since there were no technical standards for ribbed smoked sheets, a draft standard was prepared based on the Green Book and submitted to the BIS for adoption.

A few meetings were held with processors with a view to improving quality and to equip them to enter the export market.

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The Government of India amended the Rubber Rules making it mandatory that only licensees under the Board can import natural rubber into the country and that the rubber so imported should conform to the standards prescribed by the BIS, with effect from 12/12/01. By issuing notification dated 19/12/01, the seaports of Kolkatta and Vishakapatanam were designated as ports of entry for natural rubber into the country. The officers of the Department conducted inspection of the rubber imported through these ports and collected samples for analysis for checking the quality. Thus a total quantity of 7090.79 MT of rubber was inspected and cleared through the Kolkatta and Visakapatanam ports from 8/1/02 to 31/3/02 as shown below:

| <b>Grade</b> | <b>Quantity Cleared (MT)</b> |
|--------------|------------------------------|
| Block Rubber | 3188.57                      |
| RSS          | 3736.00                      |
| PLC & Skim   | 166.40                       |
| Latex        | NIL                          |
| <b>Total</b> | <b>7090.97</b>               |

A quantity of 60 MT of Block Rubber was found not conforming to the BIS specifications and hence not recommended for clearance by the customs.

The Department also checked the quality of rubber meant for export from the country. Under a scheme already in operation by the Board an amount of Rs.9,29,400 was given as incentive for export of block rubber and latex concentrate to 6 exporters.

The Model TSR Factory established under the World Bank Aided Project for Demonstration and Training started trial runs on 2-shift operation from April 2001. Three shift operation started in November 2001. The factory focuses on improving the quality of block rubber by blending FC grades with low quality sheet rubber. The factory produced 828 MT of block rubber during the year. The factory acquired ISO 9002 certification during the year. The rubber from this factory enjoyed a premium in the market on account of better quality. The factory demonstrated effluent treatment system for total recycle in block rubber processing. The factory could serve as a model for other block rubber processing factories aiming at modernization to improve the quality and to reduce cost. The factory could not attain the installed capacity. Reasons for shortfall were identified and steps are being taken to rectify them.

The Model TSR Factory was awarded a Certificate of appreciation for its effluent treatment plant working on total recycle system by the Kerala State Pollution Control Board.

The Department continued to check the quality of TSR produced by the processors through routine inspections. In all, 534 inspections were conducted during the year and in the case of processors



covered under the BIS certification scheme 261 inspection reports were sent to BIS. In cases where quality was found poor, necessary steps were taken. Facilities were also provided to the processors and consumers of rubber to get their samples tested at the Board's Central Laboratory. The laboratory also participated in International and National Round Robin checks. The department processed six applications for issuing processors licences.

To promote the production of quality sheet rubber at RPS/Co-operative level through group processing centres, an amount of Rs.3,86,694 was released as financial assistance to 18 beneficiaries. To strengthen the RPS Joint sector companies and the co-operatives in processing and marketing of rubber an amount of Rs.59,13,640 was released as share capital to 14 beneficiaries. In the special situation that prevailed in the market following the announcement of minimum statutory price for rubber and to facilitate export of rubber, short term loans and working capital loans were given to RPS joint sector companies to strengthen their processing and trading activities. Thus Rs.234.5 lakh was given to 16 companies.

The Rubber Wood Testing Laboratory established under the World Bank Aided Project provided testing facilities to processors. Thus samples received from six processors were tested during the year. The laboratory also tested doors produced by the Model Rubberwood Factory to check whether it was in conformity with BIS specifications. The Wood Lab had taken up a study along with Research Department to find out the effect of stimulation on the quality of wood. Certain other projects are also initiated.

The Model Rubberwood Factory was commissioned in November 2001. Finger jointed edge glued boards manufactured by the factory have come to the market.

The Department continued to promote rubber wood in the national market and participated in two leading national exhibitions in the year, one in Bangalore (India International Furniture Fair, February 2002) and another one in Delhi (Society Interiors, September 2001). To demonstrate the use of rubber wood in furniture and interiors, finger jointed boards were given to National Institute of Design for the interior work for the NID-ITPO Show Case Design being set up at Pragati Maidan in New Delhi. Products from rubber wood were sent to Raj Bhavan, Ranchi, Jharkand State for display. A meeting was organized in Delhi to promote it among architects and decision makers. A dealers' meet was organized along with Metrowood in Bangalore.

For the first time, Board participated in two International Fairs for promoting rubberwood - Expo India, Sao Paulo, Brazil, Sept. 25 - 29, 2001, and Florida Industrial Woodworking Expo in Orlando, FL, USA in November 30 & December 1, 2001. The results were encouraging.

The Department has undertaken various civil and electrical works of the Rubber Board in the various stations. The Department also provided advisory service to rubber and rubber wood processors and entrepreneurs in rubber and rubber wood processing.

## **PART VII**

# **TRAINING AND TECHNICAL CONSULTANCY**

There are two divisions functioning under the Department, namely Training Division to conduct various training programmes and Technical Consultancy Division to render technical assistance to the rubber goods manufacturing industry in the country.

### **A) TRAINING DIVISION**

The Rubber Training Centre is located near Puthuppally, 8 km. east of Kottayam, adjacent to the Rubber Research Institute of India. It is housed in a picturesque building of 3710 m<sup>2</sup> area having 5 lecture halls with modern amenities. The Centre has a hostel to provide accommodation for 30 participants. The Centre has also a library, museum and an auditorium. The Centre has two Demonstration labs to impart training in Rubber Processing and Product Manufacturing Technology during training programmes.

The major target group identified for training are -

- ◆ Farmers
- ◆ Managers/Superintendents
- ◆ Rubber Producers Societies
- ◆ Rubber Marketing Societies
- ◆ Rubber Dealers
- ◆ Rubber Processors
- ◆ Rubber Products Manufacturers
- ◆ Entrepreneurs
- ◆ Rubber and Rubber Products Exporters
- ◆ Production Managers
- ◆ Quality Control Managers
- ◆ Women including SC/ST categories
- ◆ Students
- ◆ Participants from abroad

The important achievement of the Rubber Training Centre during 2001-02 are -

- ◆ Conducted an International Training Programme for 4 participants from Srilanka
- ◆ Specialised training on Rubber Product Development and Testing was conducted for officers of Indian Air Force
- ◆ Functionalised the Demonstration Labs
- ◆ Produced two video films (i) latex based industry and (ii) dry rubber based industry
- ◆ Trained 3808 participants in different disciplines under the various training programmes
- ◆ Edited a Training Manual on training of trainers for the Sri Lankan participants
- ◆ A training course on marketing management was conducted.

**Details of Training Programmes conducted during the financial year 2001-02.**

| Code No. | Training details                                           | Duration | No. of batches | No. of participants | Participants                                            |
|----------|------------------------------------------------------------|----------|----------------|---------------------|---------------------------------------------------------|
| INT      | <u>International Training</u><br>Training of Trainers      | 5        | 1              | 4                   | Managers from Sri Lanka                                 |
| RC-01    | Rubber cultivation & plantation management                 | 10       | 1              | 11                  | Agricultural students from Allahabad University         |
| RC-02    | Short term training on cultivation & processing            | 3        | 1              | 15                  | Tribal students from Agartala                           |
| RP-01    | Rubber processing & quality control                        | 5        | 2              | 19                  | KFDC, Sullia & other interested persons.                |
| RP-02    | Training on Rubber sheet grading & preparation             | 3        | 5              | 61                  | Rubber Dealers/Farmers                                  |
|          | Specialised training on testing of raw rubber & latex      | 10       | 1              | 2                   | Technical Officers CFC Changanassery                    |
|          | Specialised training on marketable forms of NR             | 2        | 1              | 1                   | Students from Nehru Mahavidyalaya Coimbatore            |
|          | Specialised training on rubber sheet preparation & grading | 1        | 1              | 13                  | Persons from State Warehousing Corpn.                   |
|          | Training on Total Quality Management & ISO 9000 systems    | 3        | 1              | 17                  | Rubber processors & officers of the Board.              |
| MD 01    | Training on Marketing Management                           | 4        | 1              | 15                  | MD's of Rubber Board companies & Koodaranji RPS members |

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|       |                                                          |    |   |    |                                               |
|-------|----------------------------------------------------------|----|---|----|-----------------------------------------------|
| RM 01 | Short term training on Latex products manufacture        | 5  | 4 | 69 | Entrepreneurs/ Industrialists                 |
| RM 02 | Short term training on Dry rubber products manufacture.  | 5  | 1 | 7  | Entrepreneurs/ Industrialists                 |
| RM 03 | Specialised training on balloon manufacture              | 8  | 4 | 80 | Persons from Mathilakam Panchayath, Thrissur. |
|       | Specialised training on rubber testing & quality control | 5  | 2 | 6  | Persons from Hitech, Coimbatore, NAD Alwaye.  |
|       | Specialised training on coir foam manufacture            | 3  | 1 | 1  | Chemist from RUBCO factory.                   |
|       | Specialised training on rubber products manufacture      | 10 | 1 | 10 | IAF Officers, Nagpur                          |
|       | Specialised training on Hawai chappal manufacture        | 4  | 1 | 2  | Cube India Rubber Ernakulam.                  |
|       | Specialised training on rubber lining                    | 4  | 1 | 1  | Meera Rubber Inds, Thirunelveli               |
|       | Specialised training on Rubber testing.                  | 4  | 1 | 3  | Hindusthan Colas, Chennai.                    |

### **General Training Programmes**

|       |                                                         |   |    |      |                                 |
|-------|---------------------------------------------------------|---|----|------|---------------------------------|
| GT 01 | Short term training on Beekeeping                       | 1 | 3  | 103  | Farmers/interested parties      |
| GT 02 | Short term training on Mushroom culture                 | 1 | 3  | 67   | Interested persons/farmers      |
| GT 03 | Trainers Training on Beekeeping                         | 1 | 3  | 42   | Staff/Tribal Farmers of Tripura |
| DT    |                                                         |   |    |      |                                 |
|       | a) Decentralised training on Beekeeping & sheet grading | 1 | 59 | 1421 | RPS members/farmers             |
|       | b) Training on pest management at RPS centres           | 1 | 2  | 16   | RPS members                     |



|       |                                                            |          |            |             |                        |
|-------|------------------------------------------------------------|----------|------------|-------------|------------------------|
| TE    | Training for employees of the Board.                       |          |            |             |                        |
|       | 1) Project planning, research methodologies for scientists | 3        | 4          | 76          | Employees of the Board |
|       | 2) Training for Jr. Assistant                              | 15       | 1          | 14          |                        |
|       | 3) Refresher training for canteen staff                    | 1        | 1          | 33          |                        |
|       | 4) Training to SOs & ASOs                                  | 5        | 1          | 19          |                        |
| ED-01 | Short term training on Rubber Technology                   | 5        | 1          | 25          | VHSE students          |
| ED-2  | Short term training on product manufacture                 | 10       | 1          | 27          | B.Tech students        |
| ED-03 | Project work                                               | 3 months | -          | 2           | M.Sc Polymer students  |
| VT    | Visit cum Training                                         |          |            |             |                        |
|       | a) Sastradarsan                                            | 1        | 54         | 1053        | Farmers/visitors       |
|       | b) TT School                                               | 1        | 34         | 573         | RPS members/TT schools |
|       | <b>TOTAL</b>                                               |          | <b>198</b> | <b>3808</b> |                        |

## B) TECHNICAL CONSULTANCY DIVISION

The Technical Consultancy Division provides technical assistance to promote the rubber goods manufacturing industry in the country. The major activities of the division are providing technical assistance to entrepreneurs in setting up rubber based industries, development of rubber products, solving production problems of existing units and quality control by testing rubber chemicals/rubber compounds/products as per National and International standards. The Division also undertakes activities like conducting workshops and seminars to promote rubber based industries, preparation of detailed project reports, market survey reports, trade directories etc. With the aim of increasing the consumption of Natural Rubber, the division is now engaged in the setting up of Rubber Industrial Parks. The implementation of the Rubber Park Project at Cochin is progressing. 45 acres of land have been developed and 30 acres is ready for allotment. 7 acres has already been allotted to the Kerala State Coop. Rubber Marketing Federation Ltd., Kochi to establish a unit for the manufacture of balloons with Malaysian collaboration. 4-5 plots are at the level of negotiation, for allotment. A 110 KV substation and other facilities are being built up. The Division is also engaged in the establishment of similar rubber parks in Tamilnadu and Tripura in consultation with the respective Governments.

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The Division has been active in the export promotion of NR and was instrumental in exporting 7000 MT of NR from India during the year 2001-02. An amount of Rs.2.36 crore was reimbursed as assistance to the exporters of NR. Various procedures connected with the EPC and issue of certificates of origin etc. were continued.

The scheme for rubberisation of roads was continued during the year also. The Division had taken up a collaborative project on the production and testing of seismic bearings, with Structural Engineering and Research Centre, Chennai and another project with Kerala Engineering Research Institute, Thrissur to explore the possibilities of canal lining by natural rubber latex to minimize the seepage of water.

Actual progress made upto the period under report is as below.

|    |                                                                      |                                      |
|----|----------------------------------------------------------------------|--------------------------------------|
| 1. | Project reports prepared                                             | 18 Nos.                              |
| 2. | Technical assistance provided                                        | 45 units                             |
| 3. | Development of rubber products                                       | 45 units                             |
| 4. | Testing of rubber/rubber compounds/<br>products from about 520 units | 6250 parameters from<br>1585 samples |
| 5. | Evaluations carried out                                              | 80 samples                           |
| 6. | Marketing assistance provided                                        | 160 units                            |
| 7. | Consultancy fee collected                                            | Rs.8,45,000/-                        |

Consultancy assistance was given to the Tripura Forest Development and Plantation Corporation Ltd. at Agartala for establishing Process-cum-Product Development Centre.

## **PART VIII**

# **FINANCE & ACCOUNTS**

The Finance & Accounts Department is concerned with designing and operating the Accounting system, preparing budget, financial statements and reports, exercising budgetary control, effective Funds Management, establishment and maintaining systems and procedures, overseeing internal audit and arranging for Statutory audit, advising on financial propriety and regularity of transactions, supervising computer applications, overseeing cost control, evaluation of projects/schemes, handling tax matters etc. The following activities were undertaken by the Department during the year.

1. Preparation of Annual Budget, Performance Budget, Foreign Exchange Budget etc. and exercising budgetary control.
2. Drawal and disbursement of money against the sanctioned budget of the Board.
3. Maintenance of the accounts of the Board, preparation of Annual Accounts and Balance Sheet, presentation of the accounts for audit by the Accountant General, Kerala and the audited accounts to the Rubber Board/Ministry/Parliament.
4. Placing demands for grant from Govt. from time to time, receiving funds from Government and ensuring its optimum utilization.
5. Advising on financial propriety and regularity of transactions and regulating payments.
6. Assisting the Cost Accounts Branch of the Ministry of Finance in ascertaining the cost of production and in fixing price of Natural Rubber.
7. Preparation of financial statements for project reports and schemes.
8. Dealing with Central Income Tax, Agricultural Income Tax and Sales Tax matters relating to the activities of the Board.
9. Co-ordinating the activities of the companies jointly promoted by the Rubber Board and RPSs.
10. Computerised Data Processing in the field of financial accounting, pay roll etc.

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11. Drawal and disbursement of pay and other entitlements of the employees of the Board based on the orders issued by Govt.of India from time to time.
12. Management of Pension Fund and General Provident Fund and regulating disbursements therefrom.
13. Implementation of the Scheme of Computerisation and Networking of all departments of the Board.

### **Annual Accounts 2000-01 & 2001-02**

Annual Accounts for the year 2000-01 were prepared and presented to AG Kerala within the stipulated time. The Audit Report and the Audited Accounts with the certificate received from the AG Kerala were placed before the Board and submitted to the Govt. within the time frame. The Annual Accounts for the year 2001-02 also has been presented to the Accountant General within the prescribed period.

### **Revised Estimates 2001-02 and Budget Estimates 2002-03**

The Revised Budget for 2001-02 and Budget Estimates for 2002-03 were prepared within the time frame and submitted to the Government. Budget sanctioned for the year 2001-02 was Rs.85.42 crore comprising Rs.70 crore under Plan and Rs.15.42 crore under Non Plan. As against this the actual expenditure for the year was Rs.76.18 crore (Plan Rs.61.63 crore and Non Plan Rs.14.55 crore). The sanctioned budget for the year 2002-03 is Rs.113.31 crore comprising Rs.98.31 crore under Plan (Budgetary support of Rs.80 crore and I&EBR and Opening Balance of Rs.18.31 crore) under Plan and Rs.15 crore under Non Plan (Budgetary support - Rs.10.50 crore plus I&EBR - Rs.4.50 crore).

### **Management of Funds**

#### **(i) General Fund**

Funds amounting to Rs.79.50 crore was received from Government as budgetary support during the year 2001-02. The internal resources during the year was about Rs.9.92 crore. The total expenditure for the year was Rs.76.18 crore.

#### **(ii) General Provident Fund/Pension Fund**

The balance under the General Provident Fund as on 31<sup>st</sup> March 2002 was Rs.1622 lakh and that under Pension Fund Rs.1256.79 lakh. The accumulations in the funds were invested to obtain optimum returns. The Board is maintaining 2228 GPF accounts. Pension was given to 507 pensioners during the year.



**(iii) Cost Accounts**

The Cost Accounts Unit of the F&A Division continued to collect and analyse cost data. Information sought for from the Government and ANRPC were furnished as and when required. Cost tables for raising rubber plantation per hectare in different regions were updated. Detailed study was conducted on the cost of production of planting materials in Board's own nurseries for regulating the selling price of planting materials by private nurseries.

The Finance and Accounts Department, examined various aspects relating to Sales Tax and Agricultural Income Tax matters and appropriate advice were given. Project report in respect of large scale plantations in Tripura, in Karnataka and in tribal land in Kerala were prepared and a Management Information System was developed and monitored.

**iv) Electronic Data Processing**

The Electronic Data Processing Division under the Department takes care of the computerized programmes and its application. The Division processed pay rolls and handled the financial accounting, GPF Account, Pensioners account, work relating to the preparation of Budget, Nominal Rolls etc. The Division looks after procurement and maintenance of Hardware/Software requirements of the Board.

## **PART IX**

### **LICENSING & EXCISE DUTY**

The Rubber Board has been entrusted with the responsibility of assessing and collecting of duty of excise (cess) on all rubber produced in India under Section 12 of the Rubber Act, 1947. The cess so levied and collected is to be remitted to the Consolidated Fund of India. All transactions in rubber are regulated in accordance with the licences issued by the Board as provided under Section 14 of the Rubber Act, 1947. The quantity of rubber transacted by every licensee is to be declared to the Board in the periodical returns. Interstate transport of rubber is regulated by a declaration in Form 'N'. Periodical inspections are conducted to verify the accounts maintained and stock held by the manufacturers/dealers/processors. These functions are monitored/discharged by the Licensing & Excise Duty Department of the Board, consisting of the following Divisions & Offices.

#### **I      EXCISE DUTY DIVISION**

Issuance of licence to manufacturers to acquire rubber, assessment of the duty of excise (cess) on rubber acquired by the manufacturers, its collection and remittance to the Consolidated Fund of India, are some of the important functions of the Excise Duty Division.

##### **(1)      Issuance of manufacturers licence**

##### **(a)      Issuance of licence for the year 2001-02.**

The function of issue of licence includes issue of new licences to prospective manufacturing units and renewal of the existing licence for the subsequent year. The details of licences issued during 2001-02 are furnished below.

|                          |                  |
|--------------------------|------------------|
| Fresh licences issued    | 304 Nos.         |
| Renewal of licences made | 4773 Nos.        |
| <b>TOTAL</b>             | <b>5077 Nos.</b> |

During the period, the licence in respect of 11 units was cancelled on the basis of requests. Therefore, the total number of licensed manufacturers as at the end of 31.3.2002 was 5066. The state-wise distribution of licensed manufacturers as at the end of 31<sup>st</sup> March 2002 is detailed hereunder.

| Sl.No.       | Name of State/Union Territory   | No. of units |
|--------------|---------------------------------|--------------|
| 01           | Kerala                          | 906          |
| 02           | Maharashtra                     | 611          |
| 03           | Punjab                          | 539          |
| 04           | Tamilnadu                       | 503          |
| 05           | West Bengal                     | 437          |
| 06           | Uttar Pradesh                   | 439          |
| 07           | Gujarat                         | 377          |
| 08           | Delhi                           | 242          |
| 09           | Haryana                         | 307          |
| 10           | Karnataka                       | 219          |
| 11           | Andhra Pradesh                  | 155          |
| 12           | Rajasthan                       | 99           |
| 13           | Madhya Pradesh                  | 86           |
| 14           | Bihar                           | 28           |
| 15           | Pondicherry                     | 30           |
| 17           | Chandigarh                      | 13           |
| 16           | Goa, Dadra, Nagarhaveli & Daman | 31           |
| 18           | Orissa                          | 13           |
| 19           | Himachal Pradesh                | 10           |
| 20           | Jammu & Kashmir                 | 8            |
| 21           | Assam                           | 7            |
| 22           | Tripura                         | 6            |
| <b>Total</b> |                                 | <b>5066</b>  |

The Division also prepared and supplied a list of licensed manufacturers for reference to the various offices of the Rubber Board, Rubber Dealers and the public.

**b) Renewal of licence for the year 2002-03**

The Division renewed the licences of 2905 existing manufacturers for the year 2002-03 as on 31.3.2002.

**(2) Registration of letter of authorisation to purchase rubber by agents/dealers on behalf of manufacturers.**

The Division registered 330 letters of authorizations issued by various manufacturers in favour of their agent dealer to purchase and despatch rubber on their behalf during 2001-02.

**(3) Registration of Branch/Purchase Depot**

On the basis of the applications received from the manufacturers, 15 new branches/ purchase depots were registered during the year under report.

**(4) Letter of authorisation to purchase rubber**

Special authorisation to 17 Organizations/Institutions to acquire rubber for experimental purposes were issued in lieu of regular licence, after collecting the cess in advance.

**(5) Assessment and collection of duty of excise (cess) on rubber.**

The total amount of cess on rubber assessed during 2001-02 was Rs.8181.90 lakh as against Rs.8255.05 lakh during 2000-01. The total number of half-yearly returns (Form 'M') collected from the manufacturers during the year was 10,044. Of this 1,616 returns were 'Nil'. The Liaison Officer's and the Inspecting staff functioning at various parts of the country have furnished 1,963 individual inspection reports, on which appropriate actions were taken.

The duty of excise (cess) on rubber collected during the period under report was Rs.8114 lakh against Rs.8219.01 lakh collected during 2000-01.

The total number of security instruments (demand drafts) received towards cess on rubber, licence fee & service charge etc., during 2001-02 was 9,010. Besides reconciliation of CFI remittance with Central Bank of India, Kottayam and Regional Pay & Accounts Officer, Chennai were completed. The Demand, Collection and Balance (DCB) statement for 2000-01 and final account of cess collection during the period under report were prepared.

The aggregate of licence fee and service charges collected during 2001-02 was Rs.9,22,734/- . Besides a sum of Rs.38 lakh was collected towards penal interest on belated remittance of cess.



## **II LICENSING DIVISION**

Licensing of rubber dealers and processors and registration of their branches and agents, initiation of punitive action against erring dealers and processors are the main functions of the Licensing Division situated at Willingdon Island, Kochi.

### **i) Licensing of Dealers**

The number of Licensed dealers which stood at 10,482 at the beginning of the year marginally came down to 9492 at the end of the year. During the period under report, 718 new licences were issued and the validity of 3005 licences were renewed. Besides 1036 licences were renewed commencing its validity from 1/4/2002.

### **(ii) Licensing of processors**

There are 132 processors licences as on 31.3.2002. 16 licences were renewed during the year under report.

### **(iii) Suspension and revocation of licence of dealers and processors**

During the year under report, 184 dealer's licences and one processor's licence were cancelled. Besides, 12 licences of dealers were suspended and One dealer's licence was revoked on account of serious irregularities/lapses. However, the order of suspension of licences of 2 dealers was rescinded and their licences were restored on getting satisfactory explanations.

### **(iv) Registration of branches and agencies**

During the year under report, 454 branches of dealers and processors were newly registered making the total number of branches 1034, as at the end of March, 2002. Besides, letters of authorization issued by 193 principal dealers in favour of their agents to purchase and despatch rubber on their behalf were registered during 2001-02.

### **(v) Supply of 'N' Form**

5639 books of 'N' forms were supplied to various estates, dealers, processors and Manufacturers in Kochi area to transport rubber out of the State.

During the year under report, a sum of Rs.31,82,626.20 was received towards licence fee/ service charge/cess on rubber etc.

(vii) **Distribution of dealers**

| Sl. No.      | Name of State     | No. of dealers |
|--------------|-------------------|----------------|
| 01           | Kerala            | 8417           |
| 02           | Andhra Pradesh    | 4              |
| 03           | Assam             | 23             |
| 04           | Andaman & Nicobar | 3              |
| 05           | Bihar             | 5              |
| 06           | Chandigarh        | 5              |
| 07           | Delhi             | 126            |
| 08           | Goa               | 2              |
| 09           | Gujarat           | 36             |
| 10           | Haryana           | 39             |
| 11           | Jammu & Kashmir   | Nil            |
| 12           | Karnataka         | 106            |
| 13           | Madhya Pradesh    | 5              |
| 14           | Maharashtra       | 93             |
| 15           | Meghalaya         | 12             |
| 16           | Orissa            | 1              |
| 17           | Punjab            | 148            |
| 18           | Rajasthan         | 19             |
| 19           | Tamilnadu         | 192            |
| 20           | Tripura           | 105            |
| 21           | Uttar Pradesh     | 72             |
| 22           | West Bengal       | 75             |
| 23           | Pondicherry       | 3              |
| 25           | Nagaland          | 1              |
| <b>TOTAL</b> |                   | <b>9492</b>    |

a) **Districtwise distribution of dealers in Kerala**

| Sl.No.       | Name of District   | No. of dealers |
|--------------|--------------------|----------------|
| 01           | Alappuzha          | 132            |
| 02           | Ernakulam          | 1124           |
| 03           | Idukki             | 418            |
| 04           | Kannur             | 395            |
| 05           | Kasaragod          | 92             |
| 06           | Kollam             | 1062           |
| 07           | Kottayam           | 2308           |
| 08           | Kozhikode          | 188            |
| 09           | Malappuram         | 385            |
| 10           | Palakkad           | 315            |
| 11           | Pathanamthitta     | 1022           |
| 12           | Thiruvananthapuram | 758            |
| 13           | Thrissur           | 159            |
| 14           | Wynad              | 59             |
| <b>TOTAL</b> |                    | <b>8417</b>    |

### **III MARKET INTELLIGENCE DIVISION**

Detection of bogus/unlicensed dealing in rubber, arranging surprise inspection/squad inspection at the business premises of the rubber dealers to check the correctness of their books of accounts and physical stock, cross verification of the statutory returns filed by the dealers/manufacturers and processors to find out mismatch, if any, in their transactions reported to the Board, road checking and surprise visit at checkpost and Railway Parcel Offices with a view to prevent evasion of cess on rubber and thereby improve cess collection, form the important functions of the Market Intelligence Division. Inspections are also conducted to ascertain the suitability of the applicants business premises to issue licence to deal in rubber, registration of branches of the dealers, approval of new/additional premises and issue of special authorization for field latex collection.

#### **1. Activities of Inspection Squad**

1.1 The inspection squad which functioned from Kozhikode, Kochi, Kottayam and Thiruvananthapuram and the Inspectors (Market Intelligence) at Palakkad, Punalur and Nagercoil helped to a great extent in arresting illicit trade in rubber and thereby improved the cess collection. The inspection also helped in collecting monthly returns from a large number of rubber dealers.

1.2 During the period under report, the squad spent several days on tour and inspected the business premises of 1784 licensed dealers, 24 unlicensed dealers and detected irregularities in several cases involving shortage/unaccounted stock/irregular sales. The squad also conducted 444 road checking and surprise visits to the check posts, Railway Parcel Offices and border areas. As a result, a sum of Rs.15,55,371/- was collected towards cess on rubber.

Special attention was also given for scrutiny of the copies of form N declarations received from the consignors with the daily statement of movement of rubber received from the Board's officials at the check posts. Wherever irregular despatches were made such cases were timely referred to Liaison Officers/Inspectors (MI Squad) for arranging inspection. On the basis of serious irregularities detected, the licence of 9 dealers were suspended.

1.3 A Monitoring Cell was set up to attend the complaints of growers against rubber dealers for purchasing rubber below the minimum price notified by the Govt. of India, Ministry of Commerce and Industry, vide Gazette Notification dt.12.9.2001. The Inspectors

attached to the Division Conducted inspections and verified the books of accounts of large number of dealers to ascertain whether there is any lapse in the allegation and wherever lapses were noticed, appropriate action was initiated. Prosecution steps were initiated against 5 rubber dealers for purchasing rubber below the minimum notified price.

- 1.4 Inspection was also conducted at the business premises of dealers and processors for collecting actual stock position of rubber held by the dealers'/processors'.

## **2. Checkposts/inter-state movement of rubber**

- 2.1 In order to strengthen surveillance on inter-state movement of rubber, regular checking of the documents accompanying the rubber consignments were done at the three checkposts at Walayar in Palakkad District, Bengra Manjeswaram in Kasaragod District of Kerala and Kavalkinar in Thirunelveli District of Tamilnadu.
- 2.2 The surveillance exercised through the three checkposts helped in detecting illicit transport of rubber. During the period under report, the officials at Walayar, Manjeswaram and Kavalkinar checkposts detained 33 consignments of rubber for various reasons. Of this 19 consignments were allowed to cross the border on production of valid documents/satisfactory explanation and 14 consignments were released after collecting a sum of Rs.9,28,376/- towards security deposit equivalent to the cess involved in the quantity as the consignors failed to produce convincing evidence/explanation for the lapses. The Sales Tax/Police Officials have detained 13 consignments of rubber attempted to cross the border without any valid documents/under suspicious grounds for which the Board's checkpost officials/Inspector (MI) of the concerned area have given all necessary assistance for disposal/ finalization of the case.
- 2.3 During the period under report, details of 38594 consignments of rubber passed through the three checkposts at Walayar, Manjeswaram and Kavalkinar were collected by the Board's officials at the check posts. The number of consignments passed through each of the checkpost was as under: -

| <u>Sl.No.</u> | <u>Name of Checkpost</u> | <u>No.of consignment</u> |
|---------------|--------------------------|--------------------------|
| i)            | Walayar                  | 27111                    |
| ii)           | Manjeswaram              | 6206                     |
| iii)          | Kavalkinar               | 5277                     |
| <b>Total</b>  |                          | <b>38,594</b>            |



- 2.4 During 2001-02, 16500 books of Form 'N' declarations under different categories were got printed and 12530 Form 'N' books were supplied to various estates, processors, dealers and manufacturers. Out of 59984 copies of Form 'N' declarations received at the Market Intelligence Division, most of them were scrutinized and wherever discrepancies were noticed, explanation/ clarifications were called for from the concerned parties and appropriate action taken.

### **3. Cross checking of monthly returns**

- 3.1 The monthly returns and copies of Form 'N' declarations received from various dealers, manufacturers, processors and estates were cross checked at random and detected discrepancies in 291 cases. Due to cross checking of the monthly returns, discrepancies in the transactions of certain manufacturers and dealers were detected. As a result a sum of Rs. 11,59,152/- was realized towards cess on rubber.
- 3.2 Thus, on account of the special efforts of the Inspection Squad, the checkpost machinery and monitoring cell in the Market Intelligence Division a sum of Rs.36,42,899 /- was collected additionally during the year.

## **IV SUB/LIAISON OFFICES**

With a view to improving collection of Cess on rubber and to maintain liaison with various Ministries, trade and industry, Board maintains 9 Sub/Liaison offices in the major rubber consuming centres outside Kerala at Chennai, Bangalore, Secunderabad, Ahmedabad, Kanpur, Mumbai, Calcutta, Jalandhar and New Delhi. The function of these offices are to assess the suitability of applicants to hold licences to deal in rubber or to acquire rubber for manufacturing rubber goods. Inspection of the books of accounts and other records of a few dealers and manufacturers were also done to ensure whether all rubber procured by them were properly accounted and subjected to assessment of cess. Surprise inspections were conducted to detect unlicensed dealing in rubber in contravention of the provisions of the Rubber Act and Rules, to prevent loss of revenue towards cess.

## **PART X**

# **STATISTICS AND PLANNING**

### **I GENERAL STATISTICS**

The activities undertaken by the S&P Department during the period April 2001 to March 2002 included regular monitoring of the data on supply, demand, stock and price of rubber and presenting them to the Board and the Government. Demand-Supply position of rubber was reviewed periodically by Board which met on 23/6/2001, 3/11/2001 and the Statistics and Import/Export Committee which met on 21/4/2001 & 15/2/2002. For discussions in these meetings, notes supplemented with statistical data showing the situations prevailing in the NR sector and the anticipated scenarios were prepared by the Department.

The statutory monthly returns received from rubber growers, dealers, processors and manufacturers were collected, compiled and analysed every month. In order to ascertain the monthly variations in production, stock, etc. pertaining to small growers, the sample studies in small holding sector were continued. The data collected from various sources were compiled and production, consumption, import and stock of rubber were worked out on monthly basis. The required statistical information for publishing the 'Rubber Statistical News' (monthly) was prepared. This publication covers trend in production, consumption, stock, import/export of natural rubber, synthetic rubber and reclaimed rubber, price of natural rubber and many other details. The work in connection with publication of 'Indian Rubber Statistics Vol.25', 2002 is almost over and the tables were prepared using in-house computer facilities. The publication covers detailed information on area under rubber, production, consumption, import, export, price etc. of natural, synthetic and reclaimed rubber, manufacturers, dealers, rubber products, labour, etc. besides world rubber statistics.

The Department furnished relevant statistical information to the Government and various organizations connected with the rubber industry. For answering Parliament questions and Legislative Assembly questions pertaining to import/export, production, price etc. of rubber and the various aspects of rubber industry, materials were prepared and submitted.

To ascertain the production of various grades of rubber, installed capacity of the processing factories etc. during 2001-02, annual reports were collected from processors of centrifuged latex, block

rubber, PLC and crepe mills. Annual returns relating to the year 2001-02 were collected from manufacturers of rubber industry to work out consumption of rubber according to end products, classification of manufacturers according to consumption, statewise consumption of NR, SR, RR etc.

The census work initiated in 1988 was continued in the reporting period also. Census work was conducted in 82 villages in Kerala employing the stratified random sample technique in selecting the villages and with the help of 169 enumerators recruited at Regional Office level. The Department co-ordinated and monitored the census work. For selection of enumerators, training and assignments of work etc. the technical officers of the Department have assisted the field staff.

## **II Planning**

Tenth Five Year Plan proposals on natural rubber for 2002-07 was prepared and presented to the Govt. for approval. Besides, the Annual Plan proposals on rubber was also prepared. A comprehensive note on achievements of the Board and review of rubber plantation industry was prepared and presented to the Govt.

Action Plan for 2001-02 was prepared and Quarterly Review Reports were regularly prepared and submitted.

## **III Supply of information to World Organizations**

The S&P Department continued to supply information about the NR industry in India to world organizations like the Association of Natural Rubber Producing Countries (ANRPC), Kuala Lumpur, Malaysia and International Rubber Study Group (IRSG), London.

On behalf of the Govt. of India, Chairman, Rubber Board participated in the 103<sup>rd</sup> Group Meeting and International Rubber Forum of IRSG at Glasgow, Scotland, UK in February, 2002.

## PART XI

### STATISTICAL TABLES

**Table-1**  
**PRODUCTION,IMPORT,EXPORT & CONSUMPTION OF NR**  
 (Tonnes)

| Month        | Production    | Import*      | Export      | Consumption<br>(Indigenous<br>& imported) |
|--------------|---------------|--------------|-------------|-------------------------------------------|
| April 2001   | 40035         | 162          | 32          | 52875                                     |
| May „        | 43350         | 843          | 52          | 54505                                     |
| June „       | 39175         | 1298         | 226         | 55010                                     |
| July „       | 43490         | 2992         | 0           | 52655                                     |
| August „     | 51485         | 7488         | 0           | 50820                                     |
| September „  | 56450         | 8767         | 164         | 51010                                     |
| October „    | 62450         | 3955         | 122         | 51335                                     |
| November „   | 75525         | 5406         | 228         | 53150                                     |
| December „   | 79410         | 6225         | 266         | 54425                                     |
| January 2002 | 73030         | 6437         | 857         | 54950                                     |
| February „   | 31855         | 3900         | 1665        | 53045                                     |
| March „      | 35145         | 2117         | 3383        | 54430                                     |
| <b>TOTAL</b> | <b>631400</b> | <b>49590</b> | <b>6995</b> | <b>638210</b>                             |

\* Source:DGCI & S, Calcutta



**Table-2**  
**STOCK OF NATURAL RUBBER AT**  
**THE END OF EACH MONTH**

(Tonnes)

| <b>Month</b> | <b>Growers,<br/>dealers &amp;<br/>processors</b> | <b>Manufacturers</b> | <b>Total</b> |
|--------------|--------------------------------------------------|----------------------|--------------|
| April 2001   | 133700                                           | 37490                | 171190       |
| May „        | 122530                                           | 38300                | 160830       |
| June „       | 106740                                           | 36575                | 143315       |
| July „       | 105425                                           | 31115                | 136540       |
| August „     | 106195                                           | 35520                | 141715       |
| September „  | 115715                                           | 37320                | 153035       |
| October „    | 133010                                           | 34580                | 167590       |
| November „   | 158425                                           | 36435                | 194860       |
| December „   | 181615                                           | 43885                | 225500       |
| January 2002 | 196840                                           | 51150                | 247990       |
| February „   | 172160                                           | 56875                | 229035       |
| March „      | 133490                                           | 59580                | 193070       |

**Table-3**  
**PRODUCTION, IMPORT & CONSUMPTION OF**  
**SYNTHETIC RUBBER**

(Tonnes)

| <b>Month</b> | <b>Production*</b> | <b>Import**</b> | <b>Consumption</b> |
|--------------|--------------------|-----------------|--------------------|
| April 2001   | 5296               | 9109            | 14060              |
| May „        | 5218               | 7290            | 14115              |
| June „       | 5478               | 7134            | 14510              |
| July „       | 5199               | 13645           | 14350              |
| August „     | 5568               | 8203            | 14255              |
| September „  | 5536               | 8485            | 13890              |
| October „    | 6660               | 8477            | 14745              |
| November „   | 5846               | 9823            | 14510              |
| December „   | 6267               | 8944            | 14805              |
| January 2002 | 5880               | 10170           | 15210              |
| February „   | 5975               | 9593            | 14830              |
| March „      | 6730               | 10450           | 15250              |
| <b>Total</b> | <b>69653</b>       | <b>111323</b>   | <b>174530</b>      |

\* Provisional

\*\* Source: DGCI & S, Calcutta.

**Table-4**  
**PRODUCTION & CONSUMPTION OF RECLAIMED RUBBER**

(Tonnes)

| <b>Month</b> | <b>Production*</b> | <b>Consumption*</b> |
|--------------|--------------------|---------------------|
| April 2001   | 5315               | 5440                |
| May „        | 5145               | 5175                |
| June „       | 5275               | 5240                |
| July „       | 5425               | 5465                |
| August „     | 5395               | 5405                |
| September „  | 5325               | 5370                |
| October „    | 5405               | 5455                |
| November „   | 5350               | 5385                |
| December „   | 5370               | 5405                |
| January 2002 | 5320               | 5365                |
| February „   | 5105               | 5060                |
| March „      | 5120               | 5110                |
| <b>Total</b> | <b>63550</b>       | <b>63875</b>        |

*\* Monthly returns of Rubber Goods manufacturers*

**Table-5**

**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF  
NATURAL RUBBER IN INDIA  
(in Rs. per quintal)**

| Month                     | RSS1        | RSS2        | RSS3        | RSS4        | RSS5        | ISNR<br>5   | ISNR<br>10  | ISNR<br>20  | ISNR<br>50  |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| April 2001                | 3037        | 2937        | 2824        | 2679        | 2614        | 2880        | 2680        | 2519        | 2477        |
| May „                     | 3674        | 3574        | 3443        | 3295        | 3117        | 3423        | 3223        | 2975        | 2883        |
| June „                    | 3769        | 3669        | 3523        | 3353        | 3158        | 3465        | 3312        | 2998        | 2881        |
| July „                    | 3787        | 3688        | 3550        | 3389        | 3237        | 3427        | 3277        | 2920        | 2827        |
| August „                  | 3956        | 3848        | 3736        | 3601        | 3347        | 3468        | 3318        | 2995        | 2836        |
| September „               | 3578        | 3465        | 3309        | 3154        | 3019        | 3315        | 3165        | 2768        | 2689        |
| October „                 | 3537        | 3437        | 3301        | 3209        | 3079        | 3317        | 3177        | 2850        | 2700        |
| November „                | 3478        | 3368        | 3281        | 3209        | 3079        | 3198        | 3092        | 2774        | 2614        |
| December „                | 3415        | 3300        | 3250        | 3209        | 3079        | 2910        | 2727        | 2511        | 2390        |
| January 2002              | 3435        | 3340        | 3267        | 3209        | 3079        | 2923        | 2740        | 2648        | 2462        |
| February „                | 3494        | 3394        | 3294        | 3209        | 3079        | 3108        | 3008        | 2898        | 2696        |
| March „                   | 3535        | 3435        | 3335        | 3214        | 3079        | 3183        | 3083        | 2968        | 2696        |
| <b>YEARLY<br/>AVERAGE</b> | <b>3558</b> | <b>3455</b> | <b>3343</b> | <b>3228</b> | <b>3081</b> | <b>3218</b> | <b>3067</b> | <b>2819</b> | <b>2679</b> |



**Table-6**  
**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF**  
**NATURAL RUBBER IN KUALA LUMPUR MARKET**

(in Rs. per quintal)

| Month                     | RSS 1       | RSS 2       | RSS 3       | RSS 4       | RSS 5       | SMR 5       | SMR<br>10   | SMR<br>20   |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| April 2001                | 2875        | 2739        | 2721        | 2590        | 2528        | 2695        | 2617        | 2592        |
| May „                     | 2977        | 2852        | 2833        | 2702        | 2640        | 2734        | 2687        | 2662        |
| June „                    | 3027        | 2918        | 2899        | 2768        | 2705        | 2713        | 2656        | 2632        |
| July „                    | 2910        | 2802        | 2783        | 2652        | 2589        | 2621        | 2531        | 2506        |
| August „                  | 2844        | 2759        | 2740        | 2609        | 2546        | 2652        | 2586        | 2561        |
| September „               | 2731        | 2668        | 2649        | 2517        | 2454        | 2505        | 2461        | 2436        |
| October „                 | 2708        | 2663        | 2644        | 2510        | 2446        | 2511        | 2457        | 2431        |
| November „                | 2689        | 2664        | 2645        | 2511        | 2447        | 2569        | 2494        | 2468        |
| December „                | 2523        | 2494        | 2475        | 2341        | 2278        | 2498        | 2414        | 2389        |
| January 2002              | 2805        | 2778        | 2759        | 2624        | 2560        | 2712        | 2667        | 2641        |
| February „                | 3083        | 3057        | 3038        | 2902        | 2838        | 2974        | 2908        | 2882        |
| March „                   | 3390        | 3347        | 3327        | 3192        | 3127        | 3336        | 3304        | 3278        |
| <b>YEARLY<br/>AVERAGE</b> | <b>2880</b> | <b>2812</b> | <b>2793</b> | <b>2660</b> | <b>2597</b> | <b>2710</b> | <b>2649</b> | <b>2623</b> |

**LIST OF MEMBERS OF THE RUBBER BOARD**  
**AS ON 31.03.2002**

- |    |                                                                                                                                                |                                                                                                       |
|----|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 1. | <b>Shri S Maria Desalphine IAS</b>                                                                                                             | <b>Chairman, Rubber Board</b>                                                                         |
| 2. | <b>Shri Jawahar Lal Jaiswal<br/>Member, Lok Sabha</b>                                                                                          | <b>Member of Parliament under<br/>section 4(3)(e).</b>                                                |
| 3. | <b>Shri Sashikumar, Member<br/>Lok Sabha</b>                                                                                                   | <b>-do-</b>                                                                                           |
| 4. | <b>Shri Ramachandra Khuntia<br/>Member, Rajya Sabha</b>                                                                                        | <b>-do-</b>                                                                                           |
| 5. | <b>Agricultural Production<br/>Commissioner, Govt.of Kerala<br/>Agriculture Department,<br/>Government Secretariat<br/>Thiruvananthapuram.</b> | <b>Representative of the Govt.of<br/>Kerala under sub-rule (3) of rule 3.</b>                         |
| 6. | <b>Chairman<br/>Plantation Corporation of<br/>Kerala Ltd. Kottayam.</b>                                                                        | <b>-do-</b>                                                                                           |
| 7. | <b>Secretary<br/>Environment and Forest Dept.<br/>Govt.of Tamil Nadu, Chennai.</b>                                                             | <b>Representative of the Govt. of<br/>Tamil Nadu under sub-rule (2) of<br/>rule 3.</b>                |
| 8. | <b>Shri K. Jacob Thomas<br/>Managing Director<br/>M/s. Vaniampara Rubber Co.Ltd.<br/>Vazhakala Buildings, KK Road<br/>Kottayam.</b>            | <b>Representative of Large Growers<br/>from the State of Kerala under<br/>sub-rule (3) of rule 3.</b> |
| 9. | <b>Shri M.D. Joseph<br/>Manniparambil, Kanjirappally,<br/>Kerala.</b>                                                                          | <b>-do-</b>                                                                                           |

- |                                                                                                                                                                                                                                                                      |                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>10 Shri E.T. Varghese</b><br><b>President</b><br><b>Indian Rubber Dealers Federation</b><br><b>Rubber Bhawan, Kodimatha</b><br><b>Kottayam.</b>                                                                                                                   | <b>Representative of Other</b><br><b>Interests under sub-rule (4)</b><br><b>of rule 3.</b>                                          |
| <b>11. Shri A. Jacob</b><br><b>Velimala Rubber Company Ltd.</b><br><b>Ooppootil Buildings, KK Road</b><br><b>Kottayam.</b>                                                                                                                                           | <b>Representative of the</b><br><b>Large Growers from the</b><br><b>State of Tamil Nadu under</b><br><b>sub-rule (2) of rule 3.</b> |
| <b>12. Shri Suresh Elwadhi</b><br><b>Managing Director</b><br><b>Elwadhi Rubber Products</b><br><b>New Delhi &amp; Vice-President</b><br><b>All India Federation of Rubber</b><br><b>Products Manufacturers &amp; Member,</b><br><b>Management Committee, AIRIA.</b> | <b>Representative of Rubber Goods</b><br><b>manufacturers under clause (d)</b><br><b>of sub-section (3) of section 4.</b>           |
| <b>13. Shri. C. Anantha Krishnan</b><br><b>General Secretary</b><br><b>Kanyakumari District</b><br><b>Rubber Estate Workers' Union</b><br><b>INTUC, Nagacode</b><br><b>Kulasekharam.</b>                                                                             | <b>Representative of Labour</b><br><b>Interests under clause (d)</b><br><b>of sub-section (3) of section 4.</b>                     |
| <b>14. Shri K.G. Ravi</b><br><b>General Secretary,</b><br><b>Kerala State Karshaka Congress</b><br><b>Trivandrum.</b>                                                                                                                                                | <b>Representative of Small Rubber</b><br><b>Growers in the State of</b><br><b>Kerala under sub rule (3)</b><br><b>of rule 3.</b>    |
| <b>15. Shri P. Lalaji Babu</b><br><b>General Secretary</b><br><b>All India Plantation Workers'</b><br><b>Federation, Quilon District.</b>                                                                                                                            | <b>Representative of Labour</b><br><b>Interests under clause (d)</b><br><b>of sub-section (3) of section 4.</b>                     |
| <b>16. Shri Kanam Rajendran</b><br><b>Secretary</b><br><b>Kerala State Committee of AITUC</b><br><b>Thiruvananthapuram</b>                                                                                                                                           | <b>-do-</b>                                                                                                                         |
| <b>17. Shri Ettumanoor V Radhakrishnan</b><br><b>Valayil House</b><br><b>Ettumanoor</b><br><b>Kottayam District.</b>                                                                                                                                                 | <b>Representative of Other</b><br><b>Interests under sub-rule (4)</b><br><b>of rule 3.</b>                                          |

- |                                                                                                      |                                                                                                      |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 18. Shri P.B. Sathyan<br>Plavada Kochuveedu<br>South Vazhakulam Post<br>Aluva-5, Kerala.             | Representative of Small Rubber<br>Growers in the State of<br>Kerala under sub rule (3)<br>of rule 3. |
| 19. Shri C.K. Sajinarayanan<br>'Gayathri'<br>11/6, Link Road, Ayyanthole<br>Thrissur - 680 003.      | Representative of Labour<br>Interests under clause (d)<br>of sub-section (3) of<br>section 4.        |
| 20. Smt. Rema Reghunandan<br>'Smriti', Akkikkavu<br>P.O. Chavakkad, Trichur District<br>Kerala.      | Representative of Other<br>Interests under sub-rule (4)<br>of rule 3.                                |
| 21. Shri V.V. Augustine<br>Valavanthuruthel<br>Edapally P.O., Cochin.                                | Representative of Rubber Goods<br>manufacturers under clause (d)<br>of sub-section (3) of section 4. |
| 22. Shri P.R. Muralidharan<br>Pathalil House<br>S.N. Puram Post, Kottayam<br>Kerala                  | Representative of Small Rubber<br>Growers in the State of Kerala<br>under sub rule (3) of rule 3.    |
| 23. Shri Joseph Vazhakkan<br>Vazhakamalayil<br>Ramapuram, Kottayam.                                  | Representative of Other<br>Interests under sub-rule (4)<br>of rule 3.                                |
| 24. Vacant                                                                                           | Representative of Large Rubber<br>Growers from the State of Kerala<br>under Sub rule (3) of Rule 3.  |
| 25. Dr. A.K. Krishnakumar<br>Rubber Production Commissioner<br>Rubber Board, Kottayam.<br>Ex-officio |                                                                                                      |
| 26. Executive Director                                                                               | Vacant                                                                                               |



वार्षिक रिपोर्ट  
2002-03



रबर बोर्ड  
वाणिज्य एवं उद्योग मंत्रालय  
भारत सरकार

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## भाग - I

### प्रस्तावना

भारत सरकार ने रबड़ अधिनियम 1947 के अधीन देश में रबड़ खेती उद्योग के विकास के प्राथमिक लक्ष्य से कोरपोरेट निकाय के तौर पर रबड़ बोर्ड की गठन की। **हीविया ब्रासीलियनसिस** द्वारा उत्पादित लाटेक्स से संसार के सर्वाधिक बहु उपयोगी कच्चे माल के रूप में जाननेवाला स्वाभाविक रबड़ प्राप्त होता है। इस कच्चे माल का उपयोग

भारत में करीब 35000 उत्पादों के निर्माण में किया जाता है तथा राष्ट्र के औद्योगिक एवं आर्थिक विकास में इसकी अपार देन है। बोर्ड ने विकास एवं विस्तार की एक सख्त श्रृंखला की संस्थापना की तथा जिसके फलस्वरूप क्षेत्र के विस्तार, उत्पादन एवं

उत्पादकता में वृद्धि के क्षेत्रों में याने रबड़ बागान क्षेत्र के सभी स्तरों में उल्लेखनीय वृद्धि हासिल की है। साथ ही साथ अनुसंधान को इसका प्रणोद क्षेत्र माना तथा रबड़ के जैविकीय एवं प्रौद्योगिकीय सुधार हेतु अनुसंधान चलाने के लक्ष्य से बोर्ड ने 1955 में भारतीय रबड़ गवेषण संस्थान की संस्थापना की।



बोर्ड इसके प्रारंभ से ही रबड़ की वैज्ञानिक खेती को प्रोत्साहन देता आ रहा है। छठी योजना अवधि से रबड़ के नवरोपण एवं पुनरोपण प्रोत्साहित करने के लिए रबड़ बागान विकास योजना नामक रबड़ बागान हेतु एक एकीकृत योजना प्रचालित हैं तथा इसे सर्वाधिक सफल योजनाओं में एक माना जाता है। इसके अलावा उत्पादकता में वृद्धि

लाने, वैयक्तिक एवं सामूहिक प्रयासों से गुणवत्ता में सुधार लाने, कृषकों के मूल स्तरीय संगठन बनाने हेतु सुविधा प्रदान करने तथा रबड़ खेती द्वारा स्थायी विकास सुनिश्चित करने में उन्हें सशक्त करने के लिए कृषकों को विकास एवं विस्तार

समर्थन दिया जाता है। गैर-पारंपरिक क्षेत्र विशेषकर उत्तर-पूर्वी राज्यों में रबड़ बागानों की वृद्धि दर में उल्लेखनीय उपलब्धि हासिल की है जहाँ एकीकृत दृष्टिकोण स्वीकृत करके रबड़ विकास कार्य चलाये गये थे। उत्तर-पूर्व एवं उड़ीसा, आंध्रप्रदेश, कर्नाटक व केरल जैसे अन्य राज्यों के आदिवासी परिवर्तन कृषकों के लिए कार्यान्वित रबड़ आधारित

व्यवस्थापन कार्यक्रमों का विशेष जिक्र करना अति आवश्यक है जो उनके सामाजिक आर्थिक विकास/परिस्थिति को बनाये रखना सुनिश्चित करते भी है ।

रबड़ उत्पाद विनिर्माण क्षेत्र को समर्थन देकर, दक्षता में वृद्धि हेतु एवं अवसंरचना विकास हेतु सहायता प्रदान कर स्वाभाविक रबड़ के विभिन्न उपयोगों तथा अपारंपरिक उपयोगों को प्रोत्साहित करने हेतु बोर्ड अन्य कई उपाय भी अपनाते आ रहा है ।

विश्व के सर्वाधिक फसल देनेवाले क्लोनों में एक एवं लोक प्रिय क्लोन आर आर आई आई 105 का प्रजनन एवं निर्मुक्त करना भारतीय रबड़ अनुसंधान संस्थान की उल्लेखनीय देन है । पाँच और क्लोनों को विकसित करने

हेतु अनुसंधान कार्य अंतिम चरण में है जिन्हें निकट भविष्य में निर्मुक्त किया जाएगा । **हीविया** की विभिन्न कृषि प्रणालियों पर कृषि प्रौद्योगिकियाँ भी भारतीय रबड़ अनुसंधान संस्थान ने विकसित की है । संस्थान ने रबड़ संसाधन को सुधारने तथा कृत्रिम रबड़ का प्रभावी रूप से प्रतिस्थापन करने लायक विशेष रबड़ विकसित करने में भी उल्लेखनीय देन की है । प्रक्रमण फैक्टरियों में प्रदूषण रोकने हेतु विशेष परिस्थिति सुरक्षा प्रणालियों, प्रक्रमण में ऊर्जा बचाने की विधि, रबड़ काष्ठ के प्रक्रमण, सहायक आय पैदा करने के कार्यकलाप एवं रबड़ आधारित फसल प्रणालियों पर अनुसंधान के अच्छे परिणाम प्राप्त हुए हैं ।

### वर्ष 2002-03 के दौरान निष्पादन

वर्ष 2002-03 एवं इसके एकदम पूर्व के दो वर्षों के स्वाभाविक रबड़ के उत्पादन, उपभोग एवं वृद्धि दर इस प्रकार हैं :-

| वर्ष    | उत्पादन<br>(मेट्रिक टन में) | वृद्धि दर | उपभोग<br>(मेट्रिक टन में) | वृद्धि दर |
|---------|-----------------------------|-----------|---------------------------|-----------|
| 2000-01 | 6,30,405                    | 1.3%      | 6,31,475                  | 0.5%      |
| 2001-02 | 6,31,400                    | 0.2%      | 6,38,210                  | 1.1%      |
| 2002-03 | 6,49,435                    | 2.9%      | 6,95,425                  | 9%        |

### भाव

कोट्टयम में पिछले तीन वर्षों के आर एस एस 4 श्रेणी के रबड़ का वार्षिक औसतन भाव ये रहे :

| वर्ष    | भाव<br>(प्रति क्विंटल) |
|---------|------------------------|
| 2000-01 | 3,036 रु               |
| 2001-02 | 3,228 रु               |
| 2002-03 | 3,919 रु               |





## भाग - II

### रचना एवं कार्य

#### बोर्ड की रचना

रबड़ अधिनियम 1947 की धारा 4(3) के अनुसार बोर्ड में निम्नलिखित सदस्य होंगे ।

- क) केन्द्र सरकार द्वारा नियुक्त एक अध्यक्ष ।
- ख) तमिलनाडु का प्रतिनिधित्व करते हुए दो सदस्य होंगे, जिनमें एक रबड़ उत्पादनहित का प्रतिनिधित्व करनेवाला होगा ।
- ग) केरल राज्य का प्रतिनिधित्व करते हुए 8 सदस्य होंगे, जिनमें छः रबड़ उत्पादनहित का प्रतिनिधित्व करेंगे और उन व्यक्तियों में तीन छोटे उत्पादकों का प्रतिनिधित्व करेंगे ।

घ) केन्द्रीय सरकार द्वारा दस सदस्यों को मनोनीत करेंगे जिनमें से दो विनिर्माताओं एवं चार श्रमिकों का प्रतिनिधित्व करेंगे ।

ङ) संसद के तीन सदस्य होंगे जिनमें लोकसभा द्वारा दो सदस्यों को और राज्य सभा द्वारा एक सदस्य को चुन लिये जाएंगे ।

च) कार्यपालक निदेशक (पदेन); और

छ) रबड़ उत्पादन आयुक्त (पदेन)

कार्यपालक निदेशक का पद अभी तक नहीं भरा गया है।

#### 31.03.2003 के अनुसार रबड़ बोर्ड के सदस्यों की सूची निम्न प्रकार है

- |    |                                            |                                    |
|----|--------------------------------------------|------------------------------------|
| 1. | श्री एस मरिया डसलफिन आई ए एस               | अध्यक्ष, रबड़ बोर्ड                |
| 2. | श्री जवहर लाल जयसवाल<br>सदस्य, लोक सभा     | धारा 4(3)(ङ) के अधीन<br>संसद सदस्य |
| 3. | श्री शशिकुमार<br>सदस्य, लोक सभा            | वही                                |
| 4. | श्री रामचन्द्र खुंडिया<br>सदस्य, राज्य सभा | वही                                |

- |     |                                                                                                                  |                                                                               |
|-----|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 5.  | श्री सी रामचन्द्रन भा प्र से<br>कृषि उत्पाद आयुक्त,<br>केरल सरकार, कृषि विभाग,<br>सचिवालय, तिरुवनन्तपुरम         | नियम 3 के उप नियम (3)<br>के अधीन केरल सरकार<br>का प्रतिनिधि                   |
| 6.  | श्री ए सी मात्यु<br>अध्यक्ष<br>प्लान्टेशन कोरपोरेशन ऑफ केरला लि.<br>कोर्टयम                                      | वही                                                                           |
| 7.  | श्री एस पी इलंकोवन भा प्र से<br>सचिव<br>पर्यावरण एवं वन विभाग<br>तमिलनाडु सरकार<br>चेन्नै                        | नियम 3 के उप नियम (2)<br>के अधीन तमिलनाडु सरकार<br>का प्रतिनिधि               |
| 8.  | श्री के जेकब तोमस<br>प्रबंध निदेशक<br>मे.वाणियंपारा रबड़ कंपनी लि.<br>वाषक्काला बिल्डिंग्स, के.के.रोड<br>कोर्टयम | नियम 3 के उप नियम (3)के<br>अधीन केरल राज्य के बड़े<br>कृषकों का प्रतिनिधि     |
| 9.  | श्री एम डी जोसफ<br>मणिपरंपिल, कांजिरप्पल्ली<br>केरल                                                              | वही                                                                           |
| 10. | श्री ए.वी.जोर्ज<br>मे. तामरप्पल्ली रबड़ कं.लि.<br>कोर्टयम                                                        | नियम 3 के उप नियम (3)के<br>अधीन केरल राज्य के<br>बड़े कृषकों का प्रतिनिधि     |
| 11. | श्री ई टी वर्गीस<br>अध्यक्ष<br>इंडियन रबड़ डीलेर्स फेडरेशन<br>रबड़ भवन, कोडिमता<br>कोर्टयम                       | नियम 3 के उप नियम (4)के<br>अधीन अन्य हितों का<br>प्रतिनिधि                    |
| 12. | श्री ए जेकब<br>वेलिमला रबड़ कंपनी लि.<br>उप्पूट्टिल बिल्डिंग्स, के.के.रोड<br>कोर्टयम                             | नियम 3 के उप नियम (2)के<br>अधीन तमिलनाडु राज्य के<br>बड़े कृषकों का प्रतिनिधि |

- |     |                                                                                                                                                                                                        |                                                                                         |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 13. | <p>श्री सुरेश एलवाधी<br/>प्रबंध निदेशक<br/>एलवाधी रबड़ प्रोडक्ट्स<br/>नई दिल्ली एवं उपाध्यक्ष<br/>ऑल इंडिया फेडरेशन ऑफ रबड़<br/>प्रोडक्ट्स मानुफैक्चरर्स एवं सदस्य,<br/>प्रबंध समिति, ए आई आर आई ए</p> | <p>धारा 4 की उपधारा (3) के<br/>खंड (घ) के अधीन रबड़<br/>माल निर्माताओं का प्रतिनिधि</p> |
| 14. | <p>श्री सी अनन्तकृष्णन<br/>महा सचिव<br/>कन्याकुमारी जिला<br/>रबड़ एस्टेट वर्कर्स यूनियन आई एन टी यू सी,<br/>नागाकोड, कुलशेखरम</p>                                                                      | <p>धारा 4 की उपधारा (3) के<br/>खंड (घ) के अधीन श्रमिक<br/>हित का प्रतिनिधि</p>          |
| 15. | <p>श्री के जी रवी<br/>महा सचिव<br/>केरला स्टेट कर्षका काँग्रेस<br/>तिरुवनन्तपुरम</p>                                                                                                                   | <p>नियम 3 के उप नियम (3) के<br/>अधीन केरल राज्य के<br/>छोटे कृषकों का प्रतिनिधि</p>     |
| 16. | <p>श्री पी लालाजी बाबु<br/>महा सचिव<br/>ऑल इंडिया प्लान्टेशन वर्कर्स फेडरेशन<br/>कोल्लम जिला</p>                                                                                                       | <p>धारा 4 की उपधारा (3) के<br/>खंड (घ) के अधीन श्रमिक<br/>हित का प्रतिनिधि</p>          |
| 17. | <p>श्री कानम राजेन्द्रन<br/>सचिव<br/>केरला स्टेट कमिटी ऑफ ए आई टी यू सी<br/>तिरुवनन्तपुरम</p>                                                                                                          | <p>वही</p>                                                                              |
| 18. | <p>श्री एट्टुमानूर वी राधाकृष्णन<br/>वालियल हाउस<br/>एट्टुमानूर<br/>कोट्टयम जिला</p>                                                                                                                   | <p>नियम 3 के उप नियम (4) के<br/>अधीन अन्य हितों का<br/>प्रतिनिधि</p>                    |
| 19. | <p>श्री पी बी सत्यन<br/>प्लावडा कोच्चुवीडु<br/>दक्षिण वाषक्कुलम पोस्ट<br/>आलुवा - 5, केरल</p>                                                                                                          | <p>नियम 3 के उप नियम (3) के<br/>अधीन केरल राज्य के<br/>छोटे कृषकों का प्रतिनिधि</p>     |

|     |                                                                                      |                                                                                |
|-----|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 20. | श्री सी के सजी नारायणन<br>'गायत्री'<br>11/6, लिंक रोड, अय्यन्तोल,<br>तृशूर - 680 003 | धारा 4 की उपधारा (3) के<br>खंड (घ) के अधीन श्रमिक<br>हित का प्रतिनिधि          |
| 21. | श्रीमती रमा रघुनन्दन<br>'स्मृति', अक्किक्कावु<br>पी.ओ चावक्काड, तृशूर जिला<br>केरल   | नियम 3 के उप नियम (4) के<br>अधीन अन्य हितों का प्रतिनिधि                       |
| 22. | श्री वी वी अगस्टिन<br>वलवनतुरुत्तेल<br>इडप्पल्ली पी.ओ, कोचिन                         | धारा 4 की उपधारा (3) के<br>खंड (घ) के अधीन रबड़<br>माल निर्माताओं का प्रतिनिधि |
| 23. | श्री पी.आर.मुरलीधरन<br>पतालिल हाउस<br>एस एन पुरम पोस्ट, कोट्टयम<br>केरल              | नियम 3 के उप नियम (3) के<br>अधीन केरल राज्य के<br>छोटे कृषकों का प्रतिनिधि     |
| 24. | श्री जोसफ वाषक्कन<br>वाषक्कामलयिल<br>रामपुरम, कोट्टयम                                | नियम 3 के उप नियम (4) के<br>अधीन अन्य हितों का<br>प्रतिनिधि                    |
| 25. | डॉ ए के कृष्णकुमार<br>रबड़ उत्पादन आयुक्त<br>रबड़ बोर्ड, कोट्टयम                     | पदेन                                                                           |
| 26. | कार्यकारी निदेशक                                                                     | रिक्त                                                                          |

### बोर्ड के प्रकार्य

रबड़ अधिनियम 1947 की धारा 8 में बताए गए बोर्ड के प्रकार्य हैं:-

- (i) रबड़ उद्योग के विकास जैसे उचित समझता है वैसे उपायों से प्रोत्साहित करना । इस के लिए इन उपायों का प्रबंध करना है-
- क) वैज्ञानिक, प्रौद्योगिकी और आर्थिक अनुसंधान चलाना, सहायता देना या प्रोत्साहित करना;
- ख) छात्रों को रोपण, कृषि, खाद देने एवं छिडकाव की

उन्नत रीतियों का प्रशिक्षण देना;

- ग) रबड़ उत्पादकों को तकनीकी सलाह प्रदत्त करना;
- घ) रबड़ विपणन का सुधार;
- ड.) एस्टेट मालिकों, व्यापारियों और विनिर्माताओं से सांख्यिकी का एकत्रण करना;
- च) श्रमिकों को काम करने हेतु बेहतर सुविधा व व्यवस्था सुनिश्चित करना, तथा उनकी सुख



- सुविधाओं व प्रोत्साहनों का सुधार करना; तथा
- छ) बोर्ड के अधिकार में दिये गए किसी भी अन्य कार्यों का निर्वहण करना ।
- (ii) बोर्ड का यह भी कार्य होगा
- क) रबड़ के आयात और निर्यात सहित रबड़ उद्योग के विकास से संबंधित सारे मामलों पर केन्द्र सरकार को सलाह देना;
- ख) रबड़ से संबंधित किसी अंतर्राष्ट्रीय सम्मेलन या योजना में भाग लेने के संबंध में केन्द्र सरकार को सलाह देना
- ग) इस अधिनियम के कार्यों एवं बोर्ड के कार्यकलापों के संबंध में केन्द्र सरकार और ऐसे अन्य प्राधिकारियों को जैसा निर्धारित हो, अर्धवार्षिक रिपोर्ट प्रस्तुत करना; तथा



अध्यक्ष श्री एस एम डसालफिन बोर्ड की बैठक को सम्बोधित करते हुए

- घ) समय समय पर केन्द्रीय सरकार के निदेशानुसार रबड़ उद्योग से संबंधित रिपोर्ट तैयार करना और उसे पेश करना ।

रबड़ अधिनियम की धारा 8 में कथितानुसार बोर्ड के कार्यकलापों व प्रकार्यों की तुलनात्मक पुनरीक्षा हेतु सात समितियाँ गठित की गई हैं । ये हैं:- कार्यकारिणी समिति, अनुसंधान एवं विकास समिति, विपणन विकास समिति, रोपण समिति, सांख्यिकी एवं आयात/निर्यात समिति, श्रमिक कल्याण समिति और कर्मचारी कार्य समिति ।

अन्य हितों के प्रतिनिधित्व करनेवाले श्री एट्टुमानूर वी राधाकृष्णन 30.11.2002 को 21.8.2003 तक की अवधि तक बोर्ड के उपाध्यक्ष चुन लिये गये ।

श्री एस.एम.डसलफिन भा.प्र.से. वर्ष 2002-03 के दौरान बोर्ड के अध्यक्ष पद पर जारी रहे ।

### बोर्ड एवं समितियों की बैठक

रिपोर्ट वर्ष के दौरान बोर्ड और समितियों की निम्न लिखित बैठकें हुईं ।

## क) बोर्ड की बैठकें

|             |   |            |
|-------------|---|------------|
| 144वीं बैठक | - | 06.04.2002 |
| 145वीं बैठक | - | 22.07.2002 |
| 146वीं बैठक | - | 30.11.2002 |

## ख) समिति बैठकें

|                                                             |                                          |
|-------------------------------------------------------------|------------------------------------------|
| कार्यकारिणी समिति                                           | 29.04.2002, 02.01.2002<br>एवं 24.03.2003 |
| अनुसंधान एवं विकास समिति                                    | 05.10.2002                               |
| रोपण समिति                                                  | 21.09.2002                               |
| श्रमिक कल्याण समिति                                         | 05.10.2002                               |
| सांख्यिकी एवं आयात/निर्यात समिति                            | 21.09.2002 एवं 24.03.2003                |
| कर्मचारी कार्य समिति                                        | 29.04.2002                               |
| कार्यकारिणी समिति एवं बाज़ार<br>विकास समिति की संयुक्त बैठक | 17.08.2002                               |
| बाज़ार विकास समिति                                          | 26.10.2002, 26.12.2002<br>एवं 08.01.2003 |



रबड़ बोर्ड बैठक का दृश्य

उपर्युक्त के अलावा, बोर्ड ने स्वाभाविक रबड़ के निर्यात प्रोत्साहन, सडकों के रबरीकरण तथा बोर्ड द्वारा

प्रायोजित संसाधन कंपनियों के निष्पादन के मूल्यांकन हेतु उपसमितियों को गठित किया है। इन समितियों ने सामयिक

रूप से बैठक की और आवश्यक मार्गदर्शन प्रदत्त किए ।

### संगठनात्मक रचना

रबड़ बोर्ड के कार्यकलापों का आठ विभागों द्वारा निष्पादन किया जाता है याने रबड़ उत्पादन, प्रशासन, रबड़ अनुसंधान, प्रक्रमण एवं उपज विकास, प्रशिक्षण व तकनीकी परामर्श, वित्त एवं लेखा, सांख्यिकी एवं योजना और अनुज्ञापन एवं उत्पाद शुल्क । इन विभागों के मुख्य क्रमशः रबड़ उत्पादन आयुक्त, सचिव, निदेशक (अनुसंधान), निदेशक (प्र व उ वि), निदेशक (प्र व त प), निदेशक (वित्त), संयुक्त निदेशक (सां व यो) और निदेशक (अनु व उ शु) हैं । रिपोर्टाधीन वर्ष के दौरान सचिव के पद रिक्त रहने के कारण निदेशक (अनु व उ शु) ने सचिव का अतिरिक्त प्रभार संभाला ।

बोर्ड के प्रशासन, रबड़ उत्पादन, सांख्यिकी व योजना, अनुज्ञापन व उत्पाद शुल्क और वित्त एवं लेखा विभाग, कीषकुन्नु, कोट्टयम - 686 002 के अपने ही कार्यालय भवन में स्थित हैं । अनुसंधान विभाग, प्रक्रमण व उपज विकास विभाग और प्रशिक्षण व तकनीकी परामर्श विभाग भारतीय रबड़ अनुसंधान संस्थान परिसर, कोट्टयम-9 में स्थित हैं ।

अनुज्ञापन और उत्पाद शुल्क विभाग के अधीन नौ उप/संपर्क कार्यालय हैं । देश के विभिन्न रबड़ उत्पादित क्षेत्रों में रबड़ उत्पादन विभाग के 5 आंचलिक कार्यालय, 2 न्यूक्लियस रबड़ एस्टेट एवं प्रशिक्षण केन्द्र, 40 प्रादेशिक कार्यालय, 1 सहायक विकास अधिकारी के कार्यालय,

189 क्षेत्रीय स्टेशन, तीन जिला विकास केन्द्रों के सहित 13 प्रादेशिक पौधशालाएँ, एक निदर्शन केन्द्र (मिज़ोरम में), एक केन्द्रीय पौधशाला और 23 टापेर्स प्रशिक्षण स्कूल हैं ।

अनुसंधान विभाग केरल में दो क्षेत्रीय अनुसंधान केन्द्र और तमिलनाडु, कर्नाटक, महाराष्ट्र, उड़ीसा, पश्चिम बंगाल, असम, मेघालय और त्रिपुरा में एक-एक क्षेत्रीय अनुसंधान केन्द्र चलाता हैं । कोट्टयम स्थित पयलट ब्लॉक रबड़ फैक्टरी, चेतकल के केन्द्रीय परीक्षण स्टेशन में स्थित पयलट लैटेक्स संसाधन फैक्टरी का और कोट्टयम में प्राकृतिक रबड़ के रेडियेशन वलकनीकरण के लिए एक पयलट प्लान्ट का संचालन रबड़ प्रक्रमण एवं उपज विकास विभाग द्वारा किया जाता है । विश्व बैंक सहायताप्राप्त रबड़ परियोजना के अधीन संस्थापित आदर्श टी एस आर फैक्टरी का भी संचालन प्रक्रमण एवं उपज विकास विभाग द्वारा किया जाता है ।

बोर्ड के सारे विभागों एवं कार्यालयों पर अध्यक्ष का प्रशासनिक नियंत्रण होता है । 31.3.2003 के अनुसार बोर्ड के कर्मचारियों एवं अधिकारियों की कुल संख्या 2105 थी, जिनमें “क” वर्ग के 310 अधिकारी, “ख” वर्ग के 602 अधिकारी, “ग” वर्ग के 999 और “घ” वर्ग के 194 कर्मचारी सम्मिलित हैं । कार्यकारी अधिकारियों एवं कर्मचारियों के बीच अच्छा संबंध रहा था ।

आगे के पृष्ठों में विभिन्न विभागों के कार्यकलापों का संक्षिप्त विवरण दिया गया है ।



## भाग III

### प्रशासन

प्रशासन विभाग के निम्नलिखित अनुभाग एवं प्रभाग हैं ।

- 01 स्थापना अनुभाग (सामान्य प्रशासन, कार्मिक प्रशासन एवं हकदार)
- 02 विपणन प्रभाग
- 03 श्रमिक कल्याण अनुभाग
- 04 विधिक अनुभाग
- 05 हिन्दी अनुभाग

#### 1. स्थापना अनुभाग

##### (क) सामान्य प्रशासन

बोर्ड एवं उसकी समितियों का संगठन/पुनःसंगठन, बोर्ड एवं उसकी समितियों की बैठकें आयोजित करना, बोर्ड के निर्णयों के कार्यान्वयन की निगरानी करना, गृह-व्यवस्था कार्यकलाप का प्रबंधन आदि सामान्य प्रशासन के मुख्य कार्यों में हैं ।

##### (ख) हकदार

वर्ष के दौरान 11 स्वैच्छिक सेवानिवृत्ति तथा एक अनिवार्य सेवानिवृत्ति सहित 65 कर्मचारियों को सेवानिवृत्ति लाभ दिए गए । अपने कार्यकाल में ही निधन हुए 8 कर्मचारियों एवं आतंकवादियों द्वारा अपहृत एक कर्मचारी सहित नौ कर्मचारियों के परिवारों को कुटुंब पेंशन मंजूर किया गया ।

36 कर्मचारियों को अपने भवनों के निर्माण के लिए 1,05,86,186/- रु. पेशगी के तौर पर वित्तीय सहायता दी गयी । इसके अलावा 68 कर्मचारियों को वाहन पेशगी के तौर पर 13,04,749 रु. दिए गए (2 व्यक्तियों को कार अग्रिम के तौर पर 2,55,300/- रु., 36 कर्मचारियों को दुपहिया वाहन अग्रिम के रूप में 10,04,449/- रु. तथा 30 कर्मचारियों को साइकिल अग्रिम के रूप में 45,000- रु.) इसके अलावा 5 कर्मियों को कंप्यूटर अग्रिम के रूप में 2,02,300/- रु. तथा 13 कर्मचारियों को पंखा अग्रिम स्वरूप 13,000/- रु. भी दिए गए ।

कर्मचारियों की सेवा पुस्तिकाओं, छुट्टी खाते एवं वैयक्तिक फाइलों का सही रखरखाव किया गया ।

##### (ग) कार्मिक प्रशासन

अनुमोदित भर्ती नियमों एवं अनुसूचित जाति/जनजाति/अन्य पिछड़े वर्ग व विकलांग उम्मीदवारों के लिए आरक्षित पदों से संबंधित सांविधिक नियमों का पालन करते हुए बोर्ड के सुगम संचालन के लिये रिक्त पदों में योग्य व्यक्तियों का चयन सुनिश्चित किया था । भर्ती के लिए उपयुक्त कर्मचारियों के चयन के लिए चयन समिति/विभागीय पदोन्नति समिति का संगठन उपयुक्त तरीके से किया था । चुने हुए आरक्षित पदों के लिए चुने गए कर्मियों के संबंध में सामयिक विवरणियाँ सरकार को भेजी थीं ।



**I. 31.3.2003 को बोर्ड के अधीन के अधिकारियों एवं कर्मचारियों की कुल संख्या 2105 थी, जिनका विवरण निम्न प्रकार है ।**

| क्र.सं. | विभाग का नाम                 | वर्ग क     | वर्ग ख     | वर्ग ग     | वर्ग घ     | योग         |
|---------|------------------------------|------------|------------|------------|------------|-------------|
| 1       | रबड़ उत्पादन                 | 172        | 378        | 559        | 102        | 1211        |
| 2.      | अनुसंधान                     | 64         | 135        | 187        | 58         | 444         |
| 3.      | अनुज्ञापन एवं उत्पाद शुल्क   | 23         | 29         | 82         | 7          | 141         |
| 4.      | प्रशासन                      | 14         | 14         | 62         | 15         | 105         |
| 5.      | प्रक्रमण एवं उपज विकास       | 17         | 19         | 40         | 5          | 81          |
| 6.      | वित्त एवं लेखा               | 6          | 14         | 29         | 2          | 51          |
| 7.      | प्रशिक्षण एवं तकनीकी परामर्श | 9          | 7          | 27         | 4          | 47          |
| 8.      | सांख्यिकी एवं योजना          | 5          | 6          | 13         | 1          | 25          |
|         | <b>योग</b>                   | <b>310</b> | <b>602</b> | <b>999</b> | <b>194</b> | <b>2105</b> |

**II. 31.3.2003 के अनुसार कुल महिला कर्मचारियों का विवरण एवं कुल कर्मचारी बल में उनकी प्रतिशतता ।**

| वर्ग          | महिला कर्मचारियों की संख्या | कर्मचारियों की कुल संख्या | कुल संख्या में प्रतिशत |
|---------------|-----------------------------|---------------------------|------------------------|
| क             | 74                          | 310                       | 23.87                  |
| ख             | 205                         | 602                       | 34.05                  |
| ग             | 430                         | 999                       | 43.04                  |
| घ             | 21                          | 194                       | 10.82                  |
| <b>महायोग</b> | <b>730</b>                  | <b>2105</b>               | <b>34.68</b>           |

**2. विपणन प्रभाग**

विपणन प्रभाग रबड़ के मूल्यों का एकत्रण, उनका संकलन एवं प्रसारण के कार्य करता है । प्रभाग ने शीट रबड़ के विभिन्न श्रेणियों के दैनिक भाव, कुलालपुर बाज़ार एवं सिंगपुर कोमोडिटी एक्सचेंज में एस एम आर श्रेणी के ब्लॉक रबड़ एवं साठ प्रतिशत लाटेक्स के भावों का प्रकाशन कार्य भी किया । स्क़ाप रबड़ का मूल्य भी एकत्रित करके सप्ताह में दो बार प्रकाशित किए । दैनिक आधार पर रबड़ के विभिन्न श्रेणियों के राष्ट्रीय एवं अन्तर्राष्ट्रीय भाव बोर्ड के

वेब साइट में प्रविष्ट किए ।

विभिन्न श्रेणियों के शीट रबड़, आई एस एन आर 20 एवं साठ प्रतिशत केन्द्रीकृत लाटेक्स के रिपोर्ट अवधि के मासिक औसतन भाव रिपोर्ट के अंत में दिए गए हैं ।

### 3. श्रमिक कल्याण अनुभाग

रबड़ अधिनियम 1947 की धारा 8, उपधारा 2, खंड (च) के अनुसार “श्रमिकों के लिए बेहतर व्यवस्थाएँ एवं शर्तें सुनिश्चित करना तथा सुख सुविधाओं व प्रोत्साहन में अभिवृद्धि लाना” बोर्ड के प्रमुख कार्यों में एक है । इसमें परिलक्षित कार्य रबड़ बागान उद्योग के विकास एवं उत्थान के लिए एवं रबड़ बागान उद्योग के श्रमिकों के बीच, जो रबड़ खेती के विकास और उत्थान के अभिन्न अंग है, रुचि दिलाने व पैदा करने के लिए उपयुक्त उपाय हैं ।



रबड़ पेड़ टापिंग

बोर्ड ने पिछले वित्त वर्ष के दौरान उपर्युक्त कार्य विभिन्न कल्याण कार्यक्रम कार्यान्वित करके निष्पादित किये । इस वर्ष का बजट आबंटन 212.05 लाख रुपये था जबकि उपलब्धि पिछले वर्ष वितरित 1,22,16,277/- रु. के स्थान पर 2,12,01,169/- रु. रही ।

रिपोर्टाधीन वर्ष के दौरान बोर्ड द्वारा परिचालित योजनाएं निम्न प्रकार हैं :

#### 1 शैक्षिक वृत्तिका योजना

यह योजना रबड़ बागान श्रमिकों के बच्चों को कॉलेज व स्कूलों के विभिन्न पाठ्यक्रमों में अध्ययन के लिए वित्तीय सहायता प्रदान करती है ।

वृत्तिका में (1) छात्रावास/आवास शुल्क तथा (2) एकमुश्त अनुदान सम्मिलित हैं ।

#### 2 शैक्षिक छात्रवृत्ति योजना

इस योजना के अन्तर्गत प्रशंसनीय रूप से पाठ्यक्रम उत्तीर्ण होनेवाले रबड़ बागान श्रमिकों के बच्चों को छात्रवृत्ति प्रदान की जाती है । छात्रवृत्ति की रकम 1000 रु. से 5000 रु. तक है । बागान श्रमिकों के बच्चों के अध्ययन में उनके अच्छे निष्पादन को बढ़ावा देने के लिए प्रोत्साहन के तौर यह दी जाती है ।

#### 3 समूह बीमा-सह-जमा योजना (9 चरण)

यह योजना रबड़ बागान श्रमिकों के दुर्घटना द्वारा घायल होने तथा मृत्यु होने के विरुद्ध सामाजिक सुरक्षा प्रदान करने के लिए लागू किया हुआ उपाय है । यह योजना बागान श्रमिक अधिनियम लागू न किए बागानों में सहित कार्यरत श्रमिकों को 20,000 रुपये तक की रकम की बीमा सुरक्षा प्रदान करने के लिए लागू की है ।

यह योजना श्रमिकों में बचत की आदत को प्रोत्साहित करती भी है । 50 रुपये प्रतिवर्ष के श्रमिक अंशदान के साथ 1986-87 के दौरान प्रथम चरण का प्रारंभ किया गया तथा वर्ष 2000-01 में 9वाँ चरण पहुँच गया । हर

योजना 10 वर्ष की अवधि तक परिचालित होगी। वर्ष 2002-03 के दौरान समूह बीमा योजना के अंतर्गत 40 श्रमिकों को 1,10,684 रु. क्षतिपूर्ति के रूप में भुगतान किया गया।

केवल छोटी जोतों के टापरों को प्रतिवर्ष प्रति आवेदक 250 रु. के उच्चतर प्रीमियम से 50000 रु. की बीमा सुरक्षा प्रदान करने के लिए एक **नयी समूह बीमा-सह-जमा योजना** का प्रारंभ वर्ष 2001-02 के दौरान किया है। यह योजना दुर्घटनाओं में उच्चतर क्षतिपूर्ति देती है तथा टापरों में जमा करने की आदत को प्रोत्साहित करती है। योजना के अधीन प्रतिवर्ष बोर्ड 150 रु. प्रति सदस्य अंशदान करता है।

#### 4 गृह निर्माण सहायिकी योजना

यह योजना टापरों एवं रबड़ बागान के श्रमिकों को अपनी भूमि में भवन निर्माण के लिए वित्तीय सहायता देने के लिए शुरू की गयी थी। इस योजना के अधीन आवेदक

आकलित निर्माण लागत के 25 प्रतिशत में जो भी कम हो उतनी रकम की आर्थिक सहायता दी जाती है।

#### 5 प्रसाधन सुविधा प्रदान करने की योजना

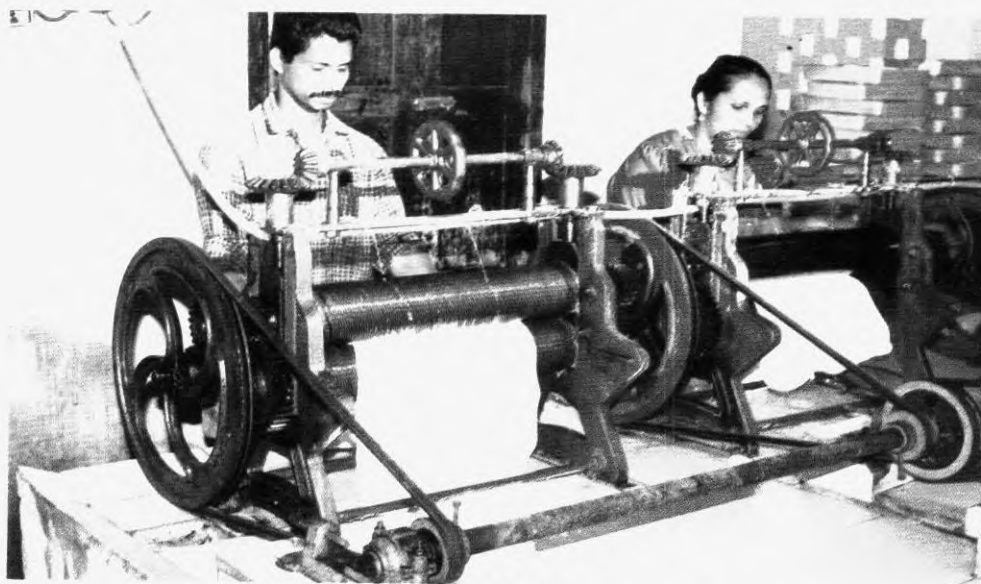
असंगठित क्षेत्र के रबड़ टापरों के बीच स्वच्छ परिस्थिति के प्रति रुचि पैदा करना इस योजना का लक्ष्य है। बोर्ड द्वारा निर्धारित नक्शा एवं अनुमान के अनुसार शौचालय निर्माण में टापरों को सहायता दी जाती है। निर्माण लागत के 75 प्रतिशत या 3000 रु. में जो भी कम हो उतनी रकम तक वित्तीय सहायता सीमित की गई है।

#### 6 चिकित्सा सहायता योजना

यह योजना असंगठित क्षेत्र के टापरों के स्वास्थ्य सुधारने के लिए शुरू की गयी थी। इस योजना द्वारा चिकित्सा हेतु रोगपीडित टापरों द्वारा खर्च किये व्यय की प्रतिपूर्ति की जाती है। एक वर्ष में देय अधिकतम राशि 2000 रु. है। एक आवेदक के जीवनकाल में गंभीर बीमारियों के लिए एक बार 10,000 रु. की उच्चतर

वित्तीय सहायता प्रदान की जाती है।

बंध्यता ऑपरेशन किये टापरों को इस योजना के अन्तर्गत एक अन्य लाभ भी प्रदान किया जाता है। छोटी जोत क्षेत्र के रबड़ टापरों में छोटे परिवार को प्रोत्साहित करने हेतु यह सुविधा प्रदान की जाती है।



रबड़ शीट निर्माण

के कार्यरत बागान का क्षेत्र 0.75 हेक्टेयर से कम न हो। योजना के उपबंधों के अनुसार इस तरह का एक टापर गृह निर्माण करता है तो उन्हें अधिकतम 7500/- रु. या

#### 7 अनुसूचित जाति/जनजाति/अन्य पिछड़ी जाति के लिए भवन निर्माण एवं सानिटरी सहायिकी योजना

यह योजना मात्र असंगठित रबड़ क्षेत्र में काम करने

वाले अनुसूचित जाति/जनजाति/अन्य पिछड़ी जाति के टापरों के लिए हैं। इस योजना के अन्दर शौचालय सहित गृहनिर्माण के लिए 14,000 रु. तक की सहायिकी प्रति आवेदक दी जाती है।

योजना हेतु निधि विशेष संघटक योजना/आदिवासी उप योजना से प्रदत्त की जाती है।

**वर्ष 2002-03 के दौरान इन योजनाओं के अन्तर्गत का निष्पादन निम्न प्रकार है :**

| योजना का नाम                                        | लाभान्वितों की संख्या | वितरित कुल रकम (रु) | वर्ष 2002-03 का बजट आबंटन (रु) |
|-----------------------------------------------------|-----------------------|---------------------|--------------------------------|
| शैक्षिक वृत्तिका                                    | 5669                  | 3061463             | 3051050                        |
| शैक्षिक छात्रवृत्ति                                 | 214                   | 101750              | 111950                         |
| समूह बीमा-सह-जमा                                    | 9068                  | 1034900             | 1036005                        |
| गृह निर्माण सहायिकी                                 | 1219                  | 9147500             | 9105000                        |
| शौचालय सहायिकी                                      | 653                   | 1956500             | 1989000                        |
| चिकित्सा सहायता                                     | 450                   | 766681              | 773986                         |
| गृहनिर्माण व शौचालय सहायिकी(अ.जा/अ.ज. जा/अ.पि.वर्ग) | 692                   | 5132375             | 5138375                        |
| <b>योग</b>                                          | <b>17965</b>          | <b>21201169</b>     | <b>21205366</b>                |

#### 4 विधिक अनुभाग

बोर्ड के विभिन्न विभागों/अनुभागों/प्रभागों को सलाह/राय देना, कानूनी दस्तावेजों का प्रारूप तैयार करना, रबड़ अधिनियम 1947 के अधीन कानूनी कार्रवाई प्रारंभ करना, श्रमिक मामलों, कर मामलों में समझौता करने हेतु विभागों की सहायता करना तथा बोर्ड के मुकदमे चलाने हेतु बोर्ड के अधिवक्ताओं को अनुदेश देना तथा सहायता प्रदान करना आदि विधिक अनुभाग के कार्य हैं।

रिपोर्ट वर्ष के दौरान विधिक अनुभाग के ध्यान

आकर्षित 960 फाइलों में समय ही पर कार्रवाई की/सलाह दी। गृह निर्माण अग्रिमों के 36 आवेदनों में नियमानुसार आवेदनों की पात्रता निर्धारित करने हेतु दस्तावेजों की छानबीन की। रिपोर्ट वर्ष के दौरान बोर्ड द्वारा निष्पादित करने के कानूनी दस्तावेजों का आवश्यक समय पर प्रारूपण किया/तैयार किया गया। विविध अदालतों में बोर्ड के विरुद्ध दायर मामलों में बोर्ड के हितों की रक्षा करने के लिए वकीलों द्वारा उचित कदम उठाये गये। उच्च न्यायालय और उच्चतम न्यायालय में लंबित मामलों पर स्थायी काउंसेल एवं केन्द्र सरकार वकीलों को खंडवार टिप्पणियाँ दी एवं आवश्यक अनुदेश दिए थे। विभिन्न जिलों के क्षतिपूर्ति फोरम के सामने आये उपभोक्ता विवाद संबंधी फाइलों पर अनुभाग ने उत्तर तैयार किये और फाइल किये तथा सुनवाई के समय बोर्ड का प्रतिनिधित्व किया।

श्रमिक मामलों के निपटान हेतु प्रादेशिक अनुसंधान केन्द्र धौकनाला, एन.आर.ई.टी.सी, अन्डमान, के.प.स्टे.चेतककल, भा.र.ग.सं. फार्म, एच बी एस नेट्टना व परलियार, र.उ.विभाग की पौधशालाएं/प्रक्षेत्रों को आवश्यक सहायताएं प्रदान की। रबड़ अधिनियम, रबड़ नियम, रबड़ बोर्ड कर्मचारी आचार नियम तथा रबड़ बोर्ड सेवा (वर्गीकरण, नियंत्रण एवं अपील) नियमों में रबड़ बोर्ड द्वारा प्रस्तावित संशोधनों के मसौदे तैयार किए।

#### 5 हिन्दी अनुभाग

रबड़ बोर्ड राजभाषा नियम के नियम 10(4) के अधीन अधिसूचित कार्यालय है।

रिपोर्टाधीन वर्ष के दौरान बोर्ड के हिन्दी अनुभाग ने निम्नलिखित कार्य किए।

##### ● राजभाषा कार्यान्वयन समिति

वर्ष के दौरान बोर्ड की राजभाषा कार्यान्वयन समिति की चार बैठकें आयोजित कीं। बैठक में तिमाही प्रगति रिपोर्टें प्रस्तुत कीं तथा उन पर चर्चा की। कार्यसूचियाँ



राजभाषा विभाग के अनुदेशों के अनुसार तैयार कीं।

### ● हिन्दी सलाहकार समिति

वाणिज्य एवं उद्योग मंत्रालय की हिन्दी सलाहकार समिति की 17/4/2002 को संपन्न बैठक में अध्यक्ष एवं सहायक निदेशक (रा.भा.) ने बोर्ड का प्रतिनिधित्व किया तथा 22/11/2002 को संपन्न बैठक में निदेशक (अनु व उ शु) एवं सहायक निदेशक (रा.भा.) भाग लिए।

### ● हिन्दी पखवाडा/हिन्दी दिवस समारोह

बोर्ड के मुख्यालय एवं भारतीय रबड़ गवेषण संस्थान में 17 सितंबर से 27 सितंबर 2002 तक हिन्दी पखवाडा समारोह का आयोजन किया। इस सिलसिले में आयोजित विभिन्न प्रतियोगिताओं में कई अधिकारी/कर्मचारी भाग लिए तथा विजेताओं को पुरस्कारों का वितरण किया गया।

बोर्ड के 30 अधीनस्थ कार्यालयों में हिन्दी दिवस समारोह का आयोजन किया। कर्मचारियों के लिए विभिन्न प्रतियोगिताएं आयोजित कीं तथा विजेताओं को पुरस्कार और प्रमाणपत्र दिए गए। इन कार्यक्रमों में कई मान्य व्यक्ति भाग लिए।

### ● हिन्दी में द्वैमासिक बुलेटिन

वर्ष के दौरान हिन्दी द्वैमासिक बुलेटिन “रबड़ समाचार” का प्रकाशन जारी किया।

### ● हिन्दी शिक्षण योजना

संघ की राजभाषा नीति के अनुसार ‘ग’ क्षेत्र में हिन्दी शिक्षण कार्य वर्ष 2005 तक पूरा किया जाना है। मुख्यालय एवं भारतीय रबड़ गवेषण संस्थान में भारत सरकार की हिन्दी शिक्षण योजना के अधीन विभिन्न हिन्दी कक्षाएं चलायी गयीं। 9 पदधारी हिन्दी टंकण पाठ्यक्रम में भाग लिए। वर्ष के दौरान 28 पदधारियों ने हिन्दी प्राज्ञ परीक्षा उत्तीर्ण की तथा 5 ने हिन्दी टंकण परीक्षा। इन परीक्षाओं में उत्तीर्ण होने हेतु योग्य पदधारियों को नकद पुरस्कार और वैयक्तिक वेतन दिये गये।

### ● हिन्दी कार्यशाला

बोर्ड ने 25 प्रादेशिक कार्यालयों में हिन्दी कार्यशालाओं का आयोजन किया। कुल 457 अधिकारियों/कर्मचारियों को राजभाषा में प्रशिक्षण दिया गया।

### ● नगर राजभाषा कार्यान्वयन समिति

वर्ष के दौरान कोट्टयम नगर राजभाषा कार्यान्वयन समिति की दो बैठकें आयोजित कीं। अध्यक्ष रबड़ बोर्ड, नगर राजभाषा कार्यान्वयन समिति के भी अध्यक्ष हैं। सदस्य संगठनों के पदधारियों के लिए संयुक्त हिन्दी सप्ताह समारोह का भी आयोजन किया गया।

### ● हिन्दी पुस्तकालय

बोर्ड के हिन्दी अनुभाग के अधीन एक हिन्दी पुस्तकालय कार्यरत है। बोर्ड के पदधारी इसका लाभ उठाते हैं। हिन्दी में टिप्पण एवं आलेखन को प्रोत्साहित करने के लिए बोर्ड के विभिन्न कार्यालयों को आवश्यक पुस्तकें खरीदकर आपूर्ति कीं।

### ● सामान्य

राजभाषा अधिनियम की धारा 3(3) के अधीन कार्यालय ज्ञापन, परिपत्र एवं आदेश जैसे दस्तावेज हिन्दी में अनूदित किए।

कोट्टयम नगर राजभाषा कार्यान्वयन समिति के संयुक्त हिन्दी सप्ताह समारोह में सर्वाधिक अंक प्राप्त करने के लिए रबड़ बोर्ड मुख्यालय को ट्रॉफी से सम्मानित किया गया।

हिन्दी अनुभाग में संस्थापित कंप्यूटर में बहुभाषी सॉफ्टवेयर लगा दिया गया है। अन्य सभी कंप्यूटरों में हिन्दी सॉफ्टवेयर लगाने की कार्यवाही प्रगति में है।

### ● आज का शब्द

मुख्यालय में आज का शब्द लिखना बोर्ड ने जारी रखा। अधीनस्थ कार्यालयों में **आज का शब्द** लिखने हेतु अनुदेश जारी किये।

## ● हिन्दी में मूल काम करने हेतु प्रोत्साहन योजना

हिन्दी में मूल रूप से काम करने हेतु अधिक पदधारियों को प्रोत्साहित किया। हिन्दी में टिप्पणी लिखने एवं मसौदा तैयार करने हेतु उन्हें आवश्यक सहायताएं प्रदत्त की। कुल 215 पदधारी इस प्रोत्साहन योजना में भाग लिए तथा इस योजना के अन्तर्गत उन्हें नकद पुरस्कार भी दिये गये।

## ● राजभाषाई निरीक्षण

वर्ष के दौरान बोर्ड के 18 अधीनस्थ कार्यालयों में राजभाषाई निरीक्षण चलाये गये।

## अध्यक्ष के सीधे नियंत्रण में कार्य करनेवाले प्रभाग

1. प्रचार व जनसंपर्क प्रभाग
2. सतर्कता प्रभाग

### 1. प्रचार व जनसंपर्क प्रभाग

प्रचार व जन संपर्क प्रभाग ने इस अवधि के दौरान रबड़ खेती के विभिन्न पहलुओं पर निम्न लिखित पत्रिकाएं एवं अन्य प्रकाशन प्रकाशित किए।

#### 1. रबड़ मासिक

वर्ष के दौरान मासिक के 12 अंक प्रकाशित किए। परिचालन की स्थिति निम्न प्रकार है:

|                |   |           |
|----------------|---|-----------|
| औसत मासिक चंदा | : | 13958 सं. |
| आजीवन चंदा     | : | 6086 सं.  |

#### 2. रबड़ स्टैटिस्टिकल न्यूज़

वर्ष 2002-03 में रबड़ स्टैटिस्टिकल न्यूज़ के 12 अंक प्रकाशित किए गए।

#### 3. प्रेस विज्ञप्तियाँ

प्रभाग से 54 प्रेस विज्ञप्तियाँ जारी कीं।

#### 4. विज्ञापन

105 विज्ञापन (प्रदर्शन एवं वर्गीकृत विज्ञापन सहित) जारी किए तथा रबड़ मासिक हेतु 96 विज्ञापन प्राप्त किए।

#### 5. आकाशवाणी

प्रभाग के सहायक निदेशक द्वारा आकाशवाणी में एक भाषण रिकार्ड किए तथा जिनका प्रसारण किया गया।

रबड़ पर आकाशवाणी में रिकॉर्ड किये गये तथा प्रसारित किये गये 13 भागों के एक सिलसिलेवार कार्यक्रम के आयोजन एवं प्रबंधन समिति के सदस्य के रूप में सहायक निदेशक प्रचार ने कार्य किया।

## 6. संगोष्ठी एवं बैठकें

बोर्ड, कंपनियों, रबड़ उत्पादक संघों, इन्टर मीडिया पब्लिसिटी कॉ ऑर्डिनेशन समिति, सार्वजनिक क्षेत्र के जनसंपर्क मंच एवं आकाशवाणी आदि से संबंधित कई संगोष्ठियों, बैठकों एवं अन्य सार्वजनिक कार्यक्रमों में प्रभाग के अधिकारी भाग लिये तथा भाषण दिये।

## 7. प्रदर्शनी

प्रभाग 11 प्रदर्शनियों में भाग लिया - याने:

- i कूनूर में उपासी प्रदर्शनी
- ii कोट्टयम में खादी मेला
- iii तोडुपुषा में कार्षिक मेला
- iv मूवाट्टुपुषा में सुवर्णोत्सव
- v बसेलियस कॉलेज कोट्टयम में प्रदर्शनी
- vi तृशूर में मातृभूमि जे टी एफ सी मेला
- vii कोट्टयम में इन्डेक्स
- viii इंडिया रबड़ एक्सपो, मुंबई
- ix तोडुपुषा में फ्यूशन 2003
- x शताब्दी समारोह के सिलसिले में कुलशेखरम में आयोजित एक दिवसीय प्रदर्शनी
- xi शताब्दी समारोह के सिलसिले में कण्णूर में आयोजित एक दिवसीय प्रदर्शनी

## 8. आलेख

प्रभाग के अधिकारियों ने विभिन्न दैनिकियों, कृषि मासिकों तथा “रबड़ मासिक” में 14 तकनीकी आलेख प्रकाशित किए।

## 9. इनसाइड रबड़ बोर्ड

“इनसाइड रबड़ बोर्ड” के 3 अंक प्रकाशित किए।

## 10. रबड़ ग्रोवर्स कम्पानियन 2003

“रबड़ ग्रोवर्स कम्पानियन 2003” की 9750 प्रतियों तथा “रबड़ एण्ड इट्स कल्टिवेशन” की 1000 प्रतियों का मुद्रण एवं वितरण किया गया।



प्रदर्शनी में रबड़ बोर्ड का स्टॉल

## 11. शताब्दी समारोह

भारत में रबड़ कृषि की शताब्दी समारोह का आयोजन वर्ष 2002 के दौरान किया गया। समारोह का प्रचुर प्रचार किया गया था। भारत में रबड़ बागान उद्योग के शताब्दी समारोह के सिलसिले में 118 पृष्ठों की एक स्मारिका प्रकाशित की।

### 2. सतर्कता प्रभाग

#### 1. पूछताछ/जांच

सतर्कता प्रभाग ने क एवं ख वर्ग के 5 अधिकारियों तथा ग एवं घ वर्ग के 6 कर्मचारियों के खिलाफ कुल 11 शिकायतों पर रिपोर्ट वर्ष के दौरान पूछताछ/जांच की। इन शिकायतों पर आवश्यक उचित तरीके की जांच की थी और जहाँ आवश्यक समझा वहाँ गलत करनेवाले बोर्ड अधिकारियों के विरुद्ध उचित कार्रवाई हेतु सिफारिश की/उचित कार्रवाई की।

#### 2. मामले

रिपोर्टाधीन अवधि के दौरान 1 पदधारी के विरुद्ध कठिन दण्ड कार्रवाई तथा 2 पदधारियों के विरुद्ध हल्की

दण्ड कार्रवाई ली गयी।

#### 3. संपत्ति विवरण एवं चल/अचल संपत्ति के अर्जन/बिक्री का विवरण

क एवं ख वर्ग स्तर के सभी अधिकारियों से 31.12.2002 के अनुसार अचल संपत्ति की वार्षिक विवरणी मांगी गयी थी। इस तरह अधिकारियों से प्राप्त विवरणियों पर उचित कार्रवाई की। सतर्कता प्रभाग ने अचल संपत्ति के क्रय-विक्रय से संबंधित 98 आवेदनों तथा चल संपत्ति के क्रय-विक्रय से संबंधित 70 आवेदनों पर कार्रवाई की।

#### 4. अन्य कार्यकलाप

केन्द्रीय सतर्कता आयोग से प्राप्त अनुदेशों के अनुसार 31.10.2002 से 6.11.2002 तक की अवधि में बोर्ड के सभी अधिकारियों एवं कर्मचारियों द्वारा प्रतिज्ञा लेकर, कार्यालय परिसर में और आसपास पोस्टर एवं बैनर लगाकर “सतर्कता जागरूकता सप्ताह” मनाया गया। प्रभाग को सलाह हेतु दिये गये विभिन्न मामलों पर प्रभाग ने विभिन्न विभागों को आवश्यक सलाह प्रदत्त की।



## भाग IV

### रबड़ उत्पादन

रबड़ खेती, स्वाभाविक रबड़ के उत्पादन को प्रोत्साहित करनेवाली योजनाओं का रूपायन एवं कार्यान्वयन, प्राथमिक प्रक्रमण को समर्थन एवं उत्पाद की गुणवत्ता में सुधार लाने की योजनाओं के रूपायन एवं कार्यान्वयन का उत्तरदायित्व रबड़ उत्पादन विभाग को है। वर्ष 2002-03 के दौरान रूपायित एवं कार्यान्वित मुख्य कार्यक्रम निम्न प्रकार हैं।

#### 1) रबड़ बागान विकास योजना

यह योजना पुराने एवं अलाभकर बागानों के पुनर्रोपण एवं नवरोपण करने हेतु मुफ्त विस्तार समर्थन देने तथा वित्तीय सहायता प्रदत्त करने के लिए है। पुनर्रोपण का लक्ष्य 3200 हे. रहा तथा नवरोपण का लक्ष्य 3000 हे. (उत्तर पूर्व के 2000 हे. सहित) रहा। वर्ष 2002-03 का वित्तीय लक्ष्य 1280.95 लाख रुपये रहा। रबड़ बागान विकास योजना के वर्ष 2002-03 के दौरान का निष्पादन परिणाम निम्न प्रकार है:

| विवरण                              | 2002-2003    |
|------------------------------------|--------------|
| 1. आवेदनों की संख्या               | 12257        |
| 2. आवेदनों के अनुसार क्षेत्र (हे.) | 9038.24      |
| 3. जारी किये परमिटों की संख्या     | 9119         |
| 4. अनुज्ञापत्रित क्षेत्र (हे.)     | 6465.49      |
| 5. वितरित रकम (रुपये करोड़ों में)  | 1425 लाख रु. |

#### ● रबड़ बागान बीमा

रबड़ रोपण विकास योजना के अधीन के सभी अपक्व बागानों और 22 वर्ष की आयु तक के परिपक्व बागानों की स्वैच्छिक आधार पर इस योजना के अन्तर्गत बीमा की जाती है। रबड़ रोपण विकास योजना से बाहर के बागानों की बीमा कृषकों के हितानुसार वैकल्पिक है। बीमा किये गये बागानों और क्षतिपूर्ति के तौर पर दी गई रकम का विवरण नीचे दिया जाता है।

| विवरण                                     | 2002-2003 | 2002-2003 तक संचित योग |
|-------------------------------------------|-----------|------------------------|
| बीमा किये गये अपक्व क्षेत्र (हेक्टेर में) | 4,983.53  | 95,954.97              |
| बीमा की गयी जोतों की संख्या               | 7,734.00  | 1,44,079.00            |
| दी गयी क्षतिपूर्ति (रु.लाखों में)         | 38.19     | 227.61                 |
| जोतों की संख्या                           | 433.00    | 6148.00                |
| लाभान्वितों की संख्या                     | 1282.00   | 6131.00                |



### ● उत्तरपूर्वी क्षेत्र में रबड़ रोपण विकास

उत्तर पूर्वी क्षेत्र के रबड़ रोपण विकास की महत्तर संभाव्यताओं पर विचार करते हुए रबड़ उत्पादन विभाग ने विद्यमान बागानों के अनुरक्षण में सहायताएं प्रदान करने का कार्यकलाप जारी रखा तथा क्षेत्र विस्तार पर अधिक ध्यान



रबड़ शीट का श्रेणीकरण

दिया गया। रबड़ बागान विकास योजना के अधीन नव रोपण के लिए 2643.27 हे. क्षेत्र के लिए 3060 आवेदन प्राप्त किए गए; जिसमें 2202.61 हे. क्षेत्र में रोपण हेतु 2614 अनुज्ञाएं जारी की। वर्ष के दौरान 110.2 हे. में ब्लॉक रोपण हेतु 107 जनजाति के लोगों का चयन किया। ब्लॉक रोपण के अधीन संचित क्षेत्र 31/03/03 के अनुसार 2653.28 हे. था और लाभान्वितों की संख्या 2338 थी।

497.33 हे. क्षेत्र में ग्रूप रोपण में 1182 लाभभोगियों ने प्रतिभागिता की। 31/3/03 के अनुसार ग्रूप रोपण के अन्दर का कुल क्षेत्र 1662.30 हे. हो गया। अगले वर्ष के रोपण हेतु पॉली बैग पौधों की तैयारी हेतु 2641 कृषकों को 11.17 लाख बड़्ड टूँठों का वितरण किया गया। रबड़ रोपण विकास योजना के अधीन वर्ष के दौरान उत्तर पूर्वी क्षेत्र में 461.38 लाख रुपये का वितरण किया गया।

### ● न्यूक्लियस रबड़ एस्टेट एवं प्रशिक्षण केन्द्र (एन आर ई टी सी) तथा जिला विकास केन्द्र (डी डी सी)

त्रिपुरा राज्य के न्यूक्लियस रबड़ एस्टेट एवं प्रशिक्षण केन्द्र (एन आर ई टी सी) तथा जिला विकास केन्द्र (डी डी सी), असम (दो) और मेघालय (1) राज्यों के जिला विकास केन्द्रों का कृषकों की आवश्यकताओं की पूर्ति हेतु विभाग ने अनुरक्षण किया। अगर्तला के रबड़ अनुसंधान एवं प्रशिक्षण केन्द्र तथा झिंगितचकग्रे के जिला विकास केन्द्र ने 50 बैचों में 732 कृषकों के लिए विभिन्न विषयों पर प्रशिक्षण चलाए। प्रदर्शनियों का भी आयोजन किया गया और 2600 कृषक जिसे देखने आए। 6650 कृषकों की सहभागिता से 109 रबड़ उत्पादक संघों/ रबड़ कृषक समितियों को रूपायित किया। 6 संगोष्ठियों, 557 ग्रूप बैठकों/अभियानों का आयोजन किया जिनमें 10407 कृषकों की सहभागिता रही। असम में एक रबड़ रोपण प्रशिक्षण एवं अनुसंधान केन्द्र की स्थापना की जा रही है।

### ● उत्तरपूर्वी क्षेत्र को छोड़कर अन्य अपरंपरागत क्षेत्र

विभाग ने उड़ीसा, आंध्रप्रदेश, गोआ, महाराष्ट्र, आंडमान व निकोबार द्वीप समूह आदि जैसे अपरंपरागत क्षेत्रों में विद्यमान बागानों के रखरखाव एवं क्षेत्र विस्तार के कार्यकलाप जारी रखे। रबड़ बागान विकास योजना एवं अन्य विस्तार समर्थन योजनाओं के अलावा इन क्षेत्रों में ब्लॉक रबड़ बागान योजनाएं एवं सामूहिक रबड़ बागान योजनाएं कार्यान्वयन में थीं। 63.55 हे. रोपण हेतु 106

आवेदन प्राप्त हुए जिसमें 54.55 हे. क्षेत्र के लिए 79 अनुज्ञाएं जारी की। वितरित रोपण अनुदान 9.30 लाख रुपये था। ब्लोक रोपण योजना के अंतर्गत 72 जनजातीय परिवार लाभान्वित हुए। 35 ग्रुप बैठकें आयोजित कीं जिनमें 944 कृषक भाग लिए।

## 2) अनुसूचित जाति/अनुसूचित जनजाति लोगों के बीच ब्लोक रोपण एवं ग्रुप रोपण योजनाओं के द्वारा रबड़ खेती का संवर्धन

यह परियोजना बोर्ड एवं संबंधित राज्य सरकारों के द्वारा संयुक्त रूप से कार्यान्वित है जो वर्तमान में केरल, त्रिपुरा, उड़ीसा, आंध्र प्रदेश एवं कर्नाटक राज्यों में प्रचालित है। जनजातीय/अनुसूचित जाति के कृषकों के समग्र विकास को लक्षित करके एक एकीकृत मार्ग द्वारा इसका

कार्यान्वयन किया जाता है। संबंधित राज्य सरकार परियोजना का वित्तीय समर्थन देती हैं। विवरण निम्न प्रकार से है।

| राज्य       | 2002-2003 के रोपण (हेक्टरों में) | वर्ष 2002-2003 तक रोपित कुल क्षेत्र (हेक्टरों में) |
|-------------|----------------------------------|----------------------------------------------------|
| त्रिपुरा    | 110.20                           | 2653.26                                            |
| उड़ीसा      | 62.48                            | 250.00                                             |
| आंध्रप्रदेश | शून्य                            | 82.00                                              |
| कर्नाटक     | 49.80                            | 225.00                                             |
| केरल        | 91.18                            | 1380.34                                            |
| <b>कुल</b>  | <b>313.66</b>                    | <b>4590.60</b>                                     |

## 3) वैज्ञानिक रोपण एवं उत्पादन हेतु कृषकों को सलाहकारी एवं विस्तार सेवाएं तथा प्रसार व उत्पादन और प्रक्रमण सुधारने हेतु बागान में आवश्यक सामग्रियों की आपूर्ति।

### क) प्राथमिक प्रक्रमण, अतिरिक्त आय सृजन आदि के लिए सहायता।

ये वित्तीय एवं तकनीकी सहायता प्रदत्त करने हेतु आवश्यकता के आधार पर विस्तार स्कंध द्वारा रूपायित एवं कार्यान्वित योजनाएं हैं। विभिन्न योजनाओं के भौतिक एवं वित्तीय लक्ष्य और उपलब्धियाँ नीचे दिए गए हैं :

| क्र. सं. | योजना                               | लक्ष्य    |                         | उपलब्धि      |                         |
|----------|-------------------------------------|-----------|-------------------------|--------------|-------------------------|
|          |                                     | भौतिक सं. | वित्तीय (रु. लाखों में) | भौतिक सं.    | वित्तीय (रु. लाखों में) |
| I        | पारंपरिक क्षेत्र                    |           |                         |              |                         |
| 1        | रबड़ शीट रॉलर संस्थापना हेतु सहायता | 878       | 8.78                    | 878          | 8.78                    |
| 2        | धूम घर निर्माण हेतु सहायता          | 1573      | 47.14                   | 1573         | 47.14                   |
| 3        | फलीदार फसल बीजों का वितरण           |           |                         |              |                         |
| i        | प्यूरेरिया बीज                      |           | 4.41                    | 4206 कि.ग्रा | 4.16                    |
| ii       | म्यूकुणा बीज                        |           |                         | 550 कि.ग्रा  | 0.41                    |
| 4        | जैव गैस निर्माण हेतु सहायता         | 1733      | 48.91                   | 1733         | 49.34                   |

## II अपारंपरिक क्षेत्र

|                                             |    |      |    |      |
|---------------------------------------------|----|------|----|------|
| 1. धूम घर                                   | 40 | 4.00 | 70 | 3.89 |
| 2. रॉलर                                     | 40 | 2.00 | 29 | 1.31 |
| 3. * बागान निवेशों के<br>परिवहन हेतु सहायता | -  | 6.55 | -  | 6.55 |

\* मे. मणिमलयार रबर्स प्रा.लि. (बोर्ड द्वारा प्रायोजित एक व्यापार कंपनी) को बागान निवेश उत्तर पूर्वी क्षेत्रों को परिवहन करने के लिए सहायता प्रदान की गयी ।

उपर्युक्त योजनाओं के अलावा केवल गैर-पारंपरिक क्षेत्र के लिए कुछ अन्य योजनाओं को रूपायित किया है । उनके वर्ष 2002-2003 के लक्ष्य एवं उपलब्धियाँ निम्न प्रकार हैं :

| क्र. सं. | योजना                          | लक्ष्य    |                         | उपलब्धि   |                         |
|----------|--------------------------------|-----------|-------------------------|-----------|-------------------------|
|          |                                | भौतिक सं. | वित्तीय (रु. लाखों में) | भौतिक सं. | वित्तीय (रु. लाखों में) |
| 1        | सीमा संरक्षण<br>(सामान्य वर्ग) |           | 5.00                    | 736       | 13.34                   |
| 2        | सिंचाई                         | 40        | 2.00                    | 4         | 0.63                    |

## ख) रोपण सामग्रियों का उत्पादन

गुणवत्तायुक्त रोपण सामग्रियों को प्राप्ताहित करने तथा इसके बाज़ार भाव पर नियंत्रण लाने के दुगुने लक्ष्य से बोर्ड गुणवत्तायुक्त रोपण सामग्रियों का उत्पादन और सीमित हद तक कृषकों को लागत मूल्य पर वितरण भी करता है । छोटे कृषकों को मूल्य में रियायत भी दी जाती है । इस तरह उत्पादित रोपण सामग्री आवश्यक कृषकों को स्रोत झाड सामग्री तैयार करने या बागान तैयार करने के लिए दिए गए । वर्ष 2002-2003 के दौरान उत्पादित रोपण सामग्रियों का विवरण निम्न प्रकार है ।

- बोर्ड के स्वामित्व के पौधशालाओं की संख्या - 15 (केन्द्रीय पौधशाला एवं जिला विकास केन्द्र की पौधशालाएं मिलाकर)
- पौधशालाओं का क्षेत्र - 72.17 हे.

|                                      |   |              |
|--------------------------------------|---|--------------|
| मद                                   | - | उपलब्धि      |
| <b>पारंपरिक क्षेत्र में उत्पादन</b>  |   |              |
| हरे बड्ड टूँठ                        | - | 1,66,208 नं. |
| भूरे बड्ड टूँठ                       | - | 6,67,524 "   |
| कुल                                  | - | 8,33,732 "   |
| <b>अपारंपरिक क्षेत्र में उत्पादन</b> |   |              |
| भूरे बड्ड टूँठ                       | - | 5,63,070 "   |

#### ग) शास्त्रदर्शन कार्यक्रम

शास्त्रदर्शन कार्यक्रम के अधीन अपारंपरिक क्षेत्र अगर्तला, गुआहटी, परलेखामुंडी के कुल 250 कृषकों को 20 बैचों में केरल लाया गया तथा उन्हें पारंपरिक क्षेत्र में रबड़ खेती के विभिन्न पहलुओं पर प्रशिक्षण दिया गया।

#### घ) सुवर्ण संघम एवं श्रेष्ठ छोटा कृषक पुरस्कार

बोर्ड ने दो पुरस्कारों याने सुवर्ण संघम पुरस्कार एवं प्रोफ. के.एम.चाण्डी स्मारक श्रेष्ठ कृषक पुरस्कार स्थापित किए हैं जो द्वैवार्षिक रूप से क्रमशः उत्तम रबड़ उत्पादक संघ और छोटे कृषक को प्रदान किए जाते हैं। वर्ष के दौरान कालाम्पूर रबड़ उत्पादक संघ को सुवर्ण संघम पुरस्कार और श्री सदानन्दन, निमिल भवन, पिडवूर-पत्तनापुरम को प्रोफ. के.एम.चाण्डी स्मारक पुरस्कार 2 जनवरी 2003 को प्रदान किए।

#### 4) प्राथमिक प्रक्रमण एवं छोटी जोतवालों के उत्पाद की गुणता सुधारने की योजना

तकनीकी विनिर्दिष्ट रबड़ फैक्टरियों का आधुनिकीकरण योजना का लक्ष्य तकनीकी विनिर्दिष्ट रबड़ (ब्लॉक

रबड़) की गुणवत्ता बढ़ाने हेतु बेहतर कच्चा माल आपूर्ति श्रृंखला संस्थापित करने के लिए फसल एकत्रण एवं सामूहिक प्रक्रमण सुविधाओं की संस्थापना हेतु रबड़ उत्पादक संघों



रबड़ शीट का पैकिंग

को समर्थन देना है।

टी एस आर फैक्टरियों के आधुनिकीकरण योजना के अधीन रबड़ उत्पादक संघों को प्रदत्त सहायता का विवरण निम्न प्रकार है:

| क्र. सं. | सहायता का स्वभाव     | र उ सं की संख्या | सहायता (लाख रुपयों में) |
|----------|----------------------|------------------|-------------------------|
| 1        | भवन का निर्माण       | 58               | 74.33                   |
| 2        | अन्य सुविधाएं        | 59               | 10.10                   |
| 3        | बहिस्राव उपचार       | 44               | 33.00                   |
| 4        | शीटिंग बैटरी         | 50               | 24.75                   |
| 5        | अलुमिनियम बर्तन      | 59               | 13.80                   |
| 6        | कोयागुलेशन ट्रप्स    | 26               | 11.70                   |
| 7        | लाटेक्स एकत्रण उपकरण | 166              | 17.91                   |
| 8        | बैरल एवं गैस         | 100              | 11.38                   |
| योग      |                      |                  | 196.97                  |



## 5) सामूहिक कार्यकलाप, छोटे रबड़ जोतवालों में स्वयं सहायक ग्रुप का प्रोत्साहन - र उ सं/आदर्श र उ सं.

### रबड़ उत्पादक संघ (र उ सं)

बोर्ड ने रबड़ उत्पादक संघ नाम से ग्राम स्तरीय छोटे कृषकों के स्वैच्छिक संगठनों के रूपायन को प्रोत्साहित करके एक समूह नीति अपनायी है। यह प्रौद्योगिकी के प्रभावी स्थानान्तरण और कुल स्वाभाविक रबड़ उत्पादन के 88 हिस्सेदार छोटी जोत क्षेत्र को सुशुक्त करने के लिए है। रबड़ उत्पादक संघ रबड़ बोर्ड के अतिरिक्त हाथ के

रूप में कार्य करने तथा भागीदारी नीति द्वारा छोटे कृषकों को प्रभावी रूप से सेवाएं प्रदान करने के लिए विस्तार कार्यों के अर्थपूर्ण हस्तांतरण में मदद देने के लिए लक्षित है। मृत र उ सं को पुनःजीवित करने का प्रयास भी किया जा रहा है। इस तरह रूपायित र उ संघों का विवरण निम्न प्रकार है :

| विवरण            | 2002-2003 | 2002-2003 तक संचित |
|------------------|-----------|--------------------|
| नवगठित र उ सं    | 21        | 2148               |
| पुनःजीवित र उ सं | 25        | 810                |

वर्ष के दौरान रबड़ उत्पाद संघों की 2733 कार्यकारी समिति बैठकें आयोजित की जिनमें 15519 निदेशक मंडल सदस्य भाग लिए। इसके अलावा रबड़ उत्पादक संघों की 855 आम बैठकें आयोजित की जिनमें 20175 कृषक भाग लिए।

### आदर्श रबड़ उत्पादक संघ

35 रबड़ उत्पादक संघों, 30 पारंपरिक क्षेत्र में एवं 5 गैर पारंपरिक क्षेत्र में, को आदर्श रबड़ उत्पादक संघ के रूप में चयन किया है तथा प्रौद्योगिकी हस्तांतरण केन्द्रों व सामाजिक प्रसंस्करण केन्द्रों के रूप में कार्य करने के लिए आवश्यक अवसंरचनाओं की संस्थापना हेतु वित्तीय एवं तकनीकी समर्थन प्रदान किया जा रहा है। ये आदर्श रबड़ उत्पादक संघ कृषकों, श्रमिकों आदि के प्रशिक्षण केन्द्र के रूप में भी कार्य करते हैं। रोपण प्रबंधन, गुणवत्तायुक्त शीट निर्माण, मधुमक्खी पालन, खाद प्रयोग, पौधा संरक्षण तथा टापींग आदि जैसे विभिन्न विषयों पर प्रशिक्षण कार्यक्रम चलाए गये। इन केन्द्रों को प्रशिक्षण कार्यक्रम चलाने के लिए दृश्य - श्रव्य सुविधाएं प्रदत्त की गयी हैं।

जानकारियों को अद्यतन बनाने के लिए सूचना प्रौद्योगिकी के प्रभावी उपयोग हेतु मुख्य केन्द्रों में कंप्यूटर का प्रयोग

किया जा रहा है। बोर्ड के प्रादेशिक कार्यालयों को प्रदत्त दृश्य - श्रव्य उपकरणों का उपयोग 1080 बैठकों में किया गया जिनमें 32192 कृषक भाग लिए।



शीटों का तौलना

### सामूहिक प्रक्रमण के लिए रबड़ उत्पादक संघों को धूम घर निर्माण हेतु वित्तीय सहायता

शीट रबड़ की गुणवत्ता सुधारने के लिए 1000 कि.ग्रा. क्षमता के धूम घर निर्माण के लिए रबड़ उत्पादक संघ को वित्तीय सहायताएं भी प्रदान की गयी। सहायताओं का विवरण निम्न प्रकार है:



रबड़ शीट का सामूहिक प्रक्रमण

लाभान्वित रबड़ उत्पादक संघों की संख्या - 20 नं.  
दी गई रकम - 20 लाख रु.

वर्ष के दौरान 30 रबड़ उत्पादक संघों को पिछले वर्ष के लंबित भुगतान स्वरूप 6.45 लाख रुपये का वितरण किया।

#### 10 वीं योजना के अधीन सामूहिक प्रक्रमण हेतु वित्तीय सहायता

सामूहिक प्रक्रमण हेतु सामग्रियों की खरीद के लिए 28 रबड़ उत्पादक संघों को 12.15 लाख रुपये वितरित किए। इसके अतिरिक्त 8 अन्य रबड़ उत्पादक संघों को धूम घर के निर्माण हेतु आंशिक भुगतान के रूप में 3.60 लाख रुपये वितरित किए।

#### कृषक शिक्षा कार्यक्रम

विस्तार अधिकारियों और करीब एक दशलक्ष तक आनेवाले रबड़ कृषकों के अनुपात के भारी अन्तर को देखते हुए विभाग ने कृषक समाज से संपर्क बनाए रखने के लिए एक सामूहिक नीति अपनायी है। रबड़ खेती एवं प्रक्रमण के आधुनिक तकनीकियों के प्रसार हेतु हर वर्ष अभियान कार्यक्रमों का आयोजन किया जाता है।

इस अवधि के दौरान 4012 बैठकें/संगोष्ठियाँ आयोजित कीं जिनमें 99759 कृषक भाग लिए। बैठक/संगोष्ठी का मुख्य विषय रबड़ उत्पादन में लागत प्रतियोगिताक्षमता रहा।

आयोजित बैठकों एवं भागीदारों की संख्या का विवरण निम्न प्रकार है:

| बैठक का स्वभाव | बैठकों की संख्या | भागीदार      |
|----------------|------------------|--------------|
| पूर्ण दिवसीय   | 60               | 5168         |
| अर्ध दिवसीय    | 731              | 22600        |
| ग्रुप बैठक     | 1132             | 19055        |
| अभियान बैठक    | 2089             | 52936        |
| <b>कुल</b>     | <b>4012</b>      | <b>99759</b> |

#### 6) आय सृजन हेतु रबड़ टापर्स एवं कृषकों को प्रशिक्षण टापर्स का प्रशिक्षण

छोटे कृषकों और श्रमिकों को टापिंग में प्रशिक्षण देने के लिए विभिन्न बागवानी केन्द्रों पर बोर्ड द्वारा चलाये जानेवाले 23 नियमित रबड़ टापर्स प्रशिक्षण स्कूल हैं। विवरण निम्न प्रकार है:

| क्र. सं.   | क्षेत्र              | लक्ष्य               |                     | उपलब्धि                                 |                     |
|------------|----------------------|----------------------|---------------------|-----------------------------------------|---------------------|
|            |                      | भौतिक<br>(बैचों में) | वित्तीय<br>(लाख रु) | भौतिक<br>(बैचों में)                    | वित्तीय<br>(लाख रु) |
| 1          | पारंपरिक क्षेत्र     | 122                  | 18.96               | 108 बैचों में<br>1569 प्रशिक्षणार्थियाँ | 13.48               |
| 2          | गैर पारंपरिक क्षेत्र | 33                   | 5.11                | 20 बैचों में<br>303 प्रशिक्षणार्थियाँ   | 2.16                |
| <b>कुल</b> |                      | <b>155</b>           | <b>24.07</b>        | <b>128</b>                              | <b>15.64</b>        |

वैज्ञानिक टापींग के विभिन्न प्रायोगिक पहलुओं पर हस्तावधि गहन प्रशिक्षण पाठ्यक्रमों का भी आयोजन बोर्ड करता है। विवरण नीचे दिया गया है:-

| क्र. सं. | क्षेत्र              | लक्ष्य                  |                     | उपलब्धि                 |                     |
|----------|----------------------|-------------------------|---------------------|-------------------------|---------------------|
|          |                      | भौतिक<br>(बैचों की सं.) | वित्तीय<br>(लाख रु) | भौतिक<br>(बैचों की सं.) | वित्तीय<br>(लाख रु) |
| 1        | पारंपरिक क्षेत्र     | 425                     | 19.98               | *430                    | 19.04               |
| 2        | गैर पारंपरिक क्षेत्र | 73                      | 3.03                | 69                      | 2.76                |

\*समस्त में 8074 टापरो/कृषकों को (7344 पारंपरिक क्षेत्र में तथा 730 गैर पारंपरिक क्षेत्र में) 499 बैचों में प्रशिक्षित किया।

### महिलाओं को सशक्त करने के कार्यक्रम

विश्व बैंक परियोजना के दौरान रबड़ उत्पादक संघों द्वारा शुरू किए महिलाओं को सशक्त करने के कार्यक्रम (आय सृजन एवं प्रशिक्षण कार्यक्रम) विभाग ने अपने मुख्य कार्यालय के विकास अधिकारी (महिला विकास) एवं प्रादेशिक कार्यालयों के नॉडल अधिकारियों के द्वारा समर्थन प्रदत्त किए। महिला स्वयं सहायक ग्रुपों को प्रशिक्षण एवं उत्पादों के विपणन के क्षेत्रों में सख्त समर्थन प्रदान किया।

### तकनीकी अधिकारियों/कृषकों को प्रशिक्षण कार्यक्रम

रबड़ बोर्ड के मानव संसाधन विकास कार्यक्रम के अन्तर्गत दो विकास अधिकारियों को अमरिका के मिचिगन

स्टेट विश्वविद्यालय में प्रशिक्षण हेतु प्रतिनियुक्त किया था। बोर्ड के 34 विस्तार अधिकारियों एवं रबड़ उत्पादक संघों के 13 निदेशक मंडल सदस्यों को बेंगलूर के भारतीय बागानी प्रबंधन संस्थान में प्रशिक्षण दिए गए। 20 विस्तार अधिकारियों को केरल कृषि विश्वविद्यालय में कृषि कार्यक्रमों में लिंग के महत्व (जेंडर पर्सपेक्टिव इन एग्रिकल्चर प्रोग्राम) पर प्रशिक्षण दिए गए। इसके अलावा पाँच कृषकों, वाणिज्य मंत्रालय के एक अधिकारी और संयुक्त रबड़ उत्पादन आयुक्त (विस्तार) को थाइलैंड में एक अन्तर्राष्ट्रीय रबड़ कृषक सम्मेलन में भाग लेने हेतु प्रतिनियुक्त किया था।



## भाग V

## रबड़ अनुसंधान



भारतीय रबड़ गवेषण संस्थान

कोट्टयम में मुख्यालय के साथ भारतीय रबड़ गवेषण संस्थान (आर आर आई आई) की संस्थापना वर्ष 1955 में हुई। संस्थान का मुख्य अनुसंधान प्रक्षेत्र केरल राज्य के पत्तनमतिट्टा जिला के रात्री में 250 हे. क्षेत्र में स्थित है। इसके 12 क्षेत्रीय अनुसंधान स्टेशन है जो केरल, तमिलनाडु, कर्नाटक, महाराष्ट्र, छत्तीसगढ़, उड़ीसा, पश्चिम बंगाल, असम, मेघालय और त्रिपुरा राज्यों में फैले हुए हैं। उत्तर पूर्व के पाँच क्षेत्रीय अनुसंधान स्टेशन मिलकर उत्तर पूर्वी अनुसंधान परिसर बनता है जिसका मुख्यालय अगर्तला में

है। संस्थान में 125 वैज्ञानिक हैं तथा 319 समर्थक कर्मचारी और रबड़ प्रसंस्करण प्रौद्योगिकी, पौधा प्रजनन, जननद्रव्य, जैव प्रौद्योगिकी, शोषण, सस्य विज्ञान, मृदा विज्ञान, पादप रोग विज्ञान, आर्थिकी एवं सस्य शरीरक्रिया विज्ञान के क्षेत्रों में अनुसंधान कार्य जारी रखे।

फसल सुधार पर वनस्पति विज्ञान प्रभाग के अनुसंधान कार्यक्रमों ने अच्छी प्रगति की। आर आर आई आई 414, आर आर आई आई 417, आर आर आई आई 422, आर आर आई आई 429 एवं आर आर आई आई 430 नामक



पाँच क्लोनों ने छोटे पैमाने के परीक्षण में 23 से 49 प्रतिशत तक फसल सुधार दिखाकर आर आर आई आई 105 से बेहतर फसल प्रदर्शन जारी रखा। ये क्लोन बड़े पैमाने के परीक्षणों में भी समान रुख का प्रदर्शन बनाए रखती हैं। बहु विषयक परीक्षणों में पी बी 314, पी बी 255, पी बी 312, पी बी 280, पी बी 311 एवं पी बी 260 का निष्पादन चार वर्षों के फसल आंकन के बाद भी आर आर आई आई 105 से बेहतर रहे। लाटेक्स एवं काष्ठ योज्य क्लोनों के रूप में इनकी संभाव्यताओं की सूचना देते हुए पी बी 235, पी बी 280 एवं पी बी 260 क्लोनों ने इनकी वर्द्धिष्णुता एवं उच्च फसल का प्रदर्शन किया। प्रबल क्लोनों की संततियों के परीक्षण में पचास क्लोनों ने आर आर आई आई 105 की तुलना में आशाजनक फसल का प्रदर्शन किया। बड़ड़ किये हरे पौधों की तुलना में बड़ड़ किये तरुण पौधे बढ़िया पाये गये। सामान्य पेड़ों की तुलना में भूरे बास्ट प्रभावित पेड़ों में पराग निष्फलता अधिक पायी गयी।

विखाम और जंगली मूल दोनों के जननद्रव्यों के परिरक्षण, लक्षण-वर्णन एवं मूल्यांकन जारी रखे। स्रोत झाड़ पौधशालाओं की पुनःस्थापना हेतु 1250 जंगली जननद्रव्य अनुवृद्धियों का संवर्द्धन पूरा किया। 46 अनुवृद्धियों के एक सौ छत्तीस हेर्बेरियम नमूनों की तैयारी की। संस्थान में एक डेटा बैंक सॉफ्टवेयर का विकास किया और आंकड़ों की प्रविष्टि शुरू की। ओइडियम रोधिता की एक बार क्षेत्र परीक्षण स्रोत झाड़ पौधशालाओं एवं क्षेत्र में पूरा किया। रबड़ रिसर्च इंस्टिट्यूट ऑफ इंडोनेशिया से हिविया की चार जातियाँ याने हिविया ग्वुनेन्सिस, हिविया पॉसिफ्लोरा, हिविया कोलीना एवं हिविया कामरागोना प्राप्त की गयीं। दो जातियाँ याने हिविया स्प्रूसियाना एवं हिविया बेन्तामियाना की पूर्ति रबड़ रिसर्च इंस्टिट्यूट ऑफ श्रीलंका को की। हिविया की तीन जातियों पर किये आर ए पी डी अध्ययन से जाति विशेष निशानों की पहचान की गयी जिसका सफल उपयोग अन्तरजातीय संकरों के निरूपण में किया जा सकता है। एक अन्य अध्ययन से विभिन्न कवकीय रोगों के प्रति रोगरोधिता दिखानेवाले सात अनन्य बहुरूपी विखंड का पता लगाया है।

जैव प्रौद्योगिकी प्रभाग द्वारा केन्द्रीय परीक्षण स्टेशन में

कायिक भ्रूणोद्भव द्वारा उत्पादित आर आर आई आई 105 के पौधे बड़े पैमाने के क्षेत्रीय मूल्यांकन हेतु लगा दिये हैं। पूर्व में उत्पादित सूपर ऑक्साइड डिस्म्यूटेस से एकीकृत ट्रान्सजेनिक हिविया पौधे की अच्छी वृद्धि पायी गयी। समान जीन से एकीकृत बीस और ट्रान्सजेनिक पौधे कठोर कर दिए गए तथा पॉलिथीन बैगों में लगा दिए हैं। कई रोगों के प्रति सहनशीलता में लगे बी- 1, 3 ग्लूकनेस के जीन कोड की संरचना को अलग कर दिया और अध्ययन किया। हिविया ब्रासीलियन्सिस की जीनोमिक सी डी एन ए और डी एन ए लाइब्रेरियों को विकसित करने की विधियों का मानकीकरण किया गया। एक आंशिक सी डी एन ए व जीनोमिक डी एन ए लाइब्रेरियों को विकसित किया।

स्वाभाविक रबड़ की उत्पादन लागत कम करने के लिए दी गयी कम आवृत्ति की टापींग प्रणाली की अनुशंसा बागान क्षेत्र एवं मध्यम जोतवालों ने सहर्ष स्वीकार की। इन्हें छोटी जोतों में लोकप्रिय बनाने के लिए प्रयास किया जा रहा है। कम आवृत्ति के टापींग की सफलता को अन्तर्राष्ट्रीय मान्यता प्राप्त हुई तथा भारतीय रबड़ गवेषण संस्थान के शोषण अध्ययन के प्रधान को इन्टरनाशनल रबड़ रिसर्च एवं डेवलपमेंट बोर्ड (IRRDB) के नवगठित सदस्य राष्ट्रों के शोषण वैज्ञानिकों के ग्रुप के अन्तर्राष्ट्रीय कार्यकलाप के संयोजन हेतु संपर्क अधिकारी बना दिया है। कम आवृत्ति के टापींग के विस्तार के लक्ष्य से कई प्रयोगशाला से कृषि भूमि कार्यक्रमों का आयोजन किया। सलाहकारी कार्य हेतु छोटी जोतों एवं बागानों में लाटेक्स निरूपण अध्ययन जारी रखे। आर आर आई आई 400 श्रेणी के क्लोनों पर भी अनुसंधान बढ़ा दिया है।

एकीकृत खरपतावार प्रबंधन, मृदा एवं जल संरक्षण, अन्तरासंरयन और वार्षिक व बहुवर्षीय फसलों और काष्ठ जाति को एकीकृत करनेवाली फसलन प्रणाली तथा खाद प्रबंधन पर सस्यविज्ञान प्रभाग की खोज संतोषजनक रूप से प्रगति की। खाद परीक्षण के परिणामों से यह सूचना मिली है कि नियंत्रित खाद निर्मुक्ति द्वारा नेत्रजन प्रयोग की खुराक एवं आवृत्ति कम कर देने की संभावनाएं हैं। खरपतावार प्रबंधन के परीक्षणों ने खुलासा किया है कि पौधों के थालों पर ग्लाइफोसेट शाकनाशी का एवं बाकी क्षेत्र में चीर निराई का एकीकृत अभिगम लागत प्रभावी एवं परिस्थिति

के अनुकूल हो सकता है। लाटेक्स सेन्ट्रीफ्यूज फैक्टरियों की अपशिष्ट सामग्री, कटोरा पंक (बाउल स्लडज) के प्रभाव पर किये गये अध्ययन से पता चला है कि रबड़ की वृद्धि एवं फसल के संवर्धन में यह रॉक फोस्फेट के समान अच्छा ही है। एक सर्वेक्षण के परिणाम ने दिखाया कि निम्न भूमि व उच्च धान खेतों में रबड़ की वृद्धि और फसल अधिक है। बागानवालों को सलाहकारी सेवा के रूप में 29 बड़े बागानों के 837 अलग अलग खेतों में विवेकी खाद प्रयोग की अनुशंसाएं दी गयी। सस्यविज्ञान प्रभाग के डी आर आई एस इकाई ने विवेकी खाद प्रयोग के लिए 9924 मृदा नमूनों एवं 1142 पत्ता नमूनों का विश्लेषण किया तथा जोतों को 5200 अनुशंसाएं दे दीं।

पादप रोगविज्ञान प्रभाग ने रोग बाधा पर सर्वेक्षण किया तथा नियंत्रण उपायों की खोज की। आर. आर.आई.आई -105 पर फाइटोफ्टोरा पत्ती सड़न रोग पर 1,30,000 हेक्टर क्षेत्र में एक सर्वेक्षण चलाया। 60 प्रतिशत से अधिक क्षेत्र में मध्यम से कठोर पत्ती सड़न रही। फाइटोफ्टोरा एवं ओइडियम पत्रक रोग के प्रति सहनशीलता हेतु जंगली जीनरूप के 600 से अधिक अनुवृद्धियों को परखा गया। इससे फाइटाफ्टोरा के प्रति सहनशील 10 एवं आइडियम के प्रति सहनशील 20 अनुवृद्धियों का पता लगाया जा सका है। रोग नियंत्रण परीक्षणों में 20% हेक्सागोनाजोल

का धूल डालना ओइडियम एवं कोरिनिस्पोरा रोगों से एकसाथ संरक्षण का परिणाम प्राप्त हुआ। कोरिनिस्पोरा पर्ण रोग की मौसमिक बाधा पर अध्ययन ने खुलासा किया कि रोग का सर्वाधिक प्रकोप मार्च महीने के मध्यम से अप्रैल तक है। वेधक इल्लियों के नियंत्रण के लिए प्रकोपित वृक्ष के तने पर 0.5% कार्बरिल एवं 0.25% क्विनलफोस के मिश्रण से फाहा करना प्रभावी है।

पर्ण चक्र को जब 60% पी ई जी में ऊष्मायन किया तथा खुले सूर्यप्रकाश में रखा गया तो पर्णहरित निम्नीकरण देखा गया। तरुण पर्णों में निम्नीकरण तेज़ रहा तथा 60% से अधिक पर्णहरित घटा हुआ पाया गया। सूखा एवं अधिक प्रकाश के प्रति सहनशीलता की खोज हेतु यह तरीका अच्छा मालूम पड़ता है। प्रकंद एवं सांकुरक के आर ए पी डी विश्लेषण से पता चला है कि हिविया के सामान्य स्वस्थ पेड़ों की तुलना में टापींग पानल सुखापन (TPD) रोग बाधक पेड़ों में प्रकंद एवं सांकुरक की जननिक दूरी अधिक है। टापींग पानल सुखापन रोगबाधक पेड़ों में एथाइलिन विकास अधिक पाया गया।

रबड़ रसायन, भौतिकी एवं प्रौद्योगिकी (आर सी पी टी) प्रभाग द्वारा विभिन्न रबड़ खेतीवाले क्षेत्र के रबड़ शीटों की गुणवत्ता का अध्ययन जारी रखा। रबड़ शीट साफ करने के अर्ध स्वचालित मशीन के निष्पादन में सुधार एवं



ऊर्ध्वमुखी टापींग पर प्रशिक्षण

लागत कम करने के लिए उसका परिष्करण कर दिया । फील्ड कोयागुलम की गुणवत्ता बढ़ाने हेतु एक परिरक्षक की पहचान की गयी । किण्वक द्वारा प्रोटीन रहित बनाए स्वाभाविक रबड़ लाटेक्स की तैयारी की तथा प्रक्रम की व्यवहार्यता का मूल्यांकन एक दस्ताना उत्पादक इकाई में किया गया । एक अग्रणी उद्योग ग्रुप को अनुसंधान एवं विकास परीक्षण के लिए छः सौ किलोग्राम इ एन आर-50 लाटेक्स की आपूर्ति की गयी । स्वाभाविक रबड़ के शुष्क रबड़ संघटक जल्द मापने की एक अनुमापन प्रणाली का मानकीकरण किया । नियंत्रित वी एफ ए वाले अपकेंद्रित स्वाभाविक रबड़ लाटेक्स के अधिकतम प्राप्त एम एस टी मूल्य, विस्कासिता एवं के ओ एच संख्या की पूर्वसूचना उसके उत्पादन के चार दिनों के अन्दर उचित कृत्यता से देने हेतु एक त्वरित परीक्षण का विकास किया है ।

आर्थिकी प्रभाग द्वारा भारतीय स्वाभाविक रबड़ क्षेत्र पर विश्व व्यापार संगठन करार की उलझनों पर अध्ययन किया तथा परिणामस्वरूप “द जेनेसिस ऑफ डब्ल्यू टी ओ एण्ड आफ्टरमाथ तथा डब्ल्यू टी ओ एण्ड द नाचुरल रबड़ सेक्टर इन इंडिया” नामक दो रिपोर्टें प्रस्तुत की गयी । एक अन्य अध्ययन में छोटी जोत क्षेत्र के टापरों की सामाजिक-आर्थिक स्थिति का अध्ययन किया गया । अध्ययन ने मज़दूरी का स्वरूप टापर की उत्पादकता के आधार पर उसके अनुकूल बनाने की आवश्यकता की ओर इशारा किया है । टापिंग क्षमता सुधारने तथा अत्यंत कुशल एवं अनुभवी टापरों को उसमें रोके रखने के लिए एक प्रोत्साहन योजना आवश्यक बताया है । एक लंबी अवधि के परिप्रेक्ष्य में रबड़ उत्पादक संघों से संबद्ध एक श्रमिक प्रारक्षण की विरचना अतिआवश्यक बतायी है ।

विभिन्न प्रांतों में स्थित प्रादेशिक अनुसंधान स्टेशनों ने हिविया की खेती एवं रोपण पर स्थानीय विशेष के अध्ययन चलाये । प्रादेशिक अनुसंधान स्टेशन, अगर्तला में रबड़ के साथ चाय के अन्तरा-सरस्यन पर परीक्षण की अच्छी प्रगति हुई । चाय पत्ती की अधिकतम फसल अक्तूबर के महीने में रही । उच्च घनता के रोपण हवा से नुक्सान को कम करते हुए देखा । तीन मंजिलीय हवा पट्टी भी हवा के नुक्सान को कम करने में सहायक देखी गयी । अगर्तला के परीक्षणों

से देखा गया कि पी बी 235 क्लोन सबसे अधिक फसलदायक है तथा जिसके पीछे है आर आर आई आई 203 एवं आर आर आई एम 600 । मृदा एवं पर्ण विश्लेषण के आधार पर स्टेशन से संबद्ध चल मृदा परीक्षण प्रयोगशाला ने 188 कृषकों को विवेकी खाद प्रयोग पर अनुशंसाएं दी ।

मेघालय में तुरा के प्रादेशिक अनुसंधान स्टेशन में आर आर आई एम 600 सबसे अधिक फसलदायक क्लोन है जिसके पीछे है आर आर आई आई 105 एवं पी बी 235. स्टेशन में चलाए एक टापिंग अध्ययन से पता चलता है कि ठंड की मौसम के दौरान गड़ो हिल्स में टापिंग समय परिवर्तित करके पूर्वाः 8-9 बजे करना चाहिए ताकि टापरों को ठंड से बचाया जा सकें तथा जो उत्पादकता स्तरों पर कोई प्रभाव नहीं डालता भी । दक्षिणी ढालों के पौधों की कम वृद्धि देखी गयी जबकि बेहतर फसल । रोग सर्वेक्षण से गाड़ो हिल्स के रबड़ बागानों में कोई गंभीर बीमारी का पता नहीं चला ।

प्रादेशिक अनुसंधान स्टेशन, गुआहटी के परिणामों ने वृद्धि और फसल की दृष्टि से आर आर आई एम 600 क्लोन की श्रेष्ठता का खुलासा किया है । तीन महीने के विश्राम के साथ 4 दिनों (d/4) के अन्तराल के टापिंग के अधीन फसल एवं शुष्क रबड़ संघटक सर्वाधिक रहे । पश्चिम बंगाल के परीक्षण स्टेशन के परीक्षणों में वृद्धि एवं फसल की दृष्टि से एस सी ए टी सी 93/114 क्लोन श्रेष्ठ पाये गये । बारह जंगली जीनरूप चूर्णिल आसिता रोग के प्रति रोगरोधी निर्धारित किये गये । उत्तर बंगाल के गिटी एवं रोंगो में रोग का प्रचुर प्रकोप पाया गया ।

महाराष्ट्र में दपचारी के प्रादेशिक अनुसंधान स्टेशन में मई एवं जून के महीनों में टापिंग विश्राम के साथ वर्ष में चार बार उद्दीपन देकर तीन दिवस के अन्तराल के टापिंग से सर्वाधिक संचित फसल प्राप्त हुई । सिंचित अवस्था में भी वर्ष में चार उद्दीपन अधिकतम फसल प्राप्ति के लिए अनुकूलतम है । सूखा ग्रस्त इलाके के इस स्टेशन पर चलाए अनुसंधान में वृद्धि एवं फसल में आर आर आई आई 208 एवं आर आर आई आई 6 क्लोन बेहतर देखे गये । इलाके के बहुसंकर संततियों के मूल्यांकन से पता चला है



कि इलाका सात महीने से ऊपर बिना वर्षा के रहने के बावजूद प्राप्त फसल करीब 800 कि.ग्रा. प्रति हेक्टेयर रही।

उड़ीसा में धेंकनाल के प्रादेशिक अनुसंधान स्टेशन में लोकप्रिय क्लोनों में सबसे अधिक वृद्धि दर जी टी-1 की रही जिसके पीछे है आर आर आई एम 600 एवं आर आर आई आई 105 लेकिन सबसे अधिक फसल आर आर आई एम 600 की रही।

कर्नाटक के हिविया प्रजनन केन्द्र में पी बी 235, पी बी 260 एवं आर आर आई आई 105 के निष्पादन अच्छे रहे। नये क्लोनों में आर आर आई आई 429 का निष्पादन अच्छा रहा।

परलियार के हिविया प्रजनन केन्द्र में पोली बैग पौधों के प्रतिस्थापन के रूप में मूल अनुवर्धन उगाए गए थे। इसकी उत्पादन लागत कम है और जिसका परिवहन आसान भी। खेत में उत्तरजीवन भी बेहतर रहा।

वर्ष 2002 की वार्षिक पुनरीक्षा बैठक सितंबर 2 से 14 सितंबर तक आयोजित की गयी। भारतीय रबड़ गवेषण संस्थान एवं प्रादेशिक अनुसंधान केन्द्रों के सभी वैज्ञानिकों ने अनुसंधान कार्य की प्रगति की प्रस्तुति की। विशेषज्ञ समिति सदस्यों ने कार्य की प्रगति की आलोचनात्मक पुनरीक्षा की। विशेषज्ञ समिति की सिफारिशों के आधार पर अनुसंधान परियोजना के कार्यक्रमों को अधिक सुचारु रूप दिया।

पिछले एक वर्ष के अनुसंधान के मुख्य अंशों का संकलन किया गया तथा अनुसंधान एवं विकास समिति की 5 अक्तूबर 2002 को संपन्न बैठक में प्रस्तुत किया गया। समिति ने अनुसंधान कार्यक्रमों की पुनरीक्षा की तथा उपयोगी सुझाव दिए। श्री एल वी सप्तर्षि भा प्र से, अतिरिक्त सचिव, वाणिज्य विभाग, वाणिज्य एवं उद्योग मंत्रालय ने 6 जुलाई 2002 को रबड़ बोर्ड के इन्टरनेट पोर्टल “[www.rubberboard.org.in](http://www.rubberboard.org.in)” का उद्घाटन किया। पोर्टल में रबड़ बोर्ड के कार्यकलापों की विस्तृत सूचना प्राप्त होती हैं तथा राष्ट्रीय एवं अन्तर्राष्ट्रीय बाजारों में रबड़ का दैनिक भाव, मौसम आंकड़े, समाचार घटनाएं, प्रशिक्षण कलेंडर आदि की नियमित अद्यतन सूचनाएं प्राप्त होती हैं।

वर्ष के दौरान आठ वैज्ञानिक संगोष्ठियाँ आयोजित कीं जिनमें 26 अनुसंधान आलेख प्रस्तुत किये थे तथा जिनपर चर्चा की थी।

विशेष विषयों में दो वैज्ञानिकों को प्रशिक्षण दिया गया। प्लांट जेनेटिक रिसोर्स (पौधा जननिक संसाधन) पर जर्मनी के गेटेरस्लेबन में आयोजित अन्तर्राष्ट्रीय सम्मेलन में एक वैज्ञानिक भाग लिये तथा “जेनेटिक रिसोर्स मैनेजमेंट ऑफ हिविया इन इंडिया” (भारत में हिविया के जननिक संसाधन प्रबंधन) पर आलेख प्रस्तुत किया। जिनोम विश्लेषण प्रयोगशाला के एक वैज्ञानिक ने इटली के उडीन विश्वविद्यालय में 3 महीने के प्लान्ट डी एन ए



नेल्लिकुन्नु आदर्श रबड़ उत्पादक संघ के प्रौद्योगिकी हस्तांतरण- सह-प्रशिक्षण केन्द्र



मार्केस में उन्नत प्रशिक्षण प्राप्त किया। पारिस्थितिक शरीरक्रिया वैज्ञानिक ने अमरीका के जोर्जिया विश्व विद्यालय में सस्य प्रकाश संश्लेषण पर दो महीने के उन्नत प्रशिक्षण प्राप्त किया। उप निदेशक प्रादेशिक अनुसंधान स्टेशन गुआहटी इटली के नाशनल रिसर्च काउंसिल में छः सप्ताह के लो टेम्परेचर स्ट्रेस स्टडीज़ पर विशेष प्रशिक्षण में गये थे। उप निदेशक केन्द्रीय परीक्षण स्टेशन तथा पौधा रोग वैज्ञानिक, प्रादेशिक अनुसंधान स्टेशन, गुआहटी ने मलेशियन रबड़ बोर्ड व इंडोनेशिया रबड़ रिसर्च इंस्टिट्यूट में दो हफ्तों का अध्ययन दौरा किया था। जननद्रव्य वनस्पतिज्ञ एवं आर्थिक अनुसंधान प्रभाग के वैज्ञानिक ने 35 दिनों की अवधि के लिए मलेशिया के विभिन्न अन्तर्राष्ट्रीय महत्ता के केन्द्रों में रबड़ काष्ठ प्रसंस्करण, उपयोग व काष्ठ लाटेक्स क्लोनों पर संयुक्त प्रशिक्षण कार्यक्रम में प्रशिक्षण प्राप्त किए। उप निदेशक आर सी पी टी ने आई आर आर डी बी फेलोशिप के साथ 45 दिनों की अवधि के स्वाभाविक रबड़ संसाधन एवं प्रौद्योगिकी के उन्नत प्रशिक्षण प्राप्त किया।

इन्टरनाशनल रबड़ रिसर्च एण्ड डवलपमेंट बोर्ड, मलेशियन रबड़ बोर्ड एवं इंडोनेशियन रबड़ रिसर्च इंस्टिट्यूट द्वारा अगस्त-सितंबर 2002 में आयोजित पौधा प्रजनन, सस्य विज्ञान एवं सामाजिक-आर्थिकी में संयुक्त कार्यशाला में संयुक्त निदेशक (शोषण), उप निदेशक (आर्थिकी) एवं उप निदेशक (जननद्रव्य) भाग लिए। शोषण प्रौद्योगिकी पर की प्रस्तुति ने आई आर आर डी बी शोषण प्रौद्योगिकी विशेषज्ञ ग्रुप की गठन की ओर ले चला।

भारतीय कृषि अनुसंधान संस्थान के दो अतिथि वैज्ञानिक भारतीय रबड़ गवेषण संस्थान का दौरा किये तथा पौधा रोगविज्ञान के पहलुओं पर वक्तव्य दिया। नवंबर 2002 के दौरान पोलैंड के तीन वैज्ञानिक भारतीय रबड़ गवेषण संस्थान के दौरा पर आए।

भारतीय रबड़ गवेषण संस्थान के 21 वैज्ञानिक एवं कनिष्ठ प्रकाशन अधिकारी मैसूर में संपन्न 15 वीं प्लैक्रोसिम (PLACROSYM XV) में भाग लिए। भारतीय रबड़ गवेषण संस्थान से 20 अनुसंधान लेख प्रस्तुत किये गये। उत्तम अनुसंधान कार्य की मौखिक प्रस्तुति के लिए डॉ सी एस वेंकटराम मेमोरियल अवार्ड भारतीय रबड़ गवेषण संस्थान के लेख “मोलिकुलार क्यारक्टेराइजेशन ऑफ फंगल पतजन्स कोर्सिंग लीफ डिज़ीस इन रबड़ हिविया

ब्रजीलियनसस” को प्राप्त हुआ। भारतीय रबड़ गवेषण संस्थान की पोस्टर प्रस्तुति “टुवेर्ड्स डेवलपमेंट ऑफ ए रबड़ इनफॉर्मेशन सिस्टम” को उत्तम पोस्टर पुरस्कार से सम्मानित किया।

### प्लान्टर्स कॉफ्रेन्स

भारत में रबड़ की वाणिज्यिक खेती की शताब्दी मनाने के लिए “भारतीय रबड़ बागान उद्योग की विश्व प्रतियोगिता क्षमता” विषय पर कोट्टयम के भारतीय रबड़ गवेषण संस्थान में 21 एवं 22 नवंबर 2002 को “रबड़ प्लान्टर्स कॉफ्रेन्स 2002” नामक एक राष्ट्रीय सम्मेलन का आयोजन किया गया। इस क्षेत्र के विभिन्न राष्ट्रीय एवं अंतर्राष्ट्रीय संगठनों के विशेषज्ञों, वैज्ञानिकों और कृषकों के बीच अर्थवान विचार विमर्श हेतु एक मंच इसके द्वारा प्रदान किया गया।

दो दिन के इस सम्मेलन में 10 सत्र थे। उद्घाटन सत्र में “स्वाभाविक रबड़ - कल, आज और आगामी कल” नामक मुख्य अभिभाषण भूतपूर्व रबड़ उत्पादन आयुक्त श्री पी मुकुन्दमेनोन ने किया। उन्होंने भारतीय रबड़ बागान उद्योग की उपलब्धियों और इसकी प्रमुख विशेषताओं तथा भविष्य की चुनौतियों को सामना करने के लिए उसमें निहित शक्ति पर प्रकाश डाला। डॉ ए एफ एस बुडिमान, महा सचिव, इंटरनाशनल रबड़ स्टडी ग्रुप, लंदन और डॉ अब्दुल अज़ीज़ बिन एस ए कादिर, महा सचिव इंटरनाशनल रिसर्च एवं डवलपमेंट बोर्ड, मलेशिया ने उद्घाटन सत्र में आलेखों की प्रस्तुति की।

आई आर एस जी द्वारा हाल में चलाए गए अध्ययन के आधार पर डॉ बुडिमान ने इशारा किया कि वर्ष 2005 तक विश्व भर स्वाभाविक रबड़ की पूर्ति से अधिक मांग होने की संभावना है अतः जिसका प्रभाव स्वाभाविक रबड़ के भाव पर भी पड़ेगा। उन्होंने सूचित किया कि जो वर्ष 2003 में भी हो सकता है। उन्होंने आगे जोड़ा, कि स्वाभाविक रबड़ के सामने कोई चुनौती नहीं है बेशर्त कि भौगोलिक आर्थिक स्थिति पर (परिप्रेक्ष्य में) किसी अप्रत्याशित घटनाएं न हों। डॉ अब्दुल अज़ीज़ बिन एस ए कादिर द्वारा प्रस्तुत आलेख विभिन्न रबड़ उत्पादक देशों की अनुसंधान प्रमुखताओं विशेषकर अंतरा सस्यन, फसल अवशोषण एवं रबड़ बागानों से अतिरिक्त आय के सृजन पर आंकड़ों से भरपूर रहा।

प्रथम दिवस पर उद्घाटन सत्र के बाद चार तकनीकी सत्र रहे जो कृषि प्रबंधन, रोपण सामग्रियों, फसल अवशोषण एवं संसाधन विषयों पर थे। दूसरे दिन पर्यावरण समस्याएं, फसल संरक्षण, रबड़ आर्थिकी एवं कृषि विस्तार विषयों पर चार सत्र थे। संबंधित क्षेत्र के विशेषज्ञों द्वारा अध्यक्षता किये गये विभिन्न सत्रों में कई वैज्ञानिक एवं तकनीकी आलेख प्रस्तुत किये गए।

एक समापन सभा के साथ दो दिवसीय सम्मेलन 22 नवंबर को शाम समाप्त हुआ। श्री एस एम डसलफिन, अध्यक्ष रबड़ बोर्ड ने सभा की अध्यक्षता की। डॉ एन एम मात्यु, निदेशक अनुसंधान ने कार्यवाही का सारांश प्रस्तुत किया।

शताब्दी समारोह का समापन 2 जनवरी 2003 को कोट्टयम के माम्मन माप्पिलै हाल में आयोजित एक आम बैठक के साथ हुआ। श्री ओ राजगोपाल केन्द्रीय संसदीय मामला राज्य मंत्री, श्री के. एम. माणी, राजस्व एवं नियम मंत्री, केरल राज्य, श्री दीपक चटर्जी, वाणिज्य एवं उद्योग सचिव, भारत सरकार, श्री उम्मन चाण्डी, विधायक, श्रीमती मर्सी रवी, विधायक, श्री एट्टुमानूर वी राधाकृष्णन उपाध्यक्ष, रबड़ बोर्ड जैसे विशिष्ट व्यक्तित्वों एवं अन्य कई महान व्यक्तियों ने भागीदारी की। श्रेष्ठ छोटे रबड़ कृषक एवं उत्तम रबड़ उत्पादक संघ को दिए जानेवाले द्वैवार्षिक पुरस्कारों का वितरण भी इस अवसर पर किया गया। के.एम. चाण्डी स्मारक श्रेष्ठ रबड़ कृषक पुरस्कार पत्तनापुरम



माननीय केन्द्रीय राज्य मंत्री द्वारा श्रेष्ठ रबड़ उत्पादक संघ पुरस्कार दिया जा रहा है।

23 नवंबर 2002 को उपासी ने मुंडक्कयम में एक क्षेत्र संदर्शन दिवस का आतिथ्य किया। रोपण, अन्तराफसलन, बहुफसलन, प्रक्षेत्र मशीनीकरण, शोषण आदि पर अद्यतन विकासों के क्षेत्रीय निदर्शन का प्रबंध किया गया। क्षेत्र संदर्शन के दौरान प्रतिनिधियों ने रबड़ खेती, शोषण एवं संसाधन क्षेत्र के विशेषज्ञों के साथ विचार विमर्श किया।

के श्री के सदानन्दन को केरल राज्य के राजस्व व नियम मंत्री श्री के एम माणी ने प्रदान किया। उत्तम रबड़ उत्पादक संघ को दिए जानेवाले “सुवर्णसंघम” पुरस्कार कालाम्पुर र उ सं (मूवाट्टुपुषा क्षेत्र) के अध्यक्ष श्री पी योहन्नान को केन्द्रीय राज्य मंत्री श्री ओ. राजगोपाल ने प्रदान किया। रबड़ बोर्ड द्वारा शताब्दी समारोह के सिलसिले में तैयार की गयी स्मारिका का प्रकाशन श्री दीपक चटर्जी, सचिव वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार ने किया।



## भाग VI

### वित्त एवं लेखा विभाग

लेखा प्रणाली का रूपायन एवं प्रचालन, बजट तैयार करना, वित्तीय प्राक्कलन एवं रिपोर्ट, बजट नियंत्रण का पालन, प्रभावी निधि प्रबंधन, प्रणालियों व प्रक्रियाओं की स्थापना एवं रख रखाव, आन्तरिक लेखा परीक्षा की निगरानी एवं संवैधानिक लेखा परीक्षा, वित्तीय उपयुक्तता एवं कारोबार की नियमितता, कंप्यूटर प्रयोगों का निरीक्षण, लागत नियंत्रण की निगरानी, परियोजनाओं/योजनाओं का मूल्यांकन, कर संबंधी कार्य आदि वित्त एवं लेखा विभाग के प्रमुख कार्य हैं। वर्ष के दौरान विभाग ने निम्न लिखित कार्य किये।

1. वार्षिक बजट, निष्पादन बजट, विदेशी यात्रा बजट आदि की तैयारी।
2. बोर्ड के मंजूर बजट के अनुसार धन का आहरण एवं संवितरण। 'शून्य' आधारित बजटिंग के अधीन बजट की पुनरीक्षा एवं परिशोधन और बजट नियंत्रण का पालन।
3. बोर्ड के लेखों का रख-रखाव, वार्षिक लेखा व तुलन पत्र की तैयारी, महालेखाकर, केरल द्वारा लेखा परीक्षा के लिये लेखों का प्रस्तुतीकरण और लेखापरीक्षा किये गये लेखे रबड़ बोर्ड/मंत्रालय/संसद को प्रस्तुत करना।
4. समय समय पर भारत सरकार को अनुदान की मांग प्रस्तुत करना, भारत सरकार से निधि स्वीकार करना तथा इसकी अधिकतम उपयोगिता सुनिश्चित करके वित्तीय प्रबंधन।

5. वित्तीय औचित्य एवं विनिमयन की नियमितता पर सलाह देना और भुगतान नियमित करना।
6. प्राकृतिक रबड़ के मूल्य निर्धारण करने में और उत्पादन लागत निश्चित रूप से जानने में वित्त मंत्रालय की लागत लेखा शाखा को सहायता देना।
7. परियोजना रिपोर्ट एवं योजनाओं के लिए वित्तीय विवरणियों की तैयारी।
8. केन्द्रीय आय कर, कृषि आय कर एवं बिक्री कर मामलों से संबंधित बोर्ड का कार्य निष्पादन।
9. रबड़ बोर्ड एवं रबड़ उत्पादक संघों द्वारा संयुक्त रूप से अभिवर्द्धित कंपनियों के कार्यकलापों का समन्वय करना।
10. वित्तीय लेखे, वेतन रोल आदि के क्षेत्र में कंप्यूटरीकृत डाटा प्रोससिंग।
11. समय समय पर भारत सरकार द्वारा जारी आदेशों के आधार पर कर्मचारियों के वेतन एवं अन्य हकदारों का आहरण एवं संवितरण।
12. पेंशन निधि एवं सामान्य भविष्य निधि का प्रबंधन तथा उससे संवितरण का नियमन।
13. कंप्यूटरीकरण एवं बोर्ड के सभी विभागों से नेट संपर्क स्थापित करने की योजना का कार्यान्वयन।

## वर्ष 2001-02 के वार्षिक लेखे

वर्ष 2001-2002 के लिये वार्षिक लेखे तैयार किये और निश्चित समय में ही महालेखाकार, केरल को प्रस्तुत किये । महालेखाकार, केरल से प्राप्त लेखा परीक्षा रिपोर्ट और प्रमाण पत्र के साथ लेखा परीक्षित लेखा बोर्ड ने इसकी 146 वीं बैठक में स्वीकार किये तथा निश्चित समय में ही केन्द्र सरकार को प्रस्तुत किये थे।

## 2002-03 का संशोधित प्राक्कलन और 2003-04 का बजट प्राक्कलन

2002-03 के लिये संशोधित बजट और 2003-04 के लिये बजट प्राक्कलन समय पर तैयार किये तथा सरकार को प्रस्तुत किये । 2002-03 के लिये 98.31 करोड़ रु. के प्लान एवं 15.00 करोड़ रु. नोन-प्लान दोनों को मिलाकर अनुमोदित बजट 113.31 करोड़ रु. था । इसके बदले इस वर्ष का वास्तविक खर्च 96.75 करोड़ रु. था ( 84.08 करोड़ रु. प्लान एवं 12.67 करोड़ रु. गैर प्लान) । वर्ष 2003-04 के लिये अनुमोदित बजट 107.41 करोड़ रु. है । जिसमें 93.28 करोड़ रुपये योजना (83.54 करोड़ रुपये बजट समर्थन एवं 9.74 करोड़ का प्रारंभिक शेष) एवं 14.13 करोड़ रुपये गैर योजना (बजट समर्थन 10.50 करोड़ तथा 3.63 करोड़ आंतरिक संसाधन) के सम्मिलित है ।

## निधियों का प्रबंधन

### (i) सामान्य निधि

वर्ष 2001-2002 के लिये वार्षिक लेखे तैयार किये और निश्चित समय में ही महालेखाकार, केरल को प्रस्तुत किये । महालेखाकार, केरल से प्राप्त लेखा परीक्षा रिपोर्ट और प्रमाण पत्र के साथ लेखा परीक्षित लेखा बोर्ड ने इसकी 146 वीं बैठक में स्वीकार किये तथा निश्चित समय में ही केन्द्र सरकार को प्रस्तुत किये थे।

### (ii) सामान्य भविष्य निधि/पेंशन निधि

2003 मार्च 31 को सामान्य भविष्य निधि में 18.11 करोड़ रु. और पेंशन निधि में 11.08 करोड़ रु. बाकी थे। अधिकतम प्रतिलाभ प्राप्त करने के लिए निधियों के संचय

का निवेश किया था। बोर्ड 2228 अभिदाताओं के सा.भ.नि.खातों का अनुरक्षण करता है । वर्ष के दौरान सेवा निवृत्तों की सूची में 562 व्यक्ति थे ।

### (iii) लागत लेखे

वित्त व लेखा प्रभाग की लागत लेखा इकाई ने लागत लेखा आंकड़ों के एकत्रण करने एवं विश्लेषण करने के कार्य जारी रखे । सरकार एवं अन्य सांविधिक निकायों एवं अभिकरणों द्वारा मांगी गई सूचनाएं समय समय पर प्रस्तुत कीं ।

वित्त व लेखा विभाग ने बिक्री कर एवं कृषि आय कर मामलों के विभिन्न पहलुओं पर अध्ययन किया तथा उचित सलाहें दी गईं ।

### (iv) आन्तरिक लेखा परीक्षा

निदेशक (वित्त) के क्रियात्मक नियंत्रण में आन्तरिक लेखा परीक्षा अधिकारी आन्तरिक लेखा परीक्षा प्रभाग के मुख्य है । यह प्रभाग विभिन्न विभागों/प्रभागों/अनुभागों/कार्यालयों/स्थापनाओं के कार्यों व कार्य स्थितियों की जानकारी अध्यक्ष को प्रदत्त करने व नियंत्रित करने एवं उचित उपाय अपनाकर इनको ठीक करने का प्रमुख उपकरण है । प्रभाग विभिन्न विभागों को बोर्ड के कार्यकलापों का सही विश्लेषण, आंकन, सिफारिश एवं संगत टिप्पणियों से अपने उत्तरदायित्वों को पूरा करने में सहायता प्रदान करता है । केरल के महा लेखाकार कार्यालय के लेखा परीक्षा विभाग एवं बोर्ड के बीच संपर्क कार्य भी प्रभाग करता है ।

बोर्ड के विविध कार्यालयों/संस्थापनाओं का निरीक्षण/लेखा परीक्षा, पेंशन/सेवानिवृत्ति/आमेलन मामलों का सत्यापन एवं विचारार्थ भेजे गए मामलों पर अध्यक्ष के निदेशानुसार विशेष लेखा परीक्षा चलाना आदि आन्तरिक लेखा परीक्षा प्रभाग के मुख्य कार्य हैं । रिपोर्ट अवधि के दौरान देश भर फैले 46 कार्यालयों/संस्थापनाओं में आन्तरिक लेखा परीक्षा के निरीक्षण चलाये गये ।

वर्ष 2001-02 के बोर्ड के लेखों की लेखा परीक्षा महालेखाकार, केरल द्वारा की गई तथा उनसे 26 खंडवाले



लेखा परीक्षा रिपोर्ट प्राप्त हुई। रिपोर्ट में सम्मिलित सभी खंडों के उत्तर तैयार करके भेज दिए गए। 31.3.2002 के अनुसार वर्ष 2001-02 के खंडों सहित लंबित लेखा परीक्षा खंडों की संख्या 91 है। वाणिज्य मंत्रालय के आन्तरिक लेखा परीक्षा स्कंध की निरीक्षण रिपोर्ट पर भी प्रभाग द्वारा कार्रवाई की जाती है। आज तक के अनुसार रिपोर्ट के पाँच खंड लंबित हैं।

भारत सरकार के आदेशों के अनुरूप अनुवर्ती कार्रवाईयों के द्वारा गाडियों के उपयोग एवं अनुरक्षण तथा ईंधन के उपभोग में मितव्ययता सुनिश्चित की जा सकी।

संबंधित कार्यालयों/इकाइयों के साथ अनुवर्ती कार्रवाई

करके स्टॉक के वार्षिक वास्तविक सत्यापन अद्यतन कर दिया गया तथा मरम्मत के अयोग्य सामग्रियों को बेचना सुनिश्चित कर दिया।

#### (v) इलक्ट्रॉनिक डाटा प्रोसेसिंग

विभाग के अन्तर्गत के इलक्ट्रॉनिक डाटा प्रोसेसिंग प्रभाग कंप्यूटरीकृत कार्यक्रमों व इसके प्रयोग की देखरेख करते हैं। प्रभाग ने वेतन पंजी, वित्तीय लेखे, सामान्य भविष्य निधि लेखे, पेंशनभोगी लेखों की तैयारी, बजट तैयार करने से संबंधित कार्य, नाम सूची आदि तैयार करने के कार्य किया। बोर्ड के हार्डवेयर/सॉफ्टवेयर आवश्यकताओं के प्रापण एवं अनुरक्षण के कार्य प्रभाग करता है।



## भाग VII

### अनुज्ञापन एवं उत्पाद शुल्क

रबड़ अधिनियम 1947 की धारा 12 के अनुसार भारत में उत्पादित सारे रबड़ का उत्पाद शुल्क (उपकर) का निर्धारण एवं संग्रह करने का दायित्व रबड़ बोर्ड को सौंपा गया है। एकत्रण लागत घटाकर भारत की समेकित निधि में इस तरह एकत्रित उपकर का जमा किया जाता है। रबड़ अधिनियम 1947 की धारा 14 के अधीन रबड़ के सभी लेनदेन बोर्ड से जारी अनुज्ञापत्र के अधीन नियंत्रित किये जाते हैं। हरेक अनुज्ञप्तधारी को उनके द्वारा खरीदे और उपयोग किये रबड़ का परिमाण सामयिक विवरणियों के द्वारा बोर्ड को प्रस्तुत करना है। प्रपत्र-एन में घोषणा से रबड़ का अन्तर्राज्य परिवहन नियंत्रित किया जाता है। विनिर्माताओं/व्यापारियों/प्रक्रमणकर्ताओं द्वारा अनुरक्षित लेखाओं व रखे गए स्टॉक की सच्चाई की जांच हेतु सामयिक निरीक्षण भी किया जाता है। इन कार्यों का निष्पादन/मॉनीटरिंग रबड़ बोर्ड के अनुज्ञापन एवं उत्पाद शुल्क विभाग द्वारा किया जाता है, जिसके निम्न लिखित प्रभाग व कार्यालय हैं।

#### I उत्पाद शुल्क प्रभाग

रबड़ के अर्जन हेतु विनिर्माताओं को अनुज्ञप्ति जारी करना, रबड़ के उत्पाद शुल्क (उपकर) का निर्धारण, एकत्रण तथा भारत की समेकित निधि में जमा करना आदि उत्पाद शुल्क प्रभाग के मुख्य कार्य हैं।

##### (1) अनुज्ञापत्र जारी करना

अनुज्ञापत्र जारी करने के कार्य में प्रत्याशित विनिर्माता

यूनिटों को नये अनुज्ञापत्र और वर्तमान विनिर्माताओं के अनुज्ञापत्र का अगले वर्ष हेतु नवीकरण आदि सम्मिलित हैं। वर्ष 2002-2003 के दौरान जारी किए अनुज्ञापत्रों का विवरण निम्न प्रकार है :

|                           |                 |
|---------------------------|-----------------|
| जारी किये नये अनुज्ञापत्र | 244 सं.         |
| अनुज्ञापत्र का नवीकरण     | 4696 सं.        |
| <b>कुल</b>                | <b>4940 सं.</b> |

वर्ष के दौरान अनुज्ञापत्रधारियों के अनुरोध के अनुसार 9 यूनिटों के अनुज्ञापत्र रद्द किये थे। 31.3.2003 के अंत में कुल अनुज्ञापत्रित विनिर्माताओं की संख्या 4931 थी। 2003 मार्च 31 तक के अनुज्ञापत्रित विनिर्माताओं का राज्यवार विवरण निम्न प्रकार है :-

| क्रम सं. | राज्य/संघ शासित क्षेत्र का नाम | एककों की संख्या |
|----------|--------------------------------|-----------------|
| 01       | केरल                           | 854             |
| 02       | महाराष्ट्र                     | 578             |
| 03       | पंजाब                          | 511             |
| 04       | तमिलनाडु                       | 486             |
| 05       | उत्तर प्रदेश                   | 439             |
| 06       | पश्चिम बंगाल                   | 435             |
| 07       | गुजरात                         | 381             |
| 08       | हरियाना                        | 324             |

|    |                                |             |
|----|--------------------------------|-------------|
| 09 | दिल्ली                         | 220         |
| 10 | कर्नाटक                        | 203         |
| 11 | आन्ध्र प्रदेश                  | 160         |
| 12 | राजस्थान                       | 111         |
| 13 | मध्य प्रदेश                    | 82          |
| 14 | बिहार                          | 27          |
| 15 | पोंडिच्चेरी                    | 33          |
| 16 | गोवा, दाद्रा, नागरहवेली और दमन | 33          |
| 17 | उड़ीसा                         | 13          |
| 18 | चंडीगढ़                        | 11          |
| 19 | जम्मू एवं कश्मीर               | 9           |
| 20 | हिमाचल प्रदेश                  | 8           |
| 21 | असम                            | 8           |
| 22 | त्रिपुरा                       | 5           |
|    | <b>कुल</b>                     | <b>4931</b> |

प्रभाग ने उद्योग के विभिन्न पणधारियों के उपयोग हेतु अनुज्ञापत्रित विनिर्माताओं की सूची तैयार की तथा वितरित की। प्रभाग ने वर्ष 2003 - 04 के लिए 2989 विद्यमान विनिर्माताओं के अनुज्ञापत्रों का नवीकरण भी किया।

## (ii) विनिर्माताओं की ओर से एजेंटों/व्यापारियों द्वारा रबड़ की खरीद हेतु प्राधिकृत पत्र का पंजीकरण

वर्ष 2002-03 के दौरान रबड़ खरीदने एवं भेजने के लिए अपने अभिकर्ता व्यापारियों के नाम पर विनिर्माताओं द्वारा दिये 999 प्राधिकृत पत्रों को प्रभाग ने पंजीकृत किया था।

## (iii) शाखा/खरीद डिपो का पंजीकरण

विनिर्माताओं से प्राप्त आवेदनों के आधार पर रिपोर्ट वर्ष के दौरान 6 नयी शाखाओं/खरीद डिपो का पंजीकरण किया था।

## (iv) रबड़ की खरीद हेतु प्राधिकृत पत्र

अग्रिम उपकरण संग्रह करने के बाद प्रायोगिक परीक्षणों के लक्ष्य से रबड़ प्राप्त करने के लिए नियमित अनुज्ञापत्र के

स्थान विशेष प्राधिकृत पत्र 10 संगठनों/संस्थाओं को जारी किये थे।

## (v) उत्पाद शुल्क (उपकर) का निर्धारण एवं एकत्रण

वर्ष 2001-2002 के दौरान के 8182 लाख रुपये के निर्धारण के स्थान पर वर्ष 2002-03 का रबड़ पर कुल उपकर का निर्धारण 8206 लाख रुपये रहा। वर्ष के दौरान विनिर्माताओं से एकत्रित कुल अर्धवार्षिक विवरणियाँ (प्रपत्र 'एम') 10,294 रहीं। देश के विभिन्न भागों में कार्यरत संपर्क अधिकारियों तथा निरीक्षण कर्मियों ने 2181 निरीक्षण रिपोर्टें प्रस्तुत की थी, जिनपर उचित कार्रवाई की थी।

रिपोर्ट अवधि के दौरान एकत्रित रबड़ पर उत्पाद शुल्क (उपकर) 8204 लाख रुपये रहा जबकि वर्ष 2001-2002 में यह 8114 लाख रुपये रहा।

कुल अनुज्ञापत्र शुल्क और सेवा प्रभार के तौर पर वर्ष 2002-03 के दौरान 8,85,663/- रु. संग्रहित किये थे। इसके अलावा उपकर के देरी से जमा करने के कारण दंडस्वरूप ब्याज के रूप में 8 लाख रु. की रकम का भी संग्रहण किया था।

## II बाज़ार आसूचना प्रभाग

बाज़ार आसूचना प्रभाग का प्रमुख कार्य रबड़ पर उपकर के अपवंचन को रोकना है। प्रभाग द्वारा किये गये कार्यों में ये सम्मिलित हैं:-

- क) व्यापारियों के व्यापार केन्द्रों में निरीक्षण करना उनके बही खातों, विवरणियों एवं अन्य विवरणों का सत्यापन करना।
- ख) रबड़ व्यापारियों की असलीयत की जांच करना।
- ग) रबड़ के झूठे व्यापार रोकने हेतु कदम शुरू करना।
- घ) व्यापारियों/विनिर्माताओं एवं संसाधकों द्वारा प्रस्तुत सांविधिक विवरणियों की आपसी जांच।
- ङ) परिवहन एवं जांच चौकी आदि में रबड़ परेषणों की जांच करना।
- च) रबड़ के अन्तर्राज्यीय परिवहन की निकट की निगरानी

## इन कार्यों का निष्पादन

तलिपरंबा, कोची, कोट्टयम एवं नागरकोइल में कार्यरत निरीक्षण दल ।

पालक्काड, पुनलूर एवं नागरकोइल में कार्यरत बाज़ार आसूचना निरीक्षक

केरल के पालक्काड जिला के वालयार, केरल के कासरगोड जिला के मंजेश्वरम और तमिलनाडु के तिरुनेलवेली जिला के कावलकिणर की जाँच चौकियों द्वारा किया गया ।

### प्रभाग के संक्षिप्त कार्यकलाप है:-

2768 व्यापारियों का निरीक्षण किया तथा 158 व्यापारियों के अनुज्ञापत्रहीन व्यापार का पता लगाया। 452 व्यापारियों के मामले में 10,95,333 कि.ग्रा. कमी/बेहिसाब के स्टॉक/अनियमित बिक्री की विसंगति/अनियमित मामलों का पता लगाया। संबंधित पार्टियों से रबड़ के उपकर स्वरूप 16,42,999 रु. की रकम का संग्रह किया गया। दल ने 687 सड़क चेकिंग एवं जांच चौकियों, रेल पार्सल घरों व सीमा क्षेत्र का अचानक निरीक्षण किया।

गंभीर अनियमितताओं का पता चलने के आधार पर 10 व्यापारियों के अनुज्ञापत्र रद्द किये गये तथा उपकर हानि के तौर पर 1,63,990 रु. का संग्रहण किया गया ।

सांविधिक निम्नतम मूल्य से कम भाव पर रबड़ खरीदने के कारण 5 व्यापारियों के विरुद्ध दंडात्मक कार्रवाई शुरू की । एक व्यापारी को न्यायालय द्वारा दोषी ठहराया गया तथा शेष चार मामले संबंधित न्यायालयों में लंबित है ।

रबड़ के अन्तर राज्य परिवहन पर निगरानी को सुशक्त करने के लिए रबड़ परेषण के साथ प्रेषित दस्तावेजों की नियमित जांच केरल के दो स्थानों याने पालक्काड जिला के वालयार, कासरगोड जिला के बेंगरा मंजेश्वरम व तमिलनाडु के तिरुनेलवेली जिला के कावलकिणर

चेक पोस्टों में की गई।

- तीन चेक पोस्टों द्वारा बरती गई निगरानी रबड़ के अवैध परिवहन का पता लगाने में सहायक रही। रिपोर्टाधीन अवधि के दौरान वालयार, मंजेश्वरम व कावलकिणर चेक पोस्टों के अधिकारियों ने विभिन्न कारणों से 31 परेषण रोके रखे । इनमें 12 परेषणों को वैध दस्तावेजों/ संतोषजनक स्पष्टीकरण की प्रस्तुति पर सीमा पार करने की अनुमति दी गयी एवं 19 परेषण परेषक विश्वासजनक सबूत प्रस्तुत न करने पर उपकर की रकम एवं सुरक्षा जमा के रूप में 9,79,363/- रु. एकत्रित करके मुक्त किये गए । बिक्री कर/पुलिस पदधारियों ने बिना प्रवैध दस्तावेज/ संदेहात्मक स्थिति में सीमा पार करने के लिए कोशिश किए रबड़ के 17 परेषण रोक दिए जिनके निपटान/ अंतिम निर्णय हेतु संबंधित क्षेत्र के बोर्ड की जांच चौकी पदधारियों/ निरीक्षकों (बा आ) ने आवश्यक सभी सहायताएं प्रदान कीं । निरीक्षण दल ने कोस्टल कारगो ट्रान्सपोर्ट द्वारा 1131 मेट्रिक टन रबड़ के गुप्त परिवहन का पता लगाया तथा जांच कार्य जारी है ।

- तीनों जांच चौकियाँ होकर पास किए रबड़ के 39049 परेषणों, जिनकी जांच की थी, का विवरण निम्न प्रकार है :

|                       |                  |
|-----------------------|------------------|
| 1. वालयार चेकपोस्ट    | : 25547 परेषण    |
| 2. मंजेश्वरम चेकपोस्ट | : 8898 "         |
| 3. कावलकिणर चेकपोस्ट  | : 4604 "         |
| <b>योग</b>            | <b>: 39049 "</b> |

- विभिन्न श्रेणी के 16500 बुक प्रपत्र 'एन' घोषणाओं का मुद्रण किया और विभिन्न बागानों, प्रसंस्करणकर्ताओं, व्यापारियों एवं विनिर्माताओं को 14320 प्रपत्र एन बुकों की आपूर्ति कीं। बाज़ार आसूचना प्रभाग में 52236



प्रपत्र-एन घोषणाओं की प्रतिलिपियाँ प्राप्त हुईं जिनमें अधिकतम की संवीक्षा की तथा जहाँ विसंगतियाँ देखी गयी, वहाँ संबंधित पार्टी से स्पष्टीकरण मांगे गए और उचित कार्रवाई की।

- विभिन्न व्यापारियों/विनिर्माताओं/प्रसंस्करणकर्ताओं/बागानों से प्राप्त मासिक विवरणियों व प्रपत्र-एन घोषणाओं की प्रतिलिपियों की यादृच्छिक दुतरफी जांच की गई एवं 398 मामलों में विसंगतियां पायी गयी। अतिरिक्त रूप से रबड़ पर उपकर के रूप में 1752650/- रु. की वसूली की गयी।
- इस तरह बाज़ार आसूचना प्रभाग के प्रयासों के फलस्वरूप 46,50,002/- रु. की रकम एकत्रित की जा सकी अन्यत्र जिसका नुकसान हो जाता।

### III अनुज्ञापन प्रभाग

कोची स्थित अनुज्ञापन प्रभाग के मुख्य कार्य रबड़ व्यापारियों, प्रक्रमणकर्ताओं का अनुज्ञापन तथा उनकी शाखाओं व अभिकर्ताओं का पंजीकरण, नियमों के पालन न करनेवाले व्यापारियों एवं प्रक्रमणकर्ताओं के विरुद्ध दंडात्मक कार्रवाई शुरू करना आदि है।

#### 1) व्यापारियों के अनुज्ञापन

वर्षारंभ में अनुज्ञापत्रित व्यापारियों की संख्या जो 9492 थी वह मामूली-सी बढ़कर वर्षांत में 9722 हो गयी। रिपोर्ट अवधि के दौरान 1059 नये अनुज्ञापत्र जारी किये तथा 2472 व्यापारियों के अनुज्ञापत्र का नवीकरण किया गया। इसके अलावा 1/4/2003 से पाँच वर्षों तक की अवधि के लिए 1573 व्यापारियों के अनुज्ञापत्रों का नवीकरण किया गया।

#### 2) प्रक्रमणकर्ताओं के अनुज्ञापन

31.3.03 के अनुसार 137 अनुज्ञापत्रित प्रक्रमणकर्ता हैं। 1/4/2003 से पाँच वर्षों तक की अवधि के लिए 20 प्रक्रमणकर्ताओं के अनुज्ञापत्र का नवीकरण किया गया।

#### 3) व्यापारियों एवं प्रसंस्करणकर्ताओं के अनुज्ञापत्रों का निलंबन एवं प्रतिसंहरण

रिपोर्टधीन वर्ष के दौरान 100 व्यापारियों के अनुज्ञापत्र एवं 1 प्रक्रमणकर्ता के अनुज्ञापत्र रद्द किये गये। इसके अलावा रबड़ अधिनियम एवं नियमों के उपबंधों के उल्लंघन के कारण 10 व्यापारियों के अनुज्ञापत्र निलंबित किये गये। लेकिन 1 व्यापारी के अनुज्ञापत्र उनसे संतोषजनक स्पष्टीकरण प्राप्त होने से निलंबन को रद्द किया तथा पुनर्स्थापित कर दिया।

#### 4) शाखाओं व अभिकरणों का पंजीकरण

वर्ष के दौरान व्यापारियों एवं प्रक्रमणकर्ताओं की 331 नयी शाखाओं का पंजीकरण किया गया जिससे मार्च 2003 के अंत तक कुल पंजीकृत शाखाओं की संख्या बढ़कर 1038 हो गयी। इसके अलावा वर्ष 2002-03 के दौरान मुख्य व्यापारियों द्वारा उनके अभिकरणों के नाम उनके लिए रबड़ की खरीद करने तथा भेजने हेतु जारी 345 प्राधिकरण पत्रों को पंजीकृत किया गया।

#### 5) व्यापारियों से नकद का एकत्रण

व्यापारियों के अनियमित व्यापार एवं स्टॉक की विसंगतियों के कारण हुए रबड़ के उपकर की हानि को पूरा करने के लिए उनसे 9,11,123 रु. का एकत्रण किया गया।

#### 6) प्रपत्र 'एन' की आपूर्ति

राज्य से बाहर रबड़ के परिवहन हेतु कोची क्षेत्र में विभिन्न बागानों, व्यापारियों, प्रक्रमणकर्ताओं एवं विनिर्माताओं को प्रपत्र 'एन' की 6218 बुकों की आपूर्ति की गई।

रिपोर्ट वर्ष के दौरान अनुज्ञापत्र शुल्क सेवा प्रभार/रबड़ पर उपकर आदि के रूप में 49,10,672 रु. एकत्रित किए।

## 7) व्यापारियों का राज्यवार वितरण

| क्रम सं. | राज्य/सं.शा.<br>क्षेत्र का नाम | व्यापारियों<br>की संख्या |
|----------|--------------------------------|--------------------------|
| 01       | केरल                           | 8620                     |
| 02       | तमिलनाडु                       | 195                      |
| 03       | पंजाब                          | 153                      |
| 04       | दिल्ली                         | 120                      |
| 05       | कर्नाटक                        | 115                      |
| 06       | त्रिपुरा                       | 113                      |
| 07       | महाराष्ट्र                     | 95                       |
| 08       | पश्चिम बंगाल                   | 76                       |
| 09       | उत्तर प्रदेश                   | 67                       |
| 10       | गुजरात                         | 42                       |
| 11       | हरियाणा                        | 38                       |
| 12       | असम                            | 24                       |
| 13       | राजस्थान                       | 22                       |
| 14       | मेघालय                         | 14                       |
| 15       | आंध्र प्रदेश                   | 6                        |
| 16       | बिहार                          | 4                        |
| 17       | चण्डीगढ़                       | 4                        |
| 18       | मध्य प्रदेश                    | 4                        |
| 19       | आन्डमान व निकोबार              | 3                        |
| 20       | पोंडिच्चेरी                    | 3                        |
| 21       | नागालैंड                       | 2                        |
| 22       | उड़ीसा                         | 1                        |
| 23       | गोआ                            | 1                        |
| 24       | जम्मू व काश्मीर                | शून्य                    |
|          | <b>कुल</b>                     | <b>9722</b>              |

## IV उप/संपर्क कार्यालय

रबड़ पर उपकर के संग्रह की प्रगति और विविध मंत्रालयों तथा व्यापार व उद्योग के साथ संपर्क बनाए रखने और व्यापारियों एवं विनिर्माताओं के कारोबार की निगरानी की दृष्टि से बोर्ड केरल के बाहर के प्रमुख उपभोक्ता केन्द्रों में – याने चेन्नै, बेंगलूर, सेकन्दराबाद, अहम्मदाबाद, कानपुर,

## क) केरल में व्यापारियों का जिलावार वितरण

| क्रम सं. | जिला का नाम   | व्यापारियों की संख्या |
|----------|---------------|-----------------------|
| 01       | कोट्टयम       | 2304                  |
| 02       | कोल्लम        | 1734                  |
| 03       | एरणाकुलम      | 1105                  |
| 04       | पत्तनंतिट्टा  | 1069                  |
| 05       | तिरुवनन्तपुरम | 768                   |
| 06       | कण्णूर        | 423                   |
| 07       | इडुक्की       | 409                   |
| 08       | मलप्पुरम      | 408                   |
| 09       | पालक्काड      | 350                   |
| 10       | कोषिकोड       | 191                   |
| 11       | तृशूर         | 163                   |
| 12       | आलप्पुषा      | 151                   |
| 13       | कासरगोड       | 88                    |
| 14       | वयनाड         | 57                    |
|          | <b>कुल</b>    | <b>8620</b>           |

मुम्बई, कोलकत्ता, जलंधर और नई दिल्ली-नौ उप/संपर्क कार्यालयों का रख रखाव करते हैं। रबड़ के व्यापार में अनुज्ञापत्र देने में या रबड़ माल विनिर्माताओं को रबड़ खरीदने में आवेदकों की योग्यता का निर्धारण इन कार्यालयों का मुख्य कार्य है। रबड़ माल विनिर्माताओं एवं व्यापारियों द्वारा की गयी खरीद और उनके द्वारा रखे गए स्टोक का यादृश्चिक सत्यापन किया गया। अनुज्ञापत्रधारियों के बही खाते एवं अभिलेखों का सत्यापन भी सुनिश्चित किया था कि उनके द्वारा प्रापण किये गये सारे रबड़ के उपकर के निर्धारण से संबंधित सारे अभिलेख, बही खाते में ठीक प्रकार दर्ज किये गये हैं। उपकर राजस्व के नुकसान को रोकने के लिए रबड़ के गैर अनुज्ञापत्रित व्यापार और रबड़ अधिनियम एवं नियमों के उपबंधों के विरुद्ध रबड़ माल के विनिर्माण करनेवालों की पहचान के लिए अचानक निरीक्षण चलाए गये। विनिर्माताओं एवं व्यापारियों द्वारा प्रस्तुत विवरणियों की सच्चाई के सत्यापन हेतु उनके फैक्टरी/व्यापार स्थान का निरीक्षण करना और दुराचारों के पता लगाने हेतु अन्तर्राज्यीय रबड़ परिवहन की जांच करना इन कार्यालयों के अन्य कार्य हैं।



## भाग VIII

### संसाधन एवं उपज विकास

संसाधन एवं उपज विकास विभाग ने रबड़ और रबड़ काष्ठ संसाधन इकाइयों विशेषकर छोटी जोत क्षेत्र को उनकी उपजों की गुणता व विभिन्न उपायों द्वारा इसके विपणन सुधारने के लिए तकनीकी एवं वित्तीय समर्थन प्रदान करना जारी रखा ।

1.4.2001 को प्रभावी रूप से स्वाभाविक रबड़ की आयात पर से परिमाणपरक नियंत्रणों को हटाने पर भारत सरकार ने विभिन्न क्षेत्रों के तकनीकी विनिर्दिष्ट रबड़ संसाधकों को अपने द्वारा उत्पादित ब्लोक रबड़ की गुणता और संशक्ति सुधारने, उत्पादन लागत कम करने एवं पर्यावरण संरक्षण प्रणालियों को सुशक्त करने के लिए तकनीकी और वित्तीय सहायता प्रदान करने की योजना का अनुमोदन किया है । योजना के लिए मंजूर कुल परिव्यय 5 करोड़ रुपये था । योजना के अंतर्गत 26 ब्लोक रबड़ फैक्टरियों और 26 लाटेक्स सेंट्रिफ्यूजिंग फैक्टरियों को वित्तीय सहायताएं प्रदान की गयी । टी एस आर फैक्टरियों को नियमित रूप से आपूर्ति करने के लिए छोटी जोतों से लाटेक्स एकत्रण हेतु 242 रबड़ उत्पादक संघों को आवश्यक सुविधाओं से सुसज्जित किया । इस योजना के अन्तर्गत रबड़ उत्पादक संघ क्षेत्र के एक रबड़ काष्ठ संसाधन फैक्टरी को वित्तीय सहायता प्रदान की गयी ।

संसाधन एवं गुणता नियंत्रण के अद्यतन विकासों के अध्ययन हेतु रबड़ बोर्ड एवं ब्लोक रबड़ उत्पाद संसाधकों के 12 सदस्य प्रतिनिधि मंडल के लिए थाइलैंड एवं इंडोनेशिया के ब्लोक रबड़ फैक्टरियों के दौरे का आयोजन बोर्ड ने किया ।

कोलकत्ता एवं विशाखपटनम के नामोद्दिष्ट बन्दरगाहों द्वारा आयातित रबड़ की गुणता की जांच करने का कार्य बोर्ड ने जारी रखा । वर्ष 2002-03 के दौरान 24591 मेट्रिक टन रबड़ की जांच की तथा सीमा शुल्क अनुमति हेतु सिफारिश दी गयी । विहित गुणवत्ता स्तर के न होने के कारण 320 मेट्रिक टन रबड़ को अस्वीकार कर दिया था । गैर नामोद्दिष्ट बंदरगाहों द्वारा रबड़ की आयात पर भी बोर्ड ने निगरानी जारी रखी ।

वर्ष के दौरान बोर्ड ने प्रेरणा देकर शीट रबड़, ब्लोक रबड़ एवं सान्द्रीकृत लाटेक्स के विभिन्न श्रेणियों के निर्यात को प्रोत्साहित किया । ऐसे निर्यात किए गए रबड़ की गुणवत्ता सुनिश्चित करने हेतु 2 दिसंबर से रबड़ की गुणवत्ता की जांच करना बोर्ड ने शुरू की । इस अवधि के दौरान 3383 मेट्रिक टन ब्लोक रबड़, 6225 मेट्रिक टन सान्द्रीकृत लाटेक्स और 24826 मेट्रिक टन आर एस एस श्रेणियों की गुणवत्ता जांच की गयी तथा निर्यात हेतु अनुमति दी गयी । गुणवत्ता जांच के आधार पर 121 मेट्रिक टन ब्लोक रबड़, 21.5 मेट्रिक टन सान्द्रीकृत लाटेक्स एवं 1393 मेट्रिक टन आर एस एस श्रेणियों को अस्वीकार कर दिया ।

विभाग ने देश में उत्पादित ब्लोक रबड़ एवं सान्द्रीकृत लाटेक्स की गुणवत्ता जांचने हेतु 172 निरीक्षण चलाए । कच्चे रबड़, लाटेक्स, रसायन, बहिस्त्राव आदि की परीक्षण सुविधाएं संसाधकों एवं उपभोक्ताओं को प्रदत्त की तथा 16846 नमूनों की जांच की । बोर्ड ने इसके केन्द्रीय



तकनीकी विनिर्दिष्ट रबड़ (ब्लोक रबड़)

परीक्षण प्रयोगशाला हेतु राष्ट्रीय एवं अन्तर्राष्ट्रीय राउंड रोबिन क्रॉस जांचों में भागीदारी की ।

बोर्ड ने अपने आदर्श टी एस आर फैक्टरी, पाइलट लाटेक्स प्रक्रमण केंद्र, पाइलट क्रम्ब रबड़ फैक्टरी एवं रेडियेशन व वल्कनीकृत स्वाभाविक रबड़ लाटेक्स संयंत्र द्वारा रबड़ संसाधकों को संसाधन व गुणता नियंत्रण, पर्यावरण संरक्षण एवं आई एस ओ 9000 गुणता प्रबंधन प्रणाली के निदर्शन एवं प्रशिक्षण सुविधाएं प्रदत्त करना जारी रखा ।

भारत से रबड़ के निर्यात को प्रोत्साहित करने के लिए बोर्ड ने आर एस एस श्रेणियों के लिए विनिर्देश जारी करने तथा ब्लोक रबड़ एवं सान्द्रीकृत लाटेक्स के प्रभावी मानकों को संशोधित करने हेतु भारतीय मानक ब्यूरो को एक प्रस्ताव पेश किया है ताकि वे मुख्य स्वाभाविक रबड़ एवं लाटेक्स के उत्पादक देशों के मानकों के समान हो जाए । भारतीय मानक ब्यूरो द्वारा आयोजित एक बैठक में इन पर चर्चा की जा चुकी है तथा भारतीय मानक ब्यूरो के स्तर पर आगे की कार्रवाई की जा रही है ।

बोर्ड ने रबड़ उत्पादक संघ और सहकारी क्षेत्र के प्रक्रमण एवं विपणन कंपनियों को रबड़ के संसाधन एवं विपणन एवं बागान निवेशों के वितरण हेतु तकनीकी एवं वित्तीय सहायता प्रदान करना जारी रखा ।

भारत रबड़ परियोजना नामक विश्व बैंक सहायता प्राप्त परियोजना के अधीन संस्थापित आदर्श रबड़ काष्ठ फैक्टरी ने संसाधन एवं मूल्य वृद्धि, गुणता नियंत्रण एवं पर्यावरण संरक्षण प्रणालियों में रबड़ काष्ठ संसाधकों एवं नये उद्यमियों को निदर्शन और प्रशिक्षण सुविधाएं प्रदत्त करना जारी रखा ।

विश्व बैंक सहायता प्राप्त परियोजना के अधीन संस्थापित रबड़ काष्ठ परीक्षण प्रयोगशाला ने रबड़ काष्ठ संसाधकों को परीक्षण सुविधाएं प्रदत्त की, प्रशिक्षण सुविधाएं प्रदान की तथा भारतीय रबड़ गवेषण संस्थान द्वारा चलाये रबड़ काष्ठ संबंधी कुछ अनुसंधान एवं विकास परियोजनाओं में भागीदारी की ।

भारतीय मानक ब्यूरो ने रसायनिक उपचार किये और भट्टे में सुखाए रबड़ काष्ठ के मानक निकाले । सरकारी संस्थाओं में रबड़ काष्ठ के उपयोग को प्रोत्साहित करने के मद्देनज़र केरल सरकार ने फर्नीचरों के निर्माण हेतु संसाधित रबड़ काष्ठ का अनुमोदन किया तथा केरल सरकार के स्टोर्स पर्चेस रूल्स को तदनुसार संशोधित भी किया ।

फर्नीचर एवं आन्तरिक सजावट की सामग्रियों के लिए उपयुक्त पर्यावरण के अनुकूल की लकड़ी के रूप में संसाधित रबड़ काष्ठ को पेश करने के लिए कदम उठाये



गये । भारतीय विज्ञान संस्थान ने अपने 920 कमरेवाले नये छात्रावास परिसर में सजावट हेतु संसाधित रबड़ काष्ठ उपयुक्त करने का निर्णय लिया है । यह भारत के अग्रणी सरकारी/अर्धसरकारी अनुसंधान/ शैक्षणिक संस्थानों में आन्तरिक सजावट सामग्रियाँ व फर्नीचर हेतु रबड़ काष्ठ

को प्रोत्साहित करने में सहायक होगा । बोर्ड निम्नलिखित राष्ट्रीय/अन्तर्राष्ट्रीय मेलाओं में भाग लिया तथा राष्ट्रीय व अन्तर्राष्ट्रीय बाज़ारों में रबड़ काष्ठ और रबड़ काष्ठ उत्पादों को प्रोत्साहित करने के लिए इन पर तकनीकी साहित्य एवं पर्चियों का वितरण किया ।

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इन मेलाओं की भागीदारी मुख्य उपभोक्ता देशों में भारत को संसाधित रबड़ के संभाव्य पूर्तिकार के रूप में उजागर करने में सहायक बनेगी । परिणामस्वरूप, कुछ गंभीर निर्यात संबंधी पृष्ठताछें प्राप्त हुई ।



## भाग IX

### प्रशिक्षण एवं तकनीकी परामर्श

प्रशिक्षण एवं तकनीकी परामर्श विभाग के दो प्रभाग हैं याने प्रशिक्षण प्रभाग और तकनीकी परामर्श प्रभाग। प्रशिक्षण प्रभाग रबड़ बागान क्षेत्र और संसाधन व उपज विनिर्माण क्षेत्र समेत रबड़ उद्योग क्षेत्र के लाभ हेतु विभिन्न प्रशिक्षण कार्यक्रमों का आयोजन करता है। तकनीकी परामर्श प्रभाग उद्यमियों को रबड़ आधारित इकाइयों की संस्थापना हेतु तथा रबड़ उत्पन्न विनिर्माताओं को उत्पादन की समस्याएं सुलझाने हेतु तकनीकी सहायता प्रदान करता है और रबड़ उत्पादों के परीक्षण द्वारा गुणवत्ता निर्धारण करता है।

प्रशिक्षण एवं तकनीकी परामर्श विभाग स्वाभाविक रबड़ के निर्यात हेतु तकनीकी समर्थन एवं मार्गदर्शन भी प्रदत्त करता है।

#### क) प्रशिक्षण प्रभाग

रबड़ प्रशिक्षण केन्द्र कोट्टयम से आठ कि.मी पूर्व पर (पुतुप्पल्ली के पास) भारतीय रबड़ गवेषण संस्थान के बगल में स्थित है। यह 3710 वर्ग मीटर क्षेत्र के चित्रोपम भवन में नवीनतम सुविधायुक्त 5 अध्यापन हाल में स्थित है। इस केन्द्र में 30 भागीदारों को रहने की सुविधा वाले छात्रवास हैं। इस केन्द्र में पुस्तकालय, संग्रहालय एवं ऑडिटोरियम भी हैं। प्रशिक्षण कार्यक्रम के दौरान रबड़ प्रसंस्करण एवं उत्पाद विनिर्माण प्रौद्योगिकी पर प्रशिक्षण देने हेतु केन्द्र में दो निदर्शन प्रयोगशालाएं भी हैं।

मुख्य रूप से प्रशिक्षण के लिए लक्षित वर्ग ये हैं:-

- ① कृषक
- ① प्रबंधक/अधीक्षक
- ① रबड़ उत्पादक संघ
- ① रबड़ विपणन समितियाँ
- ① रबड़ व्यापारी
- ① रबड़ प्रक्रमणकर्ता
- ① रबड़ उत्पाद निर्माता
- ① उद्यमी
- ① रबड़ एवं रबड़ उत्पाद निर्यातक
- ① उत्पादन प्रबंधक
- ① गुणता नियंत्रण प्रबंधक
- ① महिला सहित अनुसूचित जाति/जनजाति वर्ग
- ① विद्यार्थी
- ① विदेशी भागीदार

रिपोर्टाधीन वर्ष के दौरान भिन्न लक्ष्य ग्रुपों के लिए 30 विभिन्न प्रशिक्षण कार्यक्रमों का आयोजन किया।

लाभभोगियों के संक्षिप्त विवरण निम्न प्रकार है:

| वर्ग                                | लाभभोगियों की संख्या |
|-------------------------------------|----------------------|
| * रबड़ संसाधन                       | 155                  |
| * रबड़ उत्पाद विनिर्माण             | 186                  |
| * र उ सं और रबड़ व्यापारी           | 33                   |
| * कृषक/र उ सं के सदस्य              | 2885                 |
| * टापर्स                            | 402                  |
| * कृषि/रबड़ प्रौद्योगिकी विद्यार्थी | 55                   |
| * दौरा सह प्रशिक्षण के व्यक्ति      | 1028                 |
| * बोर्ड के कर्मचारी                 | 117                  |
| <b>योग</b>                          | <b>4861</b>          |

लाभभोगियों में 1058 महिलाएं और 237 अनुसूचित जाति व अनुसूचित जनजाति के लोग भी सम्मिलित हैं।

कोट्टयम के रबड़ प्रशिक्षण केन्द्र का नाम इंडियन सोसाइटी फॉर ट्रेनिंग एण्ड डवलपमेंट, नई दिल्ली के स्थायी सदस्य के रूप में दर्ज कर दिया है।

### ख) तकनीकी परामर्श प्रभाग

देश में रबड़ माल विनिर्माण उद्योग को प्रोत्साहित करने हेतु तकनीकी परामर्श प्रभाग तकनीकी सहायता प्रदान करता है। रबड़ आधारित उद्योगों की संस्थापना हेतु उद्यमियों को तकनीकी सहायता प्रदान करना, रबड़ उत्पादों को विकसित करना, विद्यमान इकाइयों की उत्पादन समस्याएं

सुलझाना तथा रबड़ रसायनों/रबड़ सम्मिश्रों/उत्पादों की राष्ट्रीय एवं अन्तर्राष्ट्रीय मानकों के आधार पर जांच द्वारा गुणता नियंत्रण आदि इस प्रभाग के मुख्य कार्यकलाप हैं। रबड़ आधारित उद्योगों को प्रोत्साहित करने हेतु कार्यशालाओं एवं संगोष्ठियों का आयोजन, विस्तृत परियोजना रिपोर्टों, बाज़ार सर्वेक्षण रिपोर्टों, व्यापार निदेशिकाओं की तैयारी आदि जैसे कार्यकलाप भी प्रभाग करते हैं। स्वाभाविक रबड़ के उपभोग बढ़ाने के लक्ष्य से वर्तमान में प्रभाग रबड़ उद्योग पार्कों की संस्थापना कार्य में लगा हुआ है। रबड़ पार्क परियोजना कार्यान्वयन प्रगति में है तथा औद्योगिक रबड़ पार्कों की स्थिति रिपोर्ट नीचे दी गयी है :

- |             |                                                                                        |
|-------------|----------------------------------------------------------------------------------------|
| 1. केरल     | परियोजना का प्रथम चरण पूरा हो गया है।<br>परियोजना का दूसरा चरण पूरा हो रहा है।         |
| 2. तमिलनाडु | ए एस आई डी ई योजना के अंतर्गत निजी सहभागिता के साथ परियोजना की मंजूरी की प्रत्याशा है। |
| 3. त्रिपुरा | परियोजना प्रस्ताव भारत सरकार के विचाराधीन है।                                          |

**I प्रभाग के कार्यकलापों की संक्षिप्त रिपोर्ट नीचे दी गयी है**

1. तैयार की गयी परियोजना रिपोर्ट/योजनाएं 9 सं.
2. तकनीकी सहायता प्रदत्त 75 विनिर्माण इकाइयाँ
3. विभिन्न इकाइयों/उद्यमियों के लिए विकसित रबड़ उत्पाद 44 सं.
4. गुणता नियंत्रण 5930 प्राचलों के लिए 1106 नमूनों का परीक्षण किया गया ।
5. सडकों का रबरीकरण सडकों के निर्माण में स्वाभाविक रबड़ परिष्कृत बिटुमिन के उपयोग का प्रोत्साहन जारी रखा । केन्द्रीय सडक अनुसंधान संस्थान के सहयोग से केरल, तमिलनाडु और पोंडिच्चेरी के एन आर एम बी सडकों का निष्पादन मूल्यांकन किया गया ।
6. सीस्मिक बियरिंग का विकास स्ट्रक्चरल इंजीनियरिंग व अनुसंधान केन्द्र की अंतिम रिपोर्ट की पुनरीक्षा की गयी तथा बियरिंग की परिकल्पना एवं बियरिंगों की तैयारी हेतु माल्डों की ढलाई पर एस ई आर सी के अभियंताओं के साथ बातचीत प्रगति में है ।
7. नहरों में लाइनिंग केरला इंजीनियरिंग रिसर्च इंस्टिट्यूट की रिपोर्ट के अनुसार लाटेक्स मिश्रण से नहरों में लाइनिंग देने पर प्रयोगशाला स्तरीय परीक्षण सफल रहा। परीक्षण तालाबों में भी किया है जिसके परिणाम की प्रत्याशा है।
8. प्रधान उपलब्धियाँ आयात प्रतिस्थापना के रूप में मे.रूट्स मल्टिक्लीन प्रा.लि., कोइम्बतूर के लिए उनके फर्श सफाई मशीनों के लिए रबड़ संघटकों का विकास प्रभाग द्वारा किया गया जिसकी काफी प्रशंसा हुई।

प्रभाग स्वाभाविक रबड़ के निर्यात की निगरानी भी करता है । अप्रैल 2002 से मार्च 2003 तक निर्यात किये स्वाभाविक रबड़ का कुल परिमाण 55311 मेट्रिक टन है। मूल्य के तौर पर 2002-03 के दौरान निर्यात किए स्वाभाविक रबड़ 185.12 करोड़ रुपये याने 38.17 दशलक्ष अमरीकी डालर के समतुल्य का रहा । निर्यात विपणन सेवाएं प्रदान करने के लिए प्रभाग में एक निर्यात संवर्धन प्रकोष्ठ का गठन किया था और गुणवत्ता जांच चलाने और रबड़ के निर्यात के लिए आवश्यक गुणता प्रमाण पत्र जारी करने के लिए एक निर्यात निरीक्षण टीम को भी गठित किया था ।

केवल स्वाभाविक रबड़ के निर्यात संवर्धन के लिए

बोर्ड ने इलक्ट्रॉनिक वाणिज्य सुसाध्य करने वाले एक पारस्परिक क्रियात्मक वेब साइट का विकास किया है । परामर्शदाता मे. अक्सेन्ट्यूर इंडिया प्रा.लि., नई दिल्ली द्वारा चलाए बाज़ार अध्ययन पूरा हो गया है तथा अंतिम रिपोर्ट प्रस्तुत की है । अध्ययन रिपोर्ट की सिफारिशों के कार्यान्वयन प्रगति में है । वर्ष 2002-03 के दौरान बोर्ड ने यूरोप्लास्ट (पेरिस में 3 से 7 जून 2002 तक संपन्न), चाइना प्लास (25 जून से 29 जून 2002 तक चीन के शांगहाई में संपन्न) एवं साइटेक्स (2 से 6 अक्तूबर 2002 तक दक्षिण आफ्रिका के जोहन्नासबर्ग में संपन्न) नामक तीन अंतर्राष्ट्रीय व्यापार मेलाओं में प्रतिभागिता की ।



## भाग X

### सांख्यिकी एवं योजना

#### I सामान्य सांख्यिकी

रबड़ की पूर्ति, माँग, स्टॉक तथा मूल्य के आंकड़ों का नियमित रूप से अनुवीक्षण एवं उनकी बोर्ड एवं सरकार को प्रस्तुति सांख्यिकी एवं योजना विभाग द्वारा अप्रैल 2002 से मार्च 2003 तक की अवधि के दौरान किये गए कार्यकलापों में सम्मिलित हैं। 22.7.2002 तथा 30.11.2002 को संपन्न बोर्ड की बैठकों में तथा 21.9.2002 एवं 24.3.2003 को संपन्न सांख्यिकी एवं आयात निर्यात समिति बैठकों में रबड़ की माँग एवं पूर्ति की स्थिति का सामयिक पुनरीक्षण किया गया। विभाग ने इन बैठकों में चर्चा हेतु स्वाभाविक रबड़ क्षेत्र में विद्यमान स्थिति तथा भविष्य के रुख सांख्यिकीय आंकड़े सहित टिप्पणियों की तैयारी की।

रबड़ उत्पादकों, व्यापारियों, प्रक्रमणकर्ताओं एवं विनिर्माताओं से हर महीने एकत्रित सांविधिक विवरणियों का संकलन एवं विश्लेषण किया। छोटे कृषकों के संदर्भ में उत्पादन, स्टॉक आदि में अन्तर का पता लगाने के लिए छोटे जोत क्षेत्र में नमूना अध्ययन जारी रखा। विभिन्न स्रोतों से प्राप्त आंकड़ों का संकलन किया गया तथा मासिक आधार पर रबड़ के उत्पादन, उपभोग, आयात एवं स्टॉक आंके गए। “रबड़ स्टैटिस्टिकल न्यूज़” (मासिक) में प्रकाशन हेतु आवश्यक सांख्यिकीय सूचनाओं की तैयारी की। इस प्रकाशन में स्वाभाविक रबड़, कृत्रिम रबड़ एवं सुधारित रबड़ के उत्पादन, उपभोग, स्टॉक, आयात/निर्यात के रुख, स्वाभाविक रबड़ का भाव तथा अन्य कई विवरण

प्राप्त होते हैं। बोर्ड ने “इंडियन रबड़ स्टैटिस्टिक्स भाग 25”, 2002 का प्रकाशन 2002 अप्रैल महीने में किया। इस प्रकाशन में रबड़ के अधीन क्षेत्र, स्वाभाविक, कृत्रिम एवं सुधारित रबड़ के उत्पादन, उपभोग, आयात, निर्यात, भाव आदि एवं विनिर्माता, व्यापारी, रबड़ के उत्पाद, श्रमिक आदि के आलावा विश्व रबड़ सांख्यिकी की विस्तृत जानकारी है। विभाग ने सरकार एवं रबड़ उद्योग से संबद्ध विभिन्न संगठनों को संबंधित सांख्यिकीय सूचना प्रदत्त की।

वर्ष 2002-03 के दौरान देश में संसाधित रबड़ के विभिन्न वर्गों के उत्पादन, संस्थापित क्षमता आदि के निर्णय करने के लक्ष्य से सान्द्रीकृत लाटेक्स, ब्लॉक रबड़, पी एल सी के संसाधकों एवं क्रीप मिलों से उनकी वार्षिक रिपोर्ट संग्रहित की थी। अंतिम उत्पादों के आधार पर रबड़ के उपभोग आंकड़े, उपभोग के अनुसार विनिर्माताओं के वर्गीकरण हेतु रबड़ माल के विनिर्माताओं से वर्ष 2002-03 की वार्षिक विवरणियाँ एकत्रित की थीं। विनिर्माताओं से एकत्रित मासिक विवरणियों से स्वाभाविक रबड़, कृत्रिम रबड़, सुधारित रबड़ आदि के राज्यवार उपभोग तैयार किया।

स्तरित यादृच्छिक प्रतिदर्श तकनीक प्रयुक्त करके केरल के चयनित गाँवों की रबड़ जोतों का गणना कार्य जारी रखा। इस तरह तैयार किये आंकड़ों से उपयुक्त सारणियाँ तैयार कीं तथा विश्लेषण किया गया।

## II योजना

वर्ष 2003-04 का वार्षिक योजना प्रस्ताव तैयार किया तथा सरकार को प्रस्तुत किया। इसके अलावा रबड़ पर वार्षिक योजना प्रस्ताव भी तैयार किये। रबड़ बागान उद्योग की पुनरीक्षा पर व्यापक टिप्पणी तैयार की तथा सरकार को प्रस्तुत की।

## III विश्व संगठनों को सूचना का प्रदान

भारत में स्वाभाविक रबड़ उद्योग के संबंध में एसोसिएशन ऑफ नाचुरल रबड़ प्रोड्यूसिंग कंट्रीज़ (ए एन आर पी सी), कुलालपुर, मलेशिया एवं अंतर्राष्ट्रीय रबड़ अध्ययन ग्रुप (आई आर एस जी), लंडन जैसे विश्व संगठनों को सूचना प्रदान करना जारी रखा।

भारत सरकार की तरफ से रबड़ बोर्ड के अध्यक्ष थायलैंड में अगस्त 2002 में उत्पादन एवं विपणन नीतियों पर ए एन आर पी सी के संयोजन समिति की 9 वीं बैठक योग्याकार्टा, इंडोनेशिया में नवंबर 2002 में ए एन आर पी सी की कार्यकारी समिति की 26 वीं बैठक एवं ए एन आर पी सी असेंबली की 25 वीं बैठक में भाग लिए। संयुक्त निदेशक (सां व यो) ने सितंबर 2002 में मलेशिया में संपन्न स्वाभाविक रबड़ सांख्यिकी पर एक दिवसीय कार्यशाला एवं ए एन आर पी सी की स्वाभाविक रबड़ सांख्यिकी पर समिति की 11 वीं बैठक में प्रतिभागिता की।



भाग - XI

सांख्यिकीय सारणियाँ

सारणी - 1

प्राकृतिक रबड़ के उत्पादन, आयात, निर्यात एवं उपभोग  
(टण)

| महीना       | उत्पादन | आयात* | निर्यात | उपभोग<br>(देशी एवं<br>आयातित) |
|-------------|---------|-------|---------|-------------------------------|
| अप्रैल 2002 | 39800   | 2015  | 3928    | 54510                         |
| मई "        | 42410   | 1242  | 2697    | 56505                         |
| जून "       | 43635   | 936   | 2917    | 56740                         |
| जुलाई "     | 45835   | 2096  | 3738    | 58920                         |
| अगस्त "     | 51475   | 5067  | 1200    | 57835                         |
| सितंबर "    | 58480   | 687   | 6159    | 57380                         |
| अक्तूबर "   | 63215   | 818   | 6814    | 57750                         |
| नवंबर "     | 75410   | 317   | 5872    | 58470                         |
| दिसंबर "    | 80495   | 161   | 4740    | 59455                         |
| जनवरी 2003  | 75525   | 3187  | 4264    | 60210                         |
| फरवरी "     | 35050   | 6114  | 4676    | 59525                         |
| मार्च "     | 38105   | 3589  | 8306    | 58125                         |
| योग         | 649435  | 26229 | 55311   | 695425                        |

\*स्रोत: वाणिज्यिक आसूचना एवं सांख्यिकी महा निदेशालय, कोलकत्ता

सारणी - 2

हर महीने के अन्त में प्राकृतिक रबड़ का स्टोक  
(टण)

| महीना       | उत्पादक, व्यापारी<br>एवं संसाधक | विनिर्माता | योग    |
|-------------|---------------------------------|------------|--------|
| अप्रैल 2002 | 111200                          | 65290      | 176490 |
| मई "        | 100030                          | 60950      | 160980 |
| जून "       | 93835                           | 52015      | 145850 |
| जुलाई "     | 83875                           | 47335      | 131210 |
| अगस्त "     | 87595                           | 41125      | 128720 |
| सितंबर "    | 91830                           | 32520      | 124350 |
| अक्तूबर "   | 87335                           | 34995      | 122330 |
| नवंबर "     | 100605                          | 34590      | 135195 |
| दिसंबर "    | 111145                          | 40495      | 151640 |
| जनवरी 2003  | 119295                          | 46575      | 165870 |
| फरवरी "     | 84280                           | 57080      | 141360 |
| मार्च "     | 65655                           | 52340      | 117995 |



**सारणी - 3**

**कृत्रिम रबड़ के उत्पादन, आयात एवं उपभोग  
(टण)**

| महीना      |      | उत्पादन      | आयात*         | उपभोग         |
|------------|------|--------------|---------------|---------------|
| अप्रैल     | 2002 | 5680         | 8485          | 14885         |
| मई         | "    | 6497         | 9481          | 15065         |
| जून        | "    | 6791         | 11791         | 15545         |
| जुलाई      | "    | 5904         | 12147         | 16370         |
| अगस्त      | "    | 7505         | 13438         | 16790         |
| सितंबर     | "    | 6715         | 11988         | 16370         |
| अक्तूबर    | "    | 6247         | 15202         | 17365         |
| नवंबर      | "    | 6370         | 11730         | 17160         |
| दिसंबर     | "    | 7209         | 9733          | 16860         |
| जनवरी      | 2003 | 7800         | 9360          | 16780         |
| फरवरी      | "    | 6642         | 5611          | 15615         |
| मार्च      | "    | 7041         | 5509          | 16045         |
| <b>योग</b> |      | <b>80401</b> | <b>124475</b> | <b>194850</b> |

\*स्रोत: वाणिज्यिक आसूचना एवं सांख्यिकी महा निदेशालय, कोलकत्ता

## सारणी - 4

संसाधित रबड़ के उत्पादन एवं उपभोग  
(टण)

| महीना       | उत्पादन* | उपभोग |
|-------------|----------|-------|
| अप्रैल 2002 | 5580     | 5545  |
| मई ”        | 5405     | 5370  |
| जून ”       | 5545     | 5490  |
| जुलाई ”     | 5675     | 5615  |
| अगस्त ”     | 5705     | 5750  |
| सितंबर ”    | 5850     | 5860  |
| अक्तूबर ”   | 5905     | 5925  |
| नवंबर ”     | 5640     | 5670  |
| दिसंबर ”    | 5580     | 5650  |
| जनवरी 2003  | 5790     | 5840  |
| फरवरी ”     | 5440     | 5390  |
| मार्च ”     | 5270     | 5215  |
| योग         | 67385    | 67320 |

\*विनिर्माताओं द्वारा देशी खरीद

**सारणी - 5**

**भारत में प्राकृतिक रबड़ के विविध वर्गों के मासिक औसत भाव**  
(रु./क्विन्टल)

| महीना       | आर एस<br>एस 1 | आर एस<br>एस 2 | आर एस<br>एस 3 | आर एस<br>एस 4 | आर एस<br>एस 5 | आई एस<br>एन आर-5 | आई एस<br>एन आर-10 | आई एस<br>एन आर-20 | आई एस<br>एन आर-50 |
|-------------|---------------|---------------|---------------|---------------|---------------|------------------|-------------------|-------------------|-------------------|
| अप्रैल 2002 | 3738          | 3638          | 3538          | 3389          | 3101          | 3412             | 3312              | 3163              | 2912              |
| मई "        | 3960          | 3860          | 3760          | 3589          | 3219          | 3547             | 3437              | 3257              | 3072              |
| जून "       | 4315          | 4215          | 4115          | 3979          | 3625          | 3865             | 3764              | 3594              | 3416              |
| जुलाई "     | 4206          | 4106          | 4006          | 3830          | 3549          | 3808             | 3708              | 3535              | 3344              |
| अगस्त "     | 4106          | 4006          | 3906          | 3732          | 3484          | 3703             | 3603              | 3424              | 3245              |
| सितंबर "    | 4148          | 4048          | 3948          | 3765          | 3622          | 3840             | 3740              | 3608              | 3397              |
| अक्तूबर "   | 4038          | 3938          | 3838          | 3667          | 3515          | 3738             | 3638              | 3511              | 3298              |
| नवंबर "     | 4007          | 3907          | 3807          | 3677          | 3564          | 3730             | 3630              | 3499              | 3286              |
| दिसंबर "    | 4516          | 4416          | 4316          | 4196          | 3911          | 4168             | 4068              | 3960              | 3692              |
| जनवरी 2003  | 4704          | 4604          | 4504          | 4300          | 4077          | 4428             | 4328              | 4182              | 3928              |
| फरवरी "     | 4753          | 4653          | 4553          | 4384          | 4280          | 4555             | 4455              | 4323              | 4101              |
| मार्च "     | 4903          | 4803          | 4703          | 4517          | 4372          | 4691             | 4591              | 4417              | 4284              |
| वार्षिक औसत | <b>4283</b>   | <b>4183</b>   | <b>4083</b>   | <b>3919</b>   | <b>3693</b>   | <b>3957</b>      | <b>3856</b>       | <b>3706</b>       | <b>3498</b>       |

### सारणी - 6

**कुलालमपुर बाज़ार में प्राकृतिक रबड़ के विविध वर्गों के मासिक औसत भाव**  
(रु./क्विन्टल)

| महीना       | आर एस एस 1  | आर एस एस 2    | आर एस एस 3    | आर एस एस 4    | आर एस एस 5    | एस एम आर-5  | एस एम आर-10 | एस एम आर-20 |
|-------------|-------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|
| अप्रैल 2002 | 3517        | 3441          | 3422          | 3286          | 3221          | 3350        | 3267        | 3241        |
| मई "        | 3509        | 3446          | 3426          | 3290          | 3225          | 3337        | 3274        | 3248        |
| जून "       | 4152        | 4067          | 4047          | 3911          | 3846          | 4034        | 4008        | 3982        |
| जुलाई "     | 4142        | 4078          | 4058          | 3922          | 3858          | 4059        | 3988        | 3959        |
| अगस्त "     | 4153        | 4110          | 4090          | 3955          | 3891          | 4117        | 4056        | 4030        |
| सितंबर "    | 4395        | 4348          | 4329          | 4194          | 4129          | 4450        | 4399        | 4373        |
| अक्तूबर "   | 4046        | 4001          | 3982          | 3847          | 3783          | 4212        | 4167        | 4141        |
| नवंबर "     | 4000        | 3955          | 3936          | 3801          | 3737          | 4214        | 4169        | 4144        |
| दिसंबर "    | 4007        | 3962          | 3943          | 3809          | 3745          | 4217        | 4168        | 4142        |
| जनवरी 2003  | 4219        | 4330*         | 4330*         | 4226*         | 4109*         | 4416        | 4366        | 4340        |
| फरवरी "     | 4568        | 4716*         | 4716*         | 4613*         | 4497*         | 4640        | 4552        | 4527        |
| मार्च "     | 5008        | 5046*         | 5046*         | 4944*         | 4828*         | 4638        | 4563        | 4538        |
| वार्षिक औसत | <b>4143</b> | <b>3934**</b> | <b>3915**</b> | <b>3779**</b> | <b>3715**</b> | <b>4140</b> | <b>4081</b> | <b>4055</b> |

जनवरी 2003 से मलेशिया ने स्वाभाविक रबड़ के आर एस एस 2 से आर एस एस 5 तक की श्रेणियों के मूल्य का प्रकाशन बंद कर दिया ।

\* सिंगपूर का भाव

\*\* मात्र 9 महीनों की औसत



**ANNUAL REPORT  
2002-03**



**THE RUBBER BOARD**  
Ministry of Commerce & Industry  
Govt. of India

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## PART - I

# INTRODUCTION

The Rubber Board was constituted by the Government of India as a body corporate under the Rubber Act 1947 with the primary objective of the overall development of the rubber industry in the country. Natural rubber often referred to as nature's most versatile raw material is obtained from the latex produced by *Hevea brasiliensis*. This raw material finds its use in about 35,000 products and contributes substantially to the industrial and economic development of the country. The Board established a strong development and extension network and as a result, the rubber plantation sector achieved an impressive all-round growth in expansion of area and in the increase in production and productivity. Simultaneously, the Board gave thrust to research and the Rubber Research Institute of India (RRII) was established in 1955 for carrying

out research on biological and technological improvement of rubber.

The Board has been encouraging scientific planting of rubber right from its inception. Since the sixth plan period, an integrated scheme for development of rubber plantations, namely, the Rubber Plantation Development Scheme for promoting both newplanting and

replanting has been in operation and this is rated by the World Bank as one of the highly successful schemes. Besides, development and extension support is given to growers for increasing productivity,



improving the quality of produce through individual as well as community efforts, facilitating formation of grass roots level organisations of growers and empowering them to ensure sustainable development through rubber cultivation. The development of rubber plantation

in non-traditional region, especially in north-eastern states has also achieved significant growth where rubber development is taken up adopting an integrated approach. Special mention needs to be made about the rubber based settlement programmes for tribal shifting cultivators in the north-east and in other states such as Orissa, Andhra Pradesh, Karnataka and Kerala ensuring overall socio-economic development/eco-restoration.

The Board has also been adopting several measures to promote diversified as well as non-conventional uses of natural rubber by supporting rubber products manufacturing sector, extending assistance in skill upgradation and infrastructure development.

The Rubber Research Institute of India has made significant contribution by breeding and releasing the popular clone RR11 105, one of the highest yielding clones in the world. Re-

search is at a final stage in developing five more high yielding clones which will be released in near future. The RRII has also evolved agro-technologies on various cultural practices on 'Hevea'. The Institute made substantial contribution to improving the processing of rubber and evolving speciality rubbers, which can effectively substitute synthetic rubbers. Research on special environment protection systems to check pollution in processing factories, energy saving mechanisms for processing, processing of rubber wood, ancillary income generation activities and rubber based cropping system has yielded useful results.

### Performance during 2002-03

The production, consumption and growth rate of natural rubber for the year 2002-03 and the immediately preceding two years are-

| Year    | Production<br>(in MT) | Growth rate | Consumption<br>(in MT) | Growth rate |
|---------|-----------------------|-------------|------------------------|-------------|
| 2000-01 | 6,30,405              | 1.3%        | 6,31,475               | 0.5%        |
| 2001-02 | 6,31,400              | 0.2%        | 6,38,210               | 1.1%        |
| 2002-03 | 6,49,435              | 2.9%        | 6,95,425               | 9%          |

### Price

The yearly average price of RSS-4 grade rubber at Kottayam for the last three years was -

| Year    | Price per quintal |
|---------|-------------------|
| 2000-01 | Rs. 3,036/-       |
| 2001-02 | Rs. 3,228/-       |
| 2002-03 | Rs. 3,919/-       |



## PART - II

# CONSTITUTION AND FUNCTIONS

### CONSTITUTION OF THE BOARD

As per Section 4 (3) of the Rubber Act 1947, the Board shall consist of

- a) A Chairman to be appointed by the Central Government;
- b) Two members to represent the State of Tamilnadu, of whom one shall be a person representing the rubber producing interests;
- c) Eight members to represent the State of Kerala, six of whom shall represent the rubber producing interests, three of such six being persons representing the small growers;

- d) Ten members to be nominated by the Central Govt., of whom two shall represent the manufacturers and four labour;
- e) Three members of parliament of whom two shall be elected by the Lok Sabha and one by the Rajya Sabha;
- f) The executive Director (ex-officio); and
- g) The Rubber Production Commissioner (ex-officio).

The position of Executive Director has not been filled so far.

### THE LIST OF MEMBERS OF THE RUBBER BOARD AS ON 31.03.2003 IS GIVEN BELOW:

|   |                                                        |                                              |
|---|--------------------------------------------------------|----------------------------------------------|
| 1 | <b>Shri S Maria Desalphine IAS</b>                     | Chairman, Rubber Board                       |
| 2 | <b>Shri Jawahar Lal Jaiswal</b><br>Member, Lok Sabha   | Member of Parliament under section 4(3) (e). |
| 3 | <b>Shri Sashikumar</b> , Member Lok Sabha              | do-                                          |
| 4 | <b>Shri Ramachandra Khuntia</b><br>Member, Rajya Sabha | do-                                          |

- |    |                                                                                                                                                                                                               |                                                                                                       |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 5  | <b>C Ramachandran IAS</b><br>Agricultural Production Commissioner<br>Govt. Of Kerala, Agriculture Department,<br>Government Secretariat,<br>Thiruvananthapuram.                                               | Representative of the Govt. of<br>Kerala under sub-rule (3) of<br>rule 3.                             |
| 6  | <b>A C Mathew</b><br>Chairman<br>Plantation Corporation of Kerala Ltd.<br>Kottayam                                                                                                                            | do-                                                                                                   |
| 7  | <b>S P Elangovan IAS</b><br>Secretary<br>Environment and Forest Dept.<br>Govt. of Tamilnadu, Chennai.                                                                                                         | Representative of the Govt.<br>Tamil Nadu under sub-rule<br>(2) of rule 3.                            |
| 8  | <b>Shri K Jacob Thomas</b><br>Managing Director<br>M/s. Vaniampara Rubber Co. Ltd.<br>Vazhakala Buildings, KK Road<br>Kottayam                                                                                | Representative of Large Growers<br>from the state of Kerala under<br>sub-rule (3) of rule 3.          |
| 9  | <b>Shri M D Joseph</b><br>Manniparambil, Kanjirappally<br>Kerala.                                                                                                                                             | do-                                                                                                   |
| 10 | <b>Shri A V George</b><br>M/s. Thamarapally Rubber Co., Ltd.<br>Kottayam                                                                                                                                      | Representative of Large Rubber<br>Growers from the State of Kerala<br>under sub rule (3) of Rule 3.   |
| 11 | <b>Shri E T Varghese</b><br>Patron<br>Indian Rubber Dealers' Federation<br>Rubber Bhawan, Kodimatha, Kottayam.                                                                                                | Representative of Other<br>interests under sub-rule (4) of<br>rule 3.                                 |
| 12 | <b>Shri A Jacob</b><br>Velimala Rubber Company Ltd.<br>Oopootil Buildings, KK Road, Kottayam.                                                                                                                 | Representative of the Large<br>Growers from the State of Tamil-<br>Nadu under sub-rule (2) of rule 3. |
| 13 | <b>Shri Suresh Elwadhi</b><br>Managing Partner<br>Elwadhi Rubber Products<br>New Delhi & Vice-President<br>All India Federation of Rubber Footwear<br>Manufacturers & Member,<br>Management Committee, AIRIA. | Representative of Rubber Goods<br>Manufacturers under clause (d) of<br>sub-section (3) of section 4.  |
| 14 | <b>Shri C Anantha Krishnan</b><br>General Secretary<br>Kanyakumari District<br>Rubber Estate Workers' Union<br>INTUC, Nagacode, Kulasekharam.                                                                 | Representative of Labour<br>interests under clause (d) of<br>sub-section (3) of section 4.            |

|    |                                                                                                                 |                                                                                                      |
|----|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 15 | <b>Shri K G Ravi</b><br>General Secretary,<br>Kerala State Karshaka Congress<br>Thiruvananthapuram              | Representative of Small Rubber<br>Growers in the State of Kerala<br>under sub rule (3) of Rule 3.    |
| 16 | <b>Shri P Lalaji Babu</b><br>General Secretary<br>All India Plantation Workers'<br>Federation, Kollam District. | Representative of Labour<br>interests under clause (d) of<br>sub-section (3) of section 4.           |
| 17 | <b>Shri Kanam Rajendran</b><br>Secretary<br>Kerala State Committee of AITUC<br>Thiruvananthapuram               | do-                                                                                                  |
| 18 | <b>Shri Ettumanoor V Radhakrishnan</b><br>Valayil House<br>Ettumanoor<br>Kottayam District.                     | Representative of Other<br>interests under sub-rule (4) of<br>rule 3.                                |
| 19 | <b>Shri P B Sathyan</b><br>Plavada Kochuveedu<br>South Vazhakulam Post<br>Aluva-5, Kerala.                      | Representative of Small Rubber<br>Growers in the State of Kerala<br>under sub-rule (3) of rule 3.    |
| 20 | <b>Shri C K Sajinarayanan</b><br>'Gayathri'<br>11/6, Link Road, Ayyanthole<br>Thrissur - 680 003.               | Representative of Labour Interests<br>under clause (d) of sub-section<br>(3) of section 4.           |
| 21 | <b>Smt Rema Reghunadan</b><br>'Smrithi', Akkikkavu<br>PO Chavakkad, Trichur District<br>Kerala.                 | Representative of Other interests<br>under sub rule (4) of Rule 3.                                   |
| 22 | <b>Shri V V Augustine</b><br>Valavanthuruthel<br>Edapally PO, Cochin.                                           | Representative of Rubber Goods<br>Manufacturers under clause (d) of<br>sub-section (3) of section 4. |
| 23 | <b>Shri P R Muralidharan</b><br>Pathalil House<br>S N Puram Post, Kottayam<br>Kerala                            | Representative of Small Rubber<br>Growers in the State of Kerala<br>under sub rule (3) of Rule 3.    |
| 24 | <b>Shri Joseph Vazhakkan</b><br>Vazhakamalayil<br>Ramapuram, Kottayam.                                          | Representative of Other interests<br>under sub rule (4) of Rule 3.                                   |
| 25 | <b>Dr. A K Krishnakumar</b><br>Rubber Production Commissioner<br>Rubber Board, Kottayam.                        | Ex-officio                                                                                           |
| 26 | Executive Director                                                                                              | <i>Vacant</i>                                                                                        |

## FUNCTIONS OF THE BOARD

The functions of the Board as laid down under Section 8 of the Rubber Act 1947 are-

- (i) Promote by such measures as it thinks fit the development of the rubber industry. The measures may provide for -
  - a) undertaking, assisting or encouraging scientific, technological and economic research;
  - b) training students growers in improved methods of planting, cultivation, manuring and spraying;
  - c) the supply of technical advice to rubber growers;

industry, including the import and export of rubber;

- b) to advise the Central Govt. with regard to participation in any international conference or scheme relating to rubber;
- c) to submit to the Central Govt. and such other authorities as may be prescribed half yearly reports on its activities and the working of the Act; and
- d) to prepare and furnish such other reports relating to the rubber industry as may be required by the Central Govt. from time to time.

Seven Committees have been formed to review the Board's activities vis-a-vis the func-



*Chairman S.M. Desalpine addressing the Rubber Board Meeting*

- d) improving the marketing of rubber;
- e) the collection of statistics from owners of estates, dealers and manufactures;
- f) securing better working conditions and the provisions and improvement of amenities and incentives for workers; and
- g) carrying out any other duties which may be vested with the Board.
- (ii) It shall also be the duty of the Board -
  - a) to advise the Central Govt. on all matters relating to the development of rubber

tions as laid down under Section 8 of the Rubber Act. These are Executive Committee, Research & Development Committee, Market Development Committee, Planting Committee, Statistics & Import / Export Committee, Labour Welfare Committee and Staff Affairs Committee.

Shri Ettumanoor V Radhakrishnan representing other interests, was elected as Vice-Chairman of the Board on 30.11.2002, for the period upto 21.8.03.

Shri S.M Desalpine IAS, continued as the Chairman of the Board during 2002-03.



## MEETINGS OF THE BOARD AND ITS COMMITTEES

The following meetings of the Board and of the Committees were held during the year.

|                                                                          |                                                                                        |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| a) Board meetings .....                                                  | 144th meeting - 06.04.2002<br>145th meeting - 22.07.2002<br>146th meeting - 30.11.2002 |
| b) Committee meetings.....                                               |                                                                                        |
| Executive Committee.....                                                 | 29.04.2002, 02.01.2003<br>& 24.03.2003                                                 |
| Research & Development Committee.....                                    | 05.10.2002                                                                             |
| Planting Committee.....                                                  | 21.09.2002                                                                             |
| Labour Welfare Committee.....                                            | 05.10.2002                                                                             |
| Statistics & Import/Export Committee.....                                | 21.09.2002 & 24.03.03                                                                  |
| Staff Affairs Committee.....                                             | 29.04.2002                                                                             |
| Combined meeting of executive Committee/<br>Market Development Committee | 17.08.2002                                                                             |
| Market Development Committee.....                                        | 26.10.2002, 26.12.2002<br>& 08.01.2003                                                 |



*A view of the Rubber Board Meeting*

In addition to the above Committees, Board has constituted Sub committees for promotion of export of NR, rubberisation of roads and to evaluate the performance of the Processing Companies promoted by the Board. These Committees met periodically and provided necessary guidance.

## ORGANISATIONAL SET UP

The activities of the Rubber Board are carried out through eight Departments viz. Rubber Production, Administration, Rubber Research, Processing and Product Development, Training & Technical Consultancy, Finance & Accounts, Statistics & Planning and

Licensing & Excise Duty; headed respectively by the Rubber Production Commissioner, the Secretary, the Director of Research, the Director (P&PD), the Director (T&TC), the Director (Finance), the Jt. Director (S&P) and the Director (L&ED). During the year under report, as the post of Secretary was lying vacant, the Director (L&ED) held additional charge of the post of the Secretary.

The Headquarters of the Board along with the Administration, Rubber Production, Statistics & Planning, Licensing & Excise Duty and Finance & Accounts Departments are located at own premises in Keezhukunne, Kottayam-686 002. The Department of Research, Department of P&PD and the Department of Training & Technical Consultancy are located at the Rubber Research Institute of India campus at Kottayam - 686 009.

There are nine Sub/Liaison Offices under the Licensing & Excise Duty Department. The Rubber Production Department has 5 Zonal Offices, 2 Nucleus Rubber Estate & Training centres, 40 regional offices, 1 ADO's Office, 189 Field Stations, 13 Regional Nurseries including the nurseries in the 3 District Development Centres, one demonstration centre (in Mizoram), one Central Nursery and 23 Tapper's

Training Schools located at different rubber growing regions.

The Research Department runs two Regional Research Stations in Kerala and a Regional Station each in TamilNadu, Karnataka, Maharashtra, Orissa, West Bengal, Assam, Meghalaya and Tripura. The Pilot Block Rubber Factory located at Kottayam, the Pilot Latex Processing Factory located at the Central Experiment Station at Chethackal and the Pilot Plant for Radiation Vulcanisation of Natural Rubber latex at Kottayam are run by the Department of Processing and Product Development. The Model TSR factory established under the World Bank Assisted Rubber Project is also run by the Department of Processing and Product Development.

The Chairman exercises administrative control over all the Departments and Offices of the Board. The total number of Officers and staff under the Board as on 31.3.2003 was 2105 consisting of 310 Group 'A' Officers, 602 Group 'B' Officers, 999 Group 'C' staff and 194 Group 'D' staff. Very cordial relations existed between the staff and the executive personnel.

The activities of the different departments are summarised in the following pages.

## PART - III

# ADMINISTRATION

The Administration Dept. consists of the following Sections and Divisions.

- 01 Establishment Section (General Administration, Personnel Administration & Entitlement)
- 02 Marketing Division
- 03 Labour Welfare Section
- 04 Legal Section
- 05 Hindi Section

### 1. ESTABLISHMENT SECTION

#### (a) General Administration

The important functions of the General Administration includes constitution/ reconstitution of the Board and its Sub Committees, convening the meetings of the Board and its Committees, monitoring implementation of the decisions of the Board, managing the house keeping activities etc.

#### (b) Entitlement

During the year, retirement benefits were given to 65 employees including 11 who sought voluntary retirement and one who was compulsorily retired. Family pension was given to 9 persons, 8 employees who died in harness and 1 kidnapped by extremists.

36 employees were given financial assistance for construction of house by advancing Rs. 1,05,86,186/-. Vehicle advance amounting to Rs. 13,04,749/- to 68 employees (Rs.2,55,300/- as car advance to two persons, Rs. 10,04,449/- as motor cycle advance to 36 employees, Rs. 45,000/- as cycle advance to 30 employees) was given. Besides, Rs.2,02,300/- as computer advance to 5 employees and Rs. 13,000/- as fan advance to 13 employees were also given.

Service books, leave accounts and personal files of employees were properly maintained.

#### (c) Personnel Administration

Selection of suitable personnel to vacant positions for smooth functioning of the Board was ensured following recognised recruitment rules and statutory provisions relating to reservation of posts for candidates from SC/ST/OBC communities and physically handicapped persons. There were properly constituted Selection Committees/DPCs for selection for personnel befitting job requirements. Periodical returns on the personnel recruited at reservation points were sent to the Government.

I The total number of Officers and staff under the Board as on 31.3.2003 was 2105 as detailed below.

| Sl. No. | Name of Department                  | Group A | Group B | Group C | Group D | Total |
|---------|-------------------------------------|---------|---------|---------|---------|-------|
| 1       | Rubber Production                   | 172     | 378     | 559     | 102     | 1211  |
| 2       | Research                            | 64      | 135     | 187     | 58      | 444   |
| 3       | Licensing &<br>Excise Duty          | 23      | 29      | 82      | 7       | 141   |
| 4       | Administration                      | 14      | 14      | 62      | 15      | 105   |
| 5       | Processing &<br>Product Dev.        | 17      | 19      | 40      | 5       | 81    |
| 6       | Finance & Accounts                  | 6       | 14      | 29      | 2       | 51    |
| 7       | Training & Technical<br>Consultancy | 9       | 7       | 27      | 4       | 47    |
| 8       | Statistics & Planning               | 5       | 6       | 13      | 1       | 25    |
|         | Total                               | 310     | 602     | 999     | 194     | 2105  |

II Groupwise details of female employees and their percentage to that of the total staff strength as on 31.3.2003.

| Group              | No. of female employees | Total staff strength | % of total   |
|--------------------|-------------------------|----------------------|--------------|
| A                  | 74                      | 310                  | 23.87        |
| B                  | 205                     | 602                  | 34.05        |
| C                  | 430                     | 999                  | 43.04        |
| D                  | 21                      | 194                  | 10.82        |
| <b>Grand Total</b> | <b>730</b>              | <b>2105</b>          | <b>34.68</b> |

## 2. MARKETING DIVISION

The Division attends to the work of collection of rubber prices, their compilation and dissemination. Publishing the daily prices of various grades of sheet rubber, SMR grades of block rubber and 60% latex in the Kula Lumpur market and Singapore Commodity Exchange were also attended. The price of scrap rubber

was collected and published twice a week. The domestic and international prices of various grades of rubber were loaded in the website of the Board on a daily basis.

The monthly average price of various grades of sheet rubber, ISNR 20 and 60% centrifuged latex in the domestic market for the



period under report is furnished at the end of this report.

### 3. LABOUR WELFARE SECTION

One of the important functions of the Board as laid down under section 8, sub section 2, and clause "f" of the Rubber Act 1947 is to "secure better working conditions and the provisions and improvement of amenities and incentives for workers". These functions are envisaged as a measure for the development and promotion of the rubber plantation industry, and to inculcate and generate an interest among the workers of rubber plantation industry who are indispensable for the development and promotion of rubber cultivation.

The Board carried out the above functions during the last financial year by implementing various welfare programmes. The budget allotted for the year was Rs. 212.05 lakh and the achievement was Rs. 2,12,01,169/- as against Rs. 1,22,16,277/- disbursed during the previous year.

The various schemes operated by the Board for the period under report are-

#### 1. Educational stipend Scheme

The Scheme provides for financial assistance for different courses of studies done by the children of rubber plantation workers, both in colleges and schools.

The stipend consists of (1) hostel/board-ing fee and (2) lumpsum grant.

#### 2. Educational Scholarship Scheme

Under the scheme scholarship is provided to the children of rubber plantation workers who pass out meritoriously. The scholarship amount ranges from Rs. 1000/- to Rs. 5000/-. This is given as an incentive for encouraging good performance in their studies by the children of plantation workers.



*Tapping of the rubber tree*

#### 3) Group Insurance cum Deposit scheme (9 phases)

This is a social security measure introduced for the security of the rubber plantation workers against injuries and death caused by accidents. The scheme has been introduced to provide insurance coverage for an amount of Rs. 20,000/- per workers employed in estates where plantation Labour Act is not applicable.

The scheme also encourages a habit of saving among the workers. The first phase started in the year 1986-87 and reached ninth phase in 2000-01 with an yearly workers contribution of Rs. 50/-. The contribution from the Board is Rs. 100/- per worker. Each scheme will be in operation for a period of ten years. An amount of Rs.1,10,684/- has been paid as

compensation under Group insurance Scheme to 40 workers during the year 2002-03.

**A new Group Insurance cum Deposit Scheme** was introduced in the year 2001-02 to provide insurance coverage exclusively for tappers in the small holdings for an amount of Rs. 50,000/- with a higher contribution of Rs.250/- each from among the applicants per year. The scheme provides higher compensation against accidents and also promotes the habit of saving among the tappers. The Board contributes Rs. 150/- per member annually under the scheme.

#### 4) Housing subsidy scheme

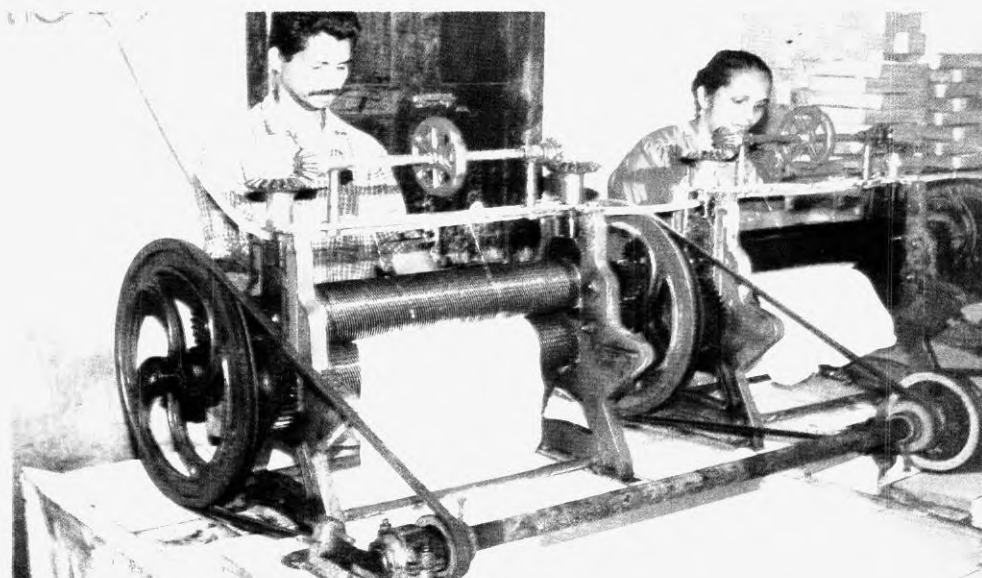
This scheme was introduced to provide financial assistance to tappers and workers in the rubber estates, for construction of houses in their own land. Under this scheme, the area of the estate where the applicant is employed should not be less than 0.75 ha. If such a tapper

#### 5) Scheme for providing sanitary facilities

The purpose of this scheme is to stimulate an interest for hygienic environment among the rubber tappers in the unorganised sector. This scheme assists the tappers to build latrine as per the plan and estimate prescribed by the Board. The financial assistance covers either 75% of the cost of construction or Rs. 3,000/- whichever is less.

#### 6) Medical Attendance Scheme

This scheme was introduced for the betterment of the health of the tappers in the unorganised sector. This scheme provides for reimbursement of medical expenses incurred for treatment of the tappers suffering from illness. The maximum amount payable is Rs.2000/- in a year. Higher financial assistance is given in case of serious diseases, to the extent of Rs. 10,000/- per applicant during his life time.



*Rubber Sheeting*

constructs a house as per the provisions of the scheme, a maximum amount of Rs. 7500/- or 25% of estimated cost whichever is less, will be granted as subsidy.

Another benefit is also given under the scheme to the tappers who have undergone sterilization operation. It is provided as an encouragement for the promotion of small

family norms among the small holding sector rubber tappers.

#### 7) Housing and sanitary subsidy scheme for SC/ST/OBC

This scheme is exclusively for SC/ST/OBC tappers who are employed in the unorganised sector. Assistance under this scheme is granted for construction of house with latrine to the extent of Rs. 14,000/- per applicant.

The scheme is financed from SCP/TSP fund.

Performance under the schemes for the year 2002-03 is as shown below:

| Name of scheme                         | Total No. of beneficiaries | Total amount disbursed (Rs) | Budget allocation for 2002-03 (Rs) |
|----------------------------------------|----------------------------|-----------------------------|------------------------------------|
| Educational stipend                    | 5669                       | 3061463                     | 3051050                            |
| Educational scholarship                | 214                        | 101750                      | 111950                             |
| Group Insurance cum deposit            | 9068                       | 1034900                     | 1036005                            |
| Housing subsidy                        | 1219                       | 9147500                     | 9105000                            |
| sanitary subsidy                       | 653                        | 1956500                     | 1989000                            |
| Medical attendance                     | 450                        | 766681                      | 773986                             |
| Housing & sanitary subsidy (SC/ST/OBC) | 692                        | 5132375                     | 5138375                            |
| <b>Total</b>                           | <b>17965</b>               | <b>21201169</b>             | <b>21205366</b>                    |

#### 4. LEGAL SECTION

Legal Section discharges the function of rendering advice/opinion to various departments /sections/ divisions of the Board, drafting legal documents, initiating steps for prosecution under the Rubber Act, 1947, assisting the departments in conciliation proceedings

in labour matters, tax cases and instructing and assisting the lawyers of the Board in conducting the litigations of the Board.

During the year under report, timely action/advice was rendered in 960 files referred to the legal section. Scrutiny of documents for determining the eligibility under the Rules was done in the cases of 36 applications for House Building Advances. Legal documents to be executed by the Board during the year under report were drafted/prepared as and when required. Appropriate steps were taken through lawyers to safeguard the interest of the Board in cases filed against the Board in various courts. Parawise comments and necessary instructions were given to Standing Counsels of the Board and the Central Government pleaders in cases pending in High Court and Supreme Court. In consumer disputes files before Redressal Forum in various districts the Section prepared and filed replies and represented the Board during the hearing.

Necessary assistance was given to RRS Dhenkanal, NRETC Andamans, Central Experiment Station, Chethakal, RRII Farm, HBSs Nettana and Paraliar, Nurseries/farms of RP Dept. etc. in dealing with labour matters. The Section prepared draft amendments proposed by the Board to Rubber Act, Rubber Rules, Rubber Board Employee's Conduct Rules and Rubber Board Service (Classification, Control and Appeal) Rules.

#### 5. HINDI SECTION

The Rubber Board is a notified office under Rule 10(4) of Official language Rules.

The following activities were undertaken by the Hindi Section of the Rubber Board during the reporting year.

##### Official Language Implementation Committee

Four meetings of the Official Language Implementation Committee of the Board were



held during the year. Quarterly Progress reports on Official Language implementation were presented in the meetings and discussed. The Agenda papers were prepared in accordance with the instructions of the Department of Official Language.

#### **Hindi Advisory Committee Meeting**

The Hindi Advisory Committee Meetings of the Ministry of Commerce and Industry held on 2002 were attended by the Chairman and Asst. Director(OL) and that held on 22.11.02, the Director (L&ED) and Asst. Director(OL).

#### **Hindi Fortnight/Hindi Day Celebration**

Hindi fortnight was celebrated from 17th to 27th September 2002 at the Headquarters of the Board and the Rubber Research Institute of India. A number of officers/employees participated in the various competitions conducted and winners were given prizes.

Hindi day was celebrated in 30 subordinate offices of the Board. Various competitions were arranged for the employees and winners were given prizes and certificates. Different eminent personalities attended these functions.

#### **Bi-monthly bulletin in Hindi**

The Bi-monthly Hindi bulletin "Rubber Samachar" were brought out during the year.

#### **Hindi Teaching Scheme**

As per the policy of the Union, Hindi Teaching in 'C' region has to be completed by the year 2005. Various classes under the Hindi teaching were conducted at Head Office and RRII. 9 Officials attended Hindi Typewriting classes. 28 officials passed Pragma examination during the year and 5 officials passed Typewriting examination. Cash award and personal pay were given to the eligible officials for passing these examinations.

#### **Hindi Workshop**

Hindi Workshops were conducted in 25 Regional Offices. A total of 457 officers/em-

ployees were imparted training in Official Language.

#### **Town Official Language Implementation Committee**

Two meetings of TOLIC Committee were conducted during the year. The Chairman, Rubber board is the Chairman of the TOLIC. Joint Hindi Week Celebration was also conducted during the year for the officials of the member organisations.

#### **Hindi Library**

A Hindi Library is functioning under the Hindi Section of the Board. Board's employees utilize this facility. For encouraging noting and drafting in Hindi, necessary books were purchased and supplied to different offices of the Board.

#### **General**

As per Section 3(3) of the OL Act, the documents like Office memoranda, Circulars and Orders were translated to Hindi.

Rubber Board was awarded a trophy for having secured the highest points in joint Hindi Week Celebration of Town Official Language Implementation Committee, Kottayam.

#### **Schemes of the Government**

The computer installed in Hindi Section has been provided with multilingual software. Action is in progress to install Hindi Software in all other computers.

#### **Aaj Ka Sabda**

The Board Continued writing Aaj Ka Sabda at Head Office. Instructions were also issued to Subordinate Offices for writing Aaj Ka Sabda.

#### **Incentive Scheme for original work in Hindi**

More officials were encouraged to do original noting in Hindi. Necessary assistance was provided to them for writing and noting in Hindi. A total of 215 officials participated in the



incentive scheme and they were given cash awards under the scheme.

### Official Language Inspection

Official Language Inspections were conducted in 18 subordinate offices of the Board during the year.

### DIVISIONS FUNCTIONING UNDER THE DIRECT CONTROL OF CHAIRMAN

1. Publicity & Public Relations Division
2. Vigilance Division

#### 1. Publicity & Public Relations Division

The P&PR Division published the following journals and other publications on various aspects of rubber cultivation during the period.

Life Subscriptions : 6086 Nos.

#### 2. Rubber Statistical News

12 Issues of the 'Rubber Statistical News' were brought out during the year 2002-03.

#### 3. Press Release

54 Press releases were issued from the Division.

#### 4. Advertisements

105 advertisements (including display and classified) were issued and 96 advertisements were received for "Rubber" Magazine.

#### 5. All India Radio

One talk was recorded and broadcast



*Rubber Board stall at UPASI exhibition*

#### 1. Rubber Magazine

12 Issues of the magazine were brought out during the year. The circulation position is

Average monthly subscriptions : 13958 Nos.

through the AIR by the Asst. Director(P) of the Division. The Asst. Director(P) also worked as a member in the committee which organised and arranged for the recording and broadcast of a 13 episode series in AIR on Rubber.

## 6. Seminars & Meetings

The Officers of the Division participated and spoke in several seminars, meetings and other public functions connected with the Board, companies, Rubber Producers' Societies, Inter Media Publicity Co-ordination Committee, Public Sector Public Relations Forum and All India Radio etc.

## 7. Exhibition

The division participated in 11 exhibitions viz.

- i. UPASI exhibition at Coonoor
- ii. Khadimela at Kottayam
- iii. Karshikamela at Thodupuzha
- iv. Suvarnotsav at Muvattupuzha
- v. Exhibition at Baselius College, Kottayam
- vi. Mathrubhoomi JTFC Mela at Thrissur
- vii. Index at Kottayam
- viii. India Rubber Expo, Mumbai
- ix 'Fusion' 2003 at Thodupuzha
- x. One day exhibition at Kulasekharam held in connection with Centenary Celebrations.
- xi. One day exhibition at Kannur held in connection with Centenary Celebrations.

## 8. Articles

Officers of the division published 14 articles in various dailies, agricultural magazines and the "Rubber" Magazine.

## 9. Inside Rubber Board

3 issues of 'Inside Rubber Board' were published.

## 10. Rubber Grower's Companion 2003

9750 copies of "Rubber Grower's Companion 2003" and 1000 Nos. of "Rubber and its Cultivation" were printed and distributed.

## 11. Centenary Celebrations

The Centenary Celebration of rubber

plantations in India was held in the year 2002. Wide publicity was given for the Celebration. A souvenir comprising 118 pages was brought out in connection with the centenary Celebration of rubber plantation industry in India.

## 2. VIGILANCE DIVISION

### 1. Enquiry/Investigation

The Vigilance Division of the Board took up enquiry/investigation on 11 complaints against 5 Group A & B officers and 6 Group C & D employees during the year under report. All these complaints were properly enquired into and appropriate action was recommended / taken against the erring Board's employees wherever found necessary.

### 2. Cases

Major Panalty proceedings against one official and minor penalty action against 2 officials were initiated during the period under report.

### 3. Property statements and aquisition/ disposal of movable/immovable property

Annual statements of immovable property as on 31.12.2002 were called for from all officers of Group A & B status. The statements thus received from the officers have been properly dealt with. The Vigilance Division also processed 98 applications relating to transactions in immovable property and 70 applications pertaining to transactions in movable property.

### 4. Other activities

As per instructions received from the Central Vigilance Commission, the Board observed the "Vigilance Awareness Week" during the period from 31.10.2002 to 6.11.2002 by taking a pledge by all officers and employees of the Board and exhibiting posters and banners in and around the office premises. Necessary advice was rendered to various Departments of the Board on matters referred to the Division.

## PART IV

### RUBBER PRODUCTION

The Rubber Production department is responsible for planning, formulation and implementation of schemes for promoting rubber cultivation, production of natural rubber, supporting primary processing and improving quality of the produce. The major programmes formulated and implemented during the year 2002-2003 are as follows.

#### 1) Rubber Plantation Development Scheme

The scheme provided for free extension support and financial assistance for undertaking replanting of old and uneconomic plantations and for new planting. The target for replanting was 3200 ha and that for new planting was 3000 ha. (including 2000 ha. in NE). The financial target for the year 2002-2003 was Rs.1280.95 lakh. The performance results of the RPD Scheme during 2002-2003, are shown below.

| Particulars                                                                       | 2002-2003    |
|-----------------------------------------------------------------------------------|--------------|
| 1. No. of applications                                                            | 12257        |
| 2. Area as per applications (ha)                                                  | 9038.24      |
| 3. No. of permit issued                                                           | 9119         |
| 4. Permitted area (ha)                                                            | 6465.49      |
| 5. Amount disbursed as assistance - including spill over payment of previous year | Rs.1425 lakh |

#### Insurance of Rubber plantations

Rubber plantations are insured against natural calamities. All immature plantations raised under the RPD scheme and mature plantations on a voluntary basis upto 22 years of age are given insurance coverage. Insurance of immature plantations outside the RPD Scheme, is optional to the growers. Details of plantations insured and compensation paid are given below.

| Details                       | 2002-2003 | Cumulative total upto 2002-2003 |
|-------------------------------|-----------|---------------------------------|
| Immature area insured (in ha) | 4,983.53  | 95,954.97                       |
| No. of holdings insured       | 7,734     | 1,44,079                        |
| Compensation paid (in lakh)   | 38.19     | 227.61                          |
| No. of holdings               | 433       | 6148                            |
| No. of beneficiaries          | 1282      | 6131                            |

## Rubber Plantation Development in NE Region

Considering the excellent potential for rubber plantation development in the North Eastern region, Rubber Production Department continued its activities for servicing the existing

## Nucleus Rubber Estate and Training Centres (NRETC) and District Development Centres (DDC)

The Nucleus Rubber Estate and Training Centres (NRETC) in Tripura State and District Development Centres (DDC) in the states of



*Group processing*

plantations and concentrated on area expansion. 3060 applications covering an area of 2643.27 ha were received under RPD scheme for new planting, out of which 2614 permits were issued for planting an area of 2202.61 ha. During the year, 107 tribals were selected for block planting in an area of 110.2 ha. The cumulative total area of Block planting and the number of beneficiaries as on 31.03.03 were 2653.28 ha. and 2338 Nos. respectively. 1182 beneficiaries participated in group planting in an area of 497.33 ha. The total area under group planting as on 31.3.03 was 1662.30 ha. In order to raise polybagged plants for next years' planting 11.17 lakh budded stumps to 2641 growers were distributed. Rs. 461.63 lakh was disbursed during this year under Rubber Plantation Development Scheme in the North-Eastern Region.

Assam (2 Nos.) and Meghalaya (1 No.) are maintained by the Department to cater to the needs of rubber growers. The Rubber Research and Training Centre at Agartala and DDC Jingitchakgre have conducted training on various subjects for 50 batches comprising 732 growers. Exhibitions were also conducted which were visited by 2600 growers. 109 RPSs/ RGSs were formed with a total grower participation of 6650. Six seminars, 557 group meeting/ campaigns were conducted and the grower participation was 10407. A Rubber Plantation Training and Research Centre is being established in Assam.

## Non-Traditional area other than NE Region

The department continued its activities of servicing existing plantations and also expanding area under rubber in the states of Karnataka,



Maharashtra, Goa, Orissa, Andhra Pradesh, West Bengal. Apart from the Rubber Plantation Development Scheme and other extension support schemes, Block plantation project aimed at economic settlement of Tribal growers were also under implementation in these regions. 106 applications for planting an area of 63.55 ha. were received out of which 79 permits covering an area of 54.55 ha. were issued. The planting grant disbursed was Rs. 9.30 lakh. 72 tribal families were benefited through Block Planting Scheme. 35 Group meetings were conducted in which 944 growers participated.

## 2. Promotion of rubber cultivation among scheduled castes/scheduled tribes through block planting and group planting schemes.

This project, implemented jointly by the Board and the concerned State Governments, are currently in operation in the States of Kerala, Tripura, Orissa, Andhra Pradesh and Karnataka. It is implemented by adopting an integrated approach aiming at the overall development of Tribal/SC category of growers. The concerned State Governments are financially supporting the project. The details are as shown below.

| State          | Planting in<br>2002-2003 (in ha) | Total area planted upto<br>2002-03 (in ha) |
|----------------|----------------------------------|--------------------------------------------|
| Tripura        | 110.20                           | 2653.26                                    |
| Orissa         | 62.48                            | 250.00                                     |
| Andhra Pradesh | Nil                              | 82.00                                      |
| Karnataka      | 49.80                            | 225.00                                     |
| Kerala         | 91.18                            | 1380.34                                    |
| <b>Total</b>   | <b>313.66</b>                    | <b>4590.60</b>                             |

## 3) Advisory and Extension services to growers for scientific planting and production and Supply of plantation requisites for popularization and improving production and processing.

### a) Assistance for primary processing, ancillary income generation etc.

These are schemes, formulated and implemented by the Extension wing, on a need basis for providing financial and technical assistance. The physical and financial target and achievement for various schemes are given below.

| Scheme  |                                                  | Target           |                       | Achievement      |                       |
|---------|--------------------------------------------------|------------------|-----------------------|------------------|-----------------------|
|         |                                                  | Physical<br>Nos. | Financial<br>Rs. lakh | Physical<br>Nos. | Financial<br>Rs. lakh |
| Sl. No. | I TRADITIONAL AREA                               |                  |                       |                  |                       |
| 1       | Assistance for installing Rubber Sheeting Roller | 878              | 8.78                  | 878              | 8.78                  |
| 2       | Assistance for constructing Smoke House          | 1573             | 47.14                 | 1573             | 47.14                 |
| 3       | Distribution of leguminous Cover seeds           |                  |                       |                  |                       |
|         | 1. Pueraria seeds                                |                  | 4.41                  | 4206 kg          | 4.16                  |
|         | 2. Mucuna seeds                                  |                  |                       | 550 kg           | 0.41                  |
| 4       | Assistance for generating Biogas                 | 1733             | 48.91                 | 1733             | 49.34                 |

| Scheme                                            | Target        |                    | Achievement   |                    |
|---------------------------------------------------|---------------|--------------------|---------------|--------------------|
|                                                   | Physical Nos. | Financial Rs. lakh | Physical Nos. | Financial Rs. lakh |
| <b>II NT AREAS</b>                                |               |                    |               |                    |
| 1. Assistance for constructing Smoke House        |               | 40                 | 4.00          | 70 3.89            |
| 2. Assistance for installing Rubber Sheeting      |               |                    |               |                    |
| 2. Roller                                         | 40            | 2.00               | 29            | 1.31               |
| 3 *Assistance for transportation of estate inputs |               | -                  | 6.55          | - 6.55             |

Assistance for transportation of estate inputs was given to M/s. Manimalayar Rubbers (P) Ltd. (a trading company promoted by the Board) for transporting estate inputs to the NE region.

In addition to the above schemes, certain other schemes have been formulated for the non-traditional area alone. The target and achievement for the same in the year 2002-03 are as follows:-

| Sl. No. | Scheme                                 | Target        |                       | Achievement   |                       |
|---------|----------------------------------------|---------------|-----------------------|---------------|-----------------------|
|         |                                        | Physical Nos. | Financial Rs. in lakh | Physical Nos. | Financial Rs. in lakh |
| 1       | Boundary protection (General category) | -             | 5.00                  | 736           | 13.34                 |
| 2       | Irrigation                             | 40            | 2.00                  | 4             | 0.63                  |

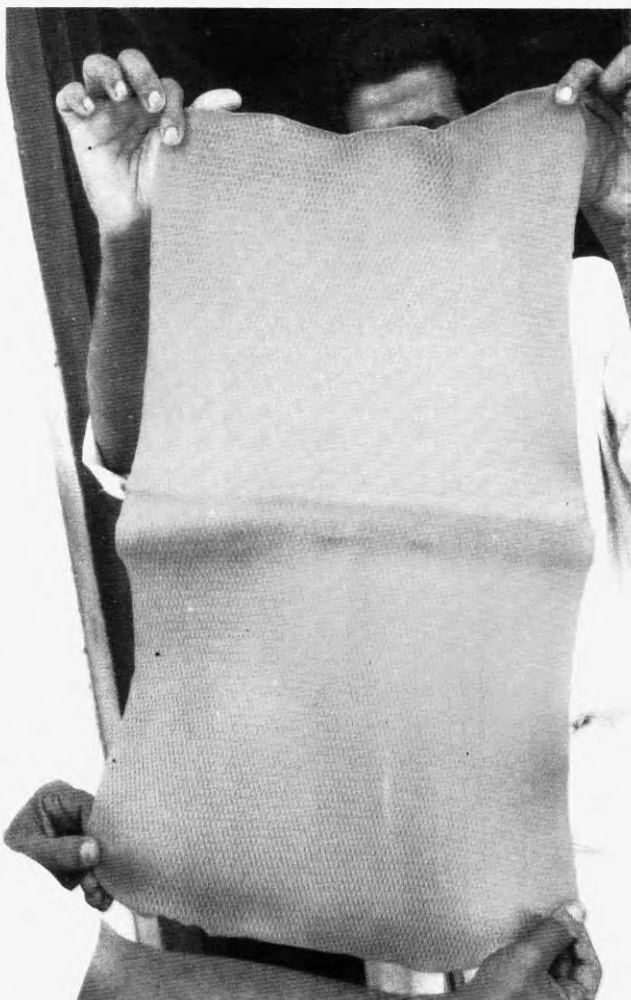
#### b) Planting Material Generation

With the twin objective of promoting quality planting material and controlling its market price, the Board is producing and distributing quality planting material to a limited extent to growers at cost price. Price concession is also offered to the small growers. The planting material so produced were issued to the needy growers for raising source bush material or for raising plantations. The details of planting material generated during the year 2002-03 are:

No. of nurseries owned by the Board - 15 (including the Central Nursery and the Nurseries in the DDCs)

Area of Nurseries - 72.17 ha

| Item                                  | Achievement   |
|---------------------------------------|---------------|
| <b>Production in Traditional Area</b> |               |
| Green budded stumps                   | 1,66,208 nos. |
| Brown budded stumps                   | 6,67,524 „    |
| Total                                 | 8,33,732 „    |
| <b>Production in NT areas</b>         |               |
| Brown budded stumps                   | 5,63,070 „    |



*Grading of Rubber Sheets*

K.M. Chandy Memorial Best Grower Award” to be given biennially to the Best Rubber Producers’ Society and small Growers respectively. During the year, the Suvarna Sangham Award was given to Kalampur RPS and Prof. KM Chandy Memorial Award to Sri Sadanandan, Nimil Bhavan, Pidavoor, Pathanapuram on 2nd January 2003.

- 4) **Schemes for primary processing and quality upgradation of small holders produce.**

#### **Modernization of Technically Specified Rubber Factories**

The scheme is aimed at supporting RPSs to set up crop collection and group processing facilities so as to establish a better raw material supply chain for quality upgradation of Technically Specified Rubber (Block Rubber).

Details of assistance given to RPSs under the scheme for modernization of TSR factories are shown below.

#### **c) Sasthradarshan Programme**

Under the Sasthradarshan Programme, a total number of 250 growers from the non-traditional area was brought to Kerala in 20 batches from Agarthala, Guwahati and Parlekhamundi and they were given training on various aspects of rubber cultivation in traditional areas.

#### **d) Suvarna Sangham and Best small Grower Award**

The Board has instituted two awards namely “Suvarna Sangham Award” and “Prof.



*Packing of Rubber Sheets*

| Sl. No | Nature of assistance        | No. of RPSs | Assistance (Rs. in lakh) |
|--------|-----------------------------|-------------|--------------------------|
| 1.     | Construction of Building    | 58          | 74.33                    |
| 2.     | Other facilities            | 59          | 10.10                    |
| 3      | Effluent treatment          | 44          | 33.00                    |
| 4      | Sheeting Battery            | 50          | 24.75                    |
| 5      | Aluminium dishes            | 59          | 13.80                    |
| 6      | Coagulation troughs         | 26          | 11.70                    |
| 7      | Latex collection equipments | 166         | 17.91                    |
| 8      | Barrels and gas             | 100         | 11.38                    |
|        | <b>Total</b>                |             | <b>196.97</b>            |

- 5) **Promotion of group activities, self help groups among small rubber holders - RPS/Model RPS.**

#### **Rubber Producers' Societies (RPS)**

The Board has adopted a group approach growers by participatory approach. Efforts are also being made to revitalize the defunct RPSs. Details of RPSs thus formed are shown below.

| Details           | 2002-2003 | Cumulative upto 2002-2003 |
|-------------------|-----------|---------------------------|
| RPSs newly formed | 21        | 2148                      |
| RPSs rejuvenated  | 25        | 810                       |

During the year, 2733 executive meetings of RPSs were arranged in which 15519 Director Board members participated. Besides 855 General body meetings of RPSs were conducted in which 20175 growers participated.

#### **Model RPSs, the technology transfer centres**

The Board has selected 35 RPSs, 30 in traditional region, and 5 in non traditional region, as model RPSs and they are supported by the Board financially and technically to set up infrastructure required for functioning as centres



*Weighing of Rubber Sheets*



for technology transfer and model primary processing. These model RPSs are also functioning as Training centres for growers, workers etc. Training programmes were conducted on various subjects such as plantation management, quality sheet making, beekeeping, manuring, plant protection and tapping etc. These centres have been equipped with audio visual facility for conducting training programmes.

For the effective use of information technology for knowledge upgradation computers were used by major centres. Audio visual aids provided to the Regional Offices of the Board, were used in 1080 meetings in which 32192 growers attended.

#### **Financial assistance for construction of smoke house to RPSs for group processing**

Financial assistance were also given to RPSs for construction of smoke house with a capacity of 1000 kg for quality upgradation of sheet rubber. The details of assistance are given below:

|                         |               |
|-------------------------|---------------|
| No. of beneficiary RPSs | - 20 Nos.     |
| Amount paid             | - Rs. 20 lakh |

During the year, an amount of Rs. 6.54 lakh was also disbursed to 30 RPSs

being the spill over payment of the previous year.

#### **Financial Assistance for group processing under 10th plan**

Rs. 12.15 lakh was disbursed among 28 RPSs for purchasing material for group processing. In addition, Rs. 3.60 lakh was disbursed among 8 other RPSs as part payment for construction of smoke houses.

#### **Farmer education programme**

For reason of wide ratio between the extension officials and growers numbering about a million, the department has been promoting a group approach to maintain contact with the grower community. Campaign programmes are being conducted every year in order to popularise the modern techniques of rubber cultivation and processing.

During the period, 4012 meetings/seminars were conducted in which 99759 growers participated. The main theme of the meeting/seminars was cost competitiveness in rubber production.

The details of the meetings conducted and the number of participants are given below.

| Type of meeting  | No: of meetings | Participants |
|------------------|-----------------|--------------|
| Full day seminar | 60              | 5168         |
| Half day meeting | 731             | 22600        |
| Group meeting    | 1132            | 19055        |
| Campaign meeting | 2089            | 52936        |
| <b>Total</b>     | <b>4012</b>     | <b>99759</b> |

## 6) Training of rubber tappers and growers for income generation

## Tappers Training

There are 23 regular Tappers Training Schools run by the Board at different plantation centres for imparting training to small growers and workers in tapping. The details are given below.

| Sl. No. | Area                 | Target                   |                        | Achievement                     |                        |
|---------|----------------------|--------------------------|------------------------|---------------------------------|------------------------|
|         |                      | Physical<br>(in batches) | Financial<br>(in lakh) | Physical<br>(in batches)        | Financial<br>(in lakh) |
| 1       | Traditional area     | 122                      | 18.96                  | 1569 trainees<br>in 108 batches | 13.48                  |
| 2       | Non traditional area | 33                       | 20 batches             | 303 trainees in                 | 2.16                   |
|         | <b>Total</b>         | <b>155</b>               | <b>24.07</b>           | <b>128</b>                      | <b>15.64</b>           |

The Board is also conducting short term intensive training courses on various practical aspects of scientific tapping.

Details are shown below:-

| Sl. No. | Area                 | Target                       |                            | Achievement                  |                            |
|---------|----------------------|------------------------------|----------------------------|------------------------------|----------------------------|
|         |                      | Physical<br>(No. of batches) | Financial<br>(in Rs. lakh) | Physical<br>(No. of batches) | Financial<br>(in Rs. lakh) |
| 1       | Traditional area     | 425                          | 19.98                      | *430                         | 19.04                      |
| 2       | Non traditional area | 73                           | 3.03                       | 69                           | 2.76                       |

\* In total 8074 tappers/growers (7344 in traditional area and 730 in NT area) were trained in 499 batches.

## Women empowerment programme

The department through its Development Officer (women Development) in the central office and nodal officers in Regional Offices continued to provide logistic support to the women empowerment programmes (income generation as well as training activities) initiated by RPSs under the World Bank Assisted India Rubber Project. The women self help groups were supported strongly in the areas of training and for marketing of their products.

## Training Programme for Technical Officers/Growers

As part of Human Resources Develop-

ment programmes of the Rubber Board, two development Officers were deputed for training to Michigan State University in USA. 34 Extension Officers of the Board and 13 Director Board Members of RPSs were trained at Indian Institute of plantation Management at Bangalore. 20 Extension Officers were trained at Kerala Agriculture University on Gender perspective in Agriculture Programme. In addition, five growers, one officer from the Ministry of Commerce, Govt. of India and the Joint Rubber Production Commissioner (Etnn) were deputed to Thailand for attending an international rubber growers' conference.

## PART V

# RUBBER RESEARCH

The Rubber Research Institute of India (RRII) was established in 1955 with its headquarters at Kottayam. The main research farm of the Institute is located in an area of 250 ha. at Ranni in Pathanamthitta District, Kerala State. It has 12 Regional Research Stations spread across the country in the states of Kerala, Tamil Nadu,

Karnataka, Maharashtra, Chattisgarh, Orissa, West Bengal, Assam, Meghalaya and Tripura. Five Regional Research Stations in the North-East form the North-Eastern Research complex with its headquarters at Agarthala. RRII has 125 Scientists and 319 supporting staff and conducts research and development work in the



*Rubber Research Institute of India*

fields of plant breeding, germplasm conservation, biotechnology, exploitation, agronomy and soil science, Plant pathology, economics and rubber processing and rubber technology.

Research programmes of Botany division on crop improvement progressed well. Five clones namely, RRII 414, RRII 417, RRII 422, RRII 429 and RRII 430, continued to give better yield than RRII 105 in the small-scale trial with yield improvement ranging from 23 to 49 percent. These clones are maintaining similar trend in the large-scale trial also. In the multidisciplinary trial, clones PB 314, PB 255, PB 312, PB 280, PB 311 and PB 260 were performing better than RRII 105 after four years of yield recording. Clones PB 235, PB 280 and PB 260 showed high vigour and high yield indicating their potential as latex timber clones. In the trial on progenies of prepotent clones, fifty clones showed promising yield compared to RRII 105. Young budded plants were found superior to green budded plants. Pollen sterility was found to be more in brown bast affected trees than in normal trees.

Conservation, characterization and evaluation of germplasm of both Wickham and wild origin were continued. Multiplication of 1250 wild germplasm accessions for re-establishment of source bush nurseries was completed. One hundred and thirty eight herbarium specimens of 46 accessions were prepared. A data bank software was developed in the Institute and data entry was initiated. One round of field screening for *Oidium* resistance was completed in both source bush nurseries and field trials. Four species of *Hevea*, viz., *H. guianensis*, *H. pauciflora*, *H. collina* and *H. camaragoana* were obtained from the Rubber Research Institute of Indonesia. Two species, *H. spruceana* and *H. benthamiana* were supplied to the Rubber Research Institute of Sri Lanka. In the RAPD studies on three *Hevea* species, species specific markers were identified that could be successfully used in the diagnosis of interspecific hybrids. In another study seven unique polymor-

phic fragments have been detected in *H. benthamiana* showing resistance to various fungal diseases.

A large scale field evaluation of RRII 105 plants produced through somatic embryogenesis was laid out at the Central Experiment Station by the Biotechnology Division. Transgenic *Hevea* plants integrated with the gene coding for superoxide dismutase produced earlier were found growing well. Twenty more transgenic plants integrated with the same gene were hardened and established in the polythene bags. The structure of the gene coding for B-1,3 glucanase involved in tolerance to many diseases was isolated and studied. Methods were standardized for developing cDNA and genomic DNA libraries of *Hevea brasiliensis*. A partial cDNA and genomic DNA library were developed.

Recommendation of low frequency tapping systems for reducing cost of production of NR was well received in the estate sector and medium holdings. Efforts are on to popularize these among small holdings. Success of low frequency tapping got international recognition and the leader of the exploitation research team of RRII was made liaison officer of the International Rubber Research and Development Board (IRRDB) for coordinating international activities of the newly constituted specialists group of exploitation scientists of member countries. A number of lab to land programmes were undertaken for extending low frequency tapping. Latex diagnosis studies were continued in small holdings and estates for advisory work. Studies were extended to RRII 400 series clones.

Investigations of the Agronomy Division on integrated weed management, soil and water conservation, intercropping and cropping systems integrating annual and perennial crops and timber species and fertilizer management progressed satisfactorily. Results from the fertilizer experiment indicated the possibility of re-



ducing the dose and frequency of application of nitrogen through controlled release of fertilizer. The experiment on weed management revealed that an integrated approach of spraying the herbicide glyphosate in the plant basin and slash weeding the remaining areas could be cost effective and eco-friendly. In the study on the effectiveness and bowl sludge, a waste material from latex centrifuge factories, it was found that the sludge was as good as rock phosphate in promoting growth and yield of rubber. Results of a survey showed that growth and yield of rubber are better in low lying areas and upland paddy fields. As an advisory service to the planters, discriminatory fertilizer recommendations were provided on 837 individual fields belonging to 29 large estates. For discriminatory fertilizer applications, the DRIS unit of the Agronomy division analysed 9924 soil samples and 1142 leaf samples and 5200 recommendations were issued to holdings.

Plant Pathology Division conducted surveys on disease occurrence and investigations on control measures. A survey on Phytophthora leaf fall disease on RR II 105 was conducted covering an area of 1,30,000 hectares. More than 60% of the area had moderate to severe leaf fall. Over 600 accessions of wild genotypes were

screened for tolerance to Phytophthora and Oidium leaf diseases. The work yielded 10 accessions tolerant to Phytophthora and 20 accessions to Oidium. In the disease control trials, 20% dusting of hexagonazole was observed to give simultaneous protection against Oidium and Corynespora leaf diseases. Studies on seasonal occurrence of Corynespora leaf disease revealed that the peak incidence of the disease was from mid March to April. For the control of borer beetles, swabbing the affected tree trunk with a mixture of carbaryl 0.5% and quinalphos 0.25% was found effective.

Clonal variation in chlorophyll degradation was observed when leaf discs were incubated in 60% PEG and exposed to open sunlight. The degradation was faster in young leaves and more than 60% of chlorophyll was found degraded. The method appeared to be good for screening for drought and high light tolerance. RAPD analysis of the root stock and scion showed that the genetic distance between root stock and scion was higher in TPD affected trees than in normal healthy trees of Hevea. Ethylene evolution was found to be more in TPD affected trees.

Studies on the quality status of sheet rubber from different rubber growing regions was



*Training in upward tapping*

continued by the Rubber Chemistry, Physics and Technology (RCPT) division. The semiautomatic machine for cleaning sheet rubber was modified for improving its performance and reducing cost. In order to upgrade the quality of field coagulum, a preservative was identified. Enzymatically deproteinized natural rubber latex was prepared and evaluated in a gloves producing unit to test the feasibility of the process. Six hundred kg of ENR-50 latex was supplied to a prominent industrial group for R & D trials. A titration method for the quick determination of dry rubber content of NR latex was standardized. An accelerated test was developed to predict the maximum attainable value for MST, viscosity and KOH number of centrifuged NR latex having VFA under control with reasonable accuracy within four days of its production.

The implications of WTO agreement on Indian natural rubber sector was studied by the Economics division and has resulted in two reports namely, 1. The Genesis of WTO and the Aftermath, and 2. WTO and the Natural Rubber Sector in India. Socio-economic status of the tappers in the small holding sector was studied in another study. The study indicated need for reorienting the wage structure based on tapper productivity. An incentive scheme is considered to be necessary to improve tapping efficiency and to ensure retention of highly skilled and experienced tappers. From a long-term perspective, a labour reserve mechanism attached to the Rubber Producers Societies was considered essential.

The Regional Research Stations located in different regions carried out location specific research on *Hevea* cultivation and exploitation. At Regional Research Station, Agartala the trial on intercropping of tea with rubber progressed well. The yield of tea leaf was maximum in the month of October. High density planting was found to reduce wind damage. A three tier wind belt was also found to reduce wind damage. From the experiments at Agarthala, the clone PB 235 was found to be the top yielder followed by RR II 203 and RRIM 600. The mobile soil test-

ing unit attached to the Station provided discriminatory fertilizer recommendations to 188 growers based on soil and leaf analysis.

At the Regional Research Station, Tura in Meghalaya, the clone RRIM 600 is the top yielder followed by RR II 105 and PB 235. In a tapping study conducted in the station, it was found that in order to protect the tappers from cold, tapping time may be shifted to 8-9 AM in the Garo hills during the winter period which will not affect the productivity levels. Plants on the southern slopes showed less growth but better yield. Disease survey showed absence of any serious disease in rubber plantation in the Garo hills.

At Regional Research Station, Guwahati, results revealed superiority of the clone RRIM 600 both in growth and yield. Yield and DRC were the highest under d/4 frequency of tapping with three months rest. In the Experiment Station at West Bengal, SCATC 93/114 was found to be superior in growth and yield. Twelve wild genotypes were assessed as resistant to powdery mildew disease. High incidence of the disease was noticed at Giti and Rongo in North Bengal.

At Regional Research Station, Dapchari in Maharashtra, the highest cumulative yield was obtained with tapping rest in May and June with 4 stimulations per year under third daily tapping. Under irrigated condition also 4 yearly stimulations were found to be optimum to get maximum yield. From the research conducted at this station which is a drought prone zone, clones RR II 208 and RR II 6 were found to be better in growth and yield. Evaluation of polycross progenies in the zone has shown that even though the zone experiences more than seven months without rain, yield obtained was about 800 kg per hectare.

At Regional Research Station, Dhenkanal in Orissa among the popular clones growth rate was the highest for clone GT 1, followed by clones RRIM 600 and RR II 105. However, yield was the highest from clone RRIM 600.

At Hevea Breeding Station in Karnataka, performance was better for clones PB 235, PB 260 and RRII 105. Among the new clones RRII 429 showed better growth performance.

At Hevea Breeding Station at Paraliyar, root trainer plants were raised as substitute for poly bag plants. Cost of production is less and it

search and Development Committee at its meeting held on 5th October 2002. The Committee reviewed the research programmes and offered useful suggestions. An internet portal of the Rubber Board "www.rubberboard.org.in" was launched by Sri. L.V. Saptharishi IAS, Additional Secretary,



*Technology Transfer cum Training Centre of Nellikkunnu Rubber producers' society*

is easy to transport. Survival in the field was also better.

The Annual Review Meeting for the year 2002 was conducted from September 2 to 14. All the scientists of RRII and the Regional Stations presented the progress of research work. The expert panel members critically reviewed the progress of work. Based on the recommendations of the experts' panel, the work programmes of the research projects were fine tuned.

The highlights of research for the last one year was compiled and presented before the Re-

Dept. of Commerce, Ministry of Commerce and Industry on 6th July, 2002. The portal provides a wide range of information on the Boards activities with regularly updated information on daily rubber price in the national and international markets, weather data, news, events, training calendar etc.

During the year, eight scientific seminars were conducted in which 26 research papers were presented and discussed.

Two scientists were trained in specialised subjects. One scientist participated in the International Conference on Plant Genetic Re-



sources at Gatersleben, Germany and presented a paper on "Genetic Resource Management of Hevea in India." One Scientist from the Genome Analysis Laboratory had undergone an advanced training in Plant DNA markers at the University of Udine, Italy for a period of three months. The Environment Physiologist has undergone a two months' advanced training programme in plant photosynthesis at the University of Georgia, USA. Dy. Director, Regional Research Station, Guwahati has undergone a specialized training in "Low temperature stress studies" at National Research Council, Italy for a period of six weeks. Dy. Director, Central Experiment Station and Plant Pathologist, RRS, Guwahati has undertaken a study visit to the Malaysian Rubber Board and Indonesian Rubber Research Institute for a period of two weeks. The Germplasm Botanist and a Scientist from Economic Research Division have undergone a joint training programme on rubber wood processing, utilization and timber latex clones at various international centres of repute in Malaysia for a period of 35 days. The Dy. Director, RCPT has undergone an advanced training in NR Processing and Technology by availing an IRRDB Fellowship for a period of 45 days.

Joint Director (Exploitation), Dy. Director (Economics) and Deputy Director (Germplasm) participated in the joint workshop on Plant Breeding, Agronomy and Socio-economics organized by the International Rubber Research and Development Board, Malaysian Rubber Board and the Indonesian Rubber Research Institute in August-September 2002. Presentation on exploitation technology led to formation of IRRDB specialist group on exploitation technology.

Two guest scientists from Indian Agricultural Research Institute visited RRII and delivered lectures on Plant Pathological aspects. Three Polish Scientists visited RRII during November 2002.

Twenty One Scientists and the Jr. Publication Officer of RRII participated in the Fifteenth Plantation Crops Symposium (PLACROSYM

XV) held at Mysore. Twenty research papers were presented from RRII. The Dr. C.S. Venkataram Memorial Award for the best original research work presented orally in the symposium was awarded to the paper from RRII entitled "Molecular characterisation of fungal pathogens causing leaf diseases in rubber *Hevea brasiliensis*. A poster presentation from the RRII entitled "Towards development of a rubber information system" was given best poster award.

### PLANTERS' CONFERENCE

To mark the centenary of commercial cultivation of rubber in India, a national conference, 'Rubber Planters' Conference 2002' with the theme 'Global Competitiveness of Indian Rubber Plantation Industry' was held at the Rubber Research Institute of India, Kottayam on 21st and 22nd November 2002. It provided a platform for meaningful interface between the planters, experts and scientists in the field from various national and international organizations.

In the two day conference there were 10 sessions. In the inaugural session the keynote address with the title 'Natural Rubber-Yesterday, Today and Tomorrow' was delivered by the former Rubber Production Commissioner, Shri P. Mukundan Menon. He threw light on the achievements of the Indian rubber plantation industry and its salient features and inherent strength to face the challenges ahead. Dr. AFS Budiman, Secretary-General of the International Rubber Study Group, London and Dr. Abdul Aziz bin SA Kadir, Secretary-General of the International Rubber Research & Development Board, Malaysia presented papers in the inaugural session. Dr. Budiman indicated based on a recent study undertaken by the IRSG, that by 2005, the global supply of NR would be short of the demand and this would ultimately reflect in the prices of NR, as well. He pointed out that this might happen even by 2003. He further stated that natural rubber has no threat provided no unforeseen events occur in the global economic scenario. The paper presented by Dr. Abdul Aziz bin SA Kadir was rich with data on



research priorities in various rubber producing countries, particularly in the area of intercropping, crop exploitation and generation of ancillary income from rubber plantations.

The inaugural session, was followed by four technical sessions on topics like agromanagement, planting materials, crop exploitation and processing on the first day. On the second day, there were four sessions on

The valedictory function of the centenary celebration was held on the 2nd January 2003 with a public meeting organized in the Mammen Mappila Hall, Kottayam. Dignitaries like Shri O. Rajagopal, Union Minister of State for Parliamentary Affairs, Shri K.M. Mani, Minister for Revenue and Law, Kerala State, Shri Dipak Chatterjee, Secretary, Commerce & Industry, Shri L.V. Sapharishi, Addl. Secretary,



*Honourable Union Minister of state Shri O. Rajagopal presenting best RPS award*

ecological issues, crop protection, rubber economics and agricultural extension. Several scientific and technical papers were presented in the various sessions chaired by experts in the respective fields.

The two day conference came to a close on the evening of 22nd November with a valedictory meeting. Shri S.M. Desalpine, Chairman, Rubber Board presided over the meeting. Dr. N.M. Mathew, Director of Research summed up the proceedings.

On 23rd November 2002 a field day was hosted by the UPASI at Mundakayam. Field demonstration on latest developments in planning, intercropping, multicropping, farm mechanization, exploitation etc. were arranged. During the field visits delegates interacted with experts in all the relevant fields of rubber cultivation, exploitation and processing.

Commerce and Industry, Govt. of India, Shri Oommen Chandy MLA, Smt. Mercy Ravi, MLA. Shri Ettumanoor V. Radhakrishnan, Vice-Chairman, Rubber Board and various other distinguished personalities participated in the function. The biennial awards one for the best small rubber grower and the other for the best RPSs were given away in the meeting. Prof. K.M. Chandy Memorial Best Grower Award was handed over to Shri K Sadanandan of Pathanapuram by Shri K.M. Mani, Revenue Minister of Kerala State. The 'Suvarna Sangham' Award for the best RPS was handed over to Shri P. Yohannan, President of Kalampur RPS (Muvattupuzha Region) by Shri O. Rajagopal, Union Minister of State. The souvenir brought out by Rubber Board in connection with the centenary celebration was released by Shri Dipak Chatterjee, Secretary, Ministry of Commerce & Industry, Govt. of India.

## PART VI

### FINANCE & ACCOUNTS

The Finance & Accounts Department is concerned with designing and operating the Accounting system, preparing budget, financial statements and reports, exercising budgetary control, effective Funds Management, establishment and maintaining systems and procedures, overseeing internal audit and arranging for Statutory audit, advising on financial propriety and regularity of transactions, supervising computer applications, overseeing cost control, evaluation of projects/schemes, handling tax matters etc. The following activities were undertaken by the Department during the year.

1. Preparation of Annual Budget, Performance Budget, Foreign Travel Budget etc.
2. Review and Revision of budget under Zero Based Budgeting and exercising budgetary control.
3. Maintenance of the accounts of the Board, preparation of Annual Accounts and Balance Sheet, presentation of the accounts for audit by the Accountant General, Kerala and the audited accounts to the Rubber Board/Ministry/Parliament.
4. Placing demands for grant from Govt. from time to time, receiving funds from Government and ensuring its optimum utilization.
5. Advising on financial propriety and regularity of transactions and regulating payments.
6. Assisting the Cost Accounts Branch of the Ministry of Finance in ascertaining the cost of production of Natural Rubber.
7. Preparation of financial statements for project reports and schemes.
8. Dealing with Central Income Tax, Agricultural Income Tax and Sales Tax matters relating to the activities of the Board.
9. Co-ordinating the activities of the trading and processing companies jointly promoted by the Rubber Board and Rubber Producers Societies.
10. Computerised Data Processing in the field of financial accounting, pay roll etc.
11. Drawal and disbursement of pay and other entitlements of the employees of

the Board based on the orders issued by Govt. of India from time to time.

12. Management of Pension Fund and General Provident Fund and regulating disbursements therefrom.
13. Implementation of the Scheme of Computerization and Networking of all departments of the Board.

#### Annual Accounts 2001-02

Annual Accounts of the Board for the year 2001-02 were prepared and presented to Accountant General, Kerala for audit within the stipulated time. The Audit Report and the Audited Accounts with the certificate received from the AG Kerala were adopted by the 146<sup>th</sup> meeting of the Board held on 30.11.02 and submitted to the Govt. of India within the time frame.

#### Revised Estimates for 2002-03 and Budget Estimates for 2003-04

The Revised Budget for 2002-03 and Budget Estimates for 2003-04 were prepared within the time frame and submitted to the Government. Budget sanctioned for the year 2002-03 was Rs. 113.31 crore comprising Rs. 98.31 crore under Plan and Rs. 15 crore under Non Plan. As against this the actual expenditure for the year was Rs. 96.75 crore (Plan Rs. 84.08 crore and Non Plan Rs. 12.67 crore). The sanctioned budget for the year 2003-04 is Rs. 107.41 crore comprising Rs. 93.28 crore under Plan (Budgetary support of Rs. 83.54 crore and Opening Balance of Rs. 9.74 crore) under Plan and Rs. 14.13 crore under Non Plan (Budgetary support - Rs. 10.50 crore plus I&EBR - Rs. 3.63 crore).

#### Management of Funds

##### (i) General Fund

Funds amounting to Rs. 81.29 crore was

received from Government as budgetary support during the year 2002-03. The internal resources during the year was about Rs. 12.08 crore. The total expenditure during the year was Rs. 96.75 crore.

##### (ii) General Provident Fund/Pension Fund

The balance under the General Provident Fund as on 31<sup>st</sup> March 2003 was Rs. 18.11 crore and that of Pension Fund Rs. 11.08 crore. The accumulations in the funds were invested in long-term securities to obtain optimum returns. The Board is maintaining GPF accounts for 2131 subscribers. There were 562 pensioners on the rolls during the year.

##### (iii) Cost Accounts

The Cost Accounts Division of the F & A Dept. continued to collect, analyze and update cost data on production of natural rubber, planting material etc. Information sought for by the Government, other Statutory Bodies and or agencies were furnished as and when required.

The Finance and Accounts Department examined various aspects relating to Sales Tax and Agricultural Income Tax matters and appropriate advice were given.

##### (iv) Internal Audit Division

The Internal Audit Division is headed by the Internal Audit Officer under the functional control of Director (Finance). It is an important tool of the Chairman to ascertain the state of affairs of different Departments/Divisions/Sections/Offices/Establishments and for setting matters right by taking prompt remedial measures. It also assists the various departments in the effective discharge of their responsibilities by furnishing the correct analysis, appraisal, recommendations and pertinent com-

ments on the activities of the Board. It also carries out liaison work with the Audit department of the AG's office in Kerala.

The main functions of the Internal Audit Division are inspection/audit of various offices/establishments of the Board, verification of pension and retirement benefits/absorption cases and other referred cases on various service matters and conducting special audits as directed by Chairman etc. During the period under report, Internal Audit/Inspection was conducted in 46-offices/establishment spread all over the country.

Audit of the Accounts of the Board for the year 2001-02 was taken up by AG, Kerala during July-August 2002 and their report containing 26 audit paragraphs were received. Replies to all the audit paragraphs were prepared and submitted. The total number of outstanding audit paras as on 31.3.03 is 91 including that of 2001-02. The inspection report of the Internal Audit Wing of the Ministry of

Commerce is also handled by the Division. 5 audit paras in the above report are outstanding as on date.

Economy in the use and maintenance of vehicles and consumption of fuel was ensured by follow up procedures and Govt. Orders.

Annual physical verification of stock and stores were updated by initiating follow up action with concerned offices/units and ensured the disposal of unserviceable items.

#### (v) Electronic Data Processing

The Electronic Data Processing Division under the Department takes care of the computerized programmes and its application. The Division processed pay rolls and handled the financial accounting, GPF Account, Pensioners account, work relating to the preparation of Budget, Nominal Rolls etc. The Division looks after procurement and maintenance of Hardware/Software requirements of the different departments of the Board.



## PART VII

### LICENSING & EXCISE DUTY

The Rubber Board has been entrusted with the responsibility of assessment and collection of the duty of excise (cess) on rubber produced in India under Section 12 of the Rubber Act 1947. The cess so levied and collected is remitted to the Consolidated Fund of India. All transactions in rubber are regulated under and in accordance with the licences issued by the Board as provided in Section 14 of the Rubber Act 1947. The quantity of rubber transacted by every licence is to be declared to the Board through periodical returns. Interstate transport of rubber is regulated by a declaration in form 'N.' Periodical inspections are conducted to verify the genuineness of the accounts maintained and stock held by the manufacturers/dealers/processors. These functions are monitored/discharged by the Licensing & Excise Duty Department of the Rubber Board, consisting of the following Divisions & Offices.

#### I. EXCISE DUTY DIVISION

The issuance of licence to manufacturers to acquire rubber, assessment and collection of

cess on rubber acquired by them and its remittance to the consolidated Fund of India, are the important functions of the Excise Duty Division.

##### (i) Issuance of Licence

The function of issue of licence includes the work of issue of new licences to prospective manufacturing units and renewal of the existing licence for the subsequent year. The details of licences issued during 2002-2003 are furnished below.

|                    |                  |
|--------------------|------------------|
| Fresh Licence      | 244 Nos.         |
| Renewal of Licence | 4696 Nos.        |
| <b>Total</b>       | <b>4940 Nos.</b> |

During the period, licences in respect of 9 units were cancelled on the basis of the request of licencees. The total number of licensed manufacturers as at the end of 31/3/2003 was 4931. The state-wise distribution of licensed manufacturers as at the end of 31st March 2003 was detailed hereunder:

| Sl. No.      | Name of State/<br>Union Territory   | Number of<br>Units |
|--------------|-------------------------------------|--------------------|
| 01           | Kerala                              | 854                |
| 02           | Maharashtra                         | 578                |
| 03           | Punjab                              | 511                |
| 04           | Tamilnadu                           | 486                |
| 05           | Uttar Pradesh                       | 439                |
| 06           | West Bengal                         | 435                |
| 07           | Gujarat                             | 381                |
| 08           | Haryana                             | 324                |
| 09           | Delhi                               | 220                |
| 10           | Karnataka                           | 203                |
| 11           | Andra Pradesh                       | 160                |
| 12           | Rajasthan                           | 111                |
| 13           | Madhya Pradesh                      | 82                 |
| 14           | Bihar                               | 27                 |
| 15           | Pondicherry                         | 33                 |
| 16           | Goa, Dadra &<br>Nagarhaveli & Daman | 33                 |
| 17           | Orissa                              | 13                 |
| 18           | Chandigarh                          | 11                 |
| 19           | Jammu & Kashmir                     | 9                  |
| 20           | Himachal Pradesh                    | 8                  |
| 21           | Assam                               | 8                  |
| 22           | Tripura                             | 5                  |
| <b>Total</b> |                                     | <b>4931</b>        |

The Division also prepared and supplied a list of licensed manufacturers for the use of various stake holders of the industry. The Division also renewed the licences of 2989 existing manufacturers for the year 2003-2004.

**(ii) Registration of letter of authorisation to purchase rubber by agent/dealers on behalf of manufacturers**

The division registered 999 letters of authorization issued by various manufacturers in favour of their agent dealers to purchase and despatch rubber on their behalf during 2002-2003.

**(iii) Registration of Branch/Purchase Depot**

On the basis of the applications received from the manufacturers, 6 new branches/purchase depots were registered during the year under report.

**(iv) Letter of authorization to purchase rubber**

Special authorization to 10 organisations/institutions to acquire rubber for experimental purposes were issued in lieu of regular licence, after collecting the relevant cess in advance.

**(v) Assessment and Collection of Duty of Excise (Cess) on rubber**

The total assessment of cess on rubber during 2002-2003 was Rs. 8206 lakh as against Rs. 8182 lakh during 2001-2002. The total number of half yearly returns (form 'M') collected from the manufacturers during the year was 10294. The Liaison Officers and the Inspecting staff under the Department functioning at various parts of the country furnished 2181 inspection reports, on which appropriate actions were taken.

The duty of excise (cess) on rubber collected during the period under report was Rs. 8204 lakh against Rs. 8114 lakh collected during 2001-2002.

The aggregate of licence fee and service charges collected during 2002-2003 was Rs. 8,85,663/-. Besides a sum of Rs. 8 lakh was collected towards penal interest on belated remittance of cess.

## **II. MARKET INTELLIGENCE DIVISION**

The most important function of the Market Intelligence Division is to prevent evasion of cess on rubber. The activities undertaken by the Division include-

- Conducting inspections at the business premises of dealers, verifying their books of accounts, returns and other statements.

- b) Conduct investigations about the genuineness of rubber dealers.
- c) Initiate steps to prevent unfair trading in rubber.
- d) Cross verification of the statutory returns filed by dealers/manufacturers and processors.
- e) Checking rubber consignments in transit and at checkposts etc.
- f) Close monitoring of the interstate movement of rubber.

**These functions are attended by**

- The inspection squads functioning at Taliparamba, Kochi, Kottayam and Nagercoil.
- Market Intelligence Inspectors functioning at Palakkad, Punalur and Nagercoil.
- The checkpost machineries at Walayar in Palakkad Dist., Manjeswaram in Kasargod Dist. of Kerala and Kavalkinar in Thirunelveli Dist., Tamilnadu.

**The brief activities of the Division are-**

- During the period under report, the inspection squad spent several days on tour and inspected the business premises of 2768 licensed dealers and detected unlicensed dealings of 158 dealers. Discrepancies/irregularities in the case of 452 dealers involving 10,95,333 kgs as shortage/unaccounted stock/irregular sales were detected. A sum of Rs. 16,42,999/- was collected towards cess on rubber from the parties involved. The Squad also conducted 687 road checking and surprise visits to the checkposts, Railway Parcel Offices and border areas.
- On the basis of serious irregularities detected, the licences of 10 dealers were sus-

pended and an amount of Rs. 1,63,990/- was collected towards cess loss involved.

- Prosecution steps against 5 rubber dealers for having purchased rubber below the statutory minimum price were initiated. One dealer was convicted by the Court and the remaining four cases are pending in the concerned courts.
- In order to strengthen surveillance on interstate movement of rubber, regular checking of the documents accompanying the rubber consignment were conducted at the three checkposts at Walayar in Palakkad District, Bengra Manjeswaram in Kasargode District of Kerala and Kavalkinar in Thirunelveli District of Tamilnadu.
- The surveillance exercised through the three checkposts helped in detecting illicit transport of rubber. During the period under report, the officials at Walayar, Manjeswaram and Kavalkinar checkposts detained 31 consignments of rubber for irregular movement. Of this, 12 consignments were allowed to cross the border on production of valid documents/satisfactory explanation and 19 consignments were released after collecting a sum of Rs. 9,79,363/- towards cess amount and security deposit equivalent to the cess involved in the quantity as the consignors failed to produce convincing evidence/explanation for the lapses. Necessary assistance was provided to the Sales Tax/Police officials who have detained 17 consignments of rubber attempted to cross the border without valid documents/under suspicious ground. The Inspection Squad detected clandestine transport of 1131 MT of rubber through coastal cargo transport and the investigations are going on.

- 39049 consignments of rubber which passed through the three check posts as under, were checked.

|   |                       |   |              |              |
|---|-----------------------|---|--------------|--------------|
| 1 | Walayar Checkpost     | : | 25547        | consignments |
| 2 | Manjeswaram Checkpost | : | 8898         | "            |
| 3 | Kavalkinar Checkpost  | : | 4604         | "            |
|   | <b>Total</b>          | : | <b>39049</b> | "            |

- 16500 books of Form 'N' declarations under different categories were got printed and 14320 form N books were supplied to various estates, processors, dealers and manufacturers. 52236 Nos of Form N declarations were received at Market Intelligence Division and most of the same were scrutinized wherever discrepancies were noticed, explanation/clarifications were called for from the concerned parties and appropriate action taken.
- The monthly returns and copies of Form N declarations received from various dealers/manufacturers/processors/estates were cross checked at random and detected discrepancies in 398 cases. A sum of Rs. 1752650/- was also realized in the case of irreconcilable transactions.
- Thus on account of the efforts of the Market Intelligence Division, a total amount of Rs. 46,50,002/- was collected, which otherwise could not have been possible.

### III. LICENSING DIVISION

Licensing of rubber dealers, processors and registration of their branches and agents, initiation of punitive action against erring dealers and processors are the main functions of the Licensing Division situated at Kochi.

#### 1) Licensing of Dealers

The number of licensed dealers which stood at 9492 at the beginning of the year marginally increased to 9722 at the end of the year. During the period under report, 1059 new licenses were issued and the licenses of 2472 dealers were renewed. Besides, the licences of 1573 dealers were also renewed for a period of 5 years from 1.4.2003.

#### 2) Licensing of Processors

The total number of Processor's licence issued during the period was 137 as on 31/3/2003. The Licences of 20 Processors were also renewed for a period of five years from 1.4.2003.

#### 3) Suspension and revocation of license of dealers and Processors

During the year, 100 licences of dealers and one processor's license were cancelled. Besides, licences of 10 dealers were suspended due to violations of the provisions of the Rubber Act and Rules. The suspension order in respect of 1 dealer was rescinded and the licence was restored after receiving satisfactory explanation for the lapses committed by him.

#### 4) Registration of Branches and Agencies

During the year, 331 branches of dealers and processors were newly registered making the total number of branches to 1038 as at the



end of March 2003. Besides, letters of authorization issued by 345 principal dealers in favour of their agents to purchase and despatch rubber on their behalf were registered during 2002-2003.

#### 5) Collection of money from Dealers

A sum of Rs. 9,11,123/- was collected from dealers to make good the loss of cess on rubber on account of their irregular transaction/discrepancies in stock.

#### 6) Supply of 'N' Form

6218 books of 'N' forms were issued to various estates, dealers, processors and manufacturers in Kochi area for interstate transport of rubber.

During the year, a sum of Rs. 49,10,672/- was collected by the Division towards licence fee/service charge/cess on rubber.

#### 7) State-wise distribution of Dealers

| Sl. No. | Name of State/<br>Union Territory | Number |
|---------|-----------------------------------|--------|
| 01      | Kerala                            | 8620   |
| 02      | Tamilnadu                         | 195    |
| 03      | Punjab                            | 153    |
| 04      | Delhi                             | 120    |
| 05      | Karnataka                         | 115    |
| 06      | Tripura                           | 113    |
| 07      | Maharashtra                       | 95     |
| 08      | West Bengal                       | 76     |
| 09      | Uttar Pradesh                     | 67     |
| 10      | Gujarat                           | 42     |
| 11      | Haryana                           | 38     |
| 12      | Assam                             | 24     |
| 13      | Rajasthan                         | 22     |

|               |                   |             |
|---------------|-------------------|-------------|
| 14            | Meghalaya         | 14          |
| 15            | Andra Pradesh     | 6           |
| 16            | Bihar             | 4           |
| 17            | Chandigarh        | 4           |
| 18            | Madhya Pradesh    | 4           |
| 19            | Andaman & Nicobar | 3           |
| 20            | Pondicherry       | 3           |
| 21            | Nagaland          | 2           |
| 22            | Orissa            | 1           |
| 23            | Goa               | 1           |
| 24            | Jammu & Kashmir   | Nil         |
| <b>Total:</b> |                   | <b>9722</b> |

#### 8) District - wise Distribution of dealers in Kerala

| Sl. No.      | Name of District   | No. of Dealers |
|--------------|--------------------|----------------|
| 01           | Kottayam           | 2304           |
| 02           | Kollam             | 1734           |
| 03           | Ernakulam          | 1105           |
| 04           | Pathanamthitta     | 1069           |
| 05           | Thiruvananthapuram | 768            |
| 06           | Kannur             | 423            |
| 07           | Idukki             | 409            |
| 08           | Malappuram         | 408            |
| 09           | Palakkad           | 350            |
| 10           | Kozhikode          | 191            |
| 11           | Trichur            | 163            |
| 12           | Alappuzha          | 151            |
| 13           | Kasargod           | 88             |
| 14           | Wynad              | 57             |
| <b>Total</b> |                    | <b>8620</b>    |

#### IV. SUB OFFICES/LIAISON OFFICES

With a view to improving collection of cess on rubber and to maintain liaison with various Ministries, trade and Industry, Board maintains 9 Sub Offices in the major rubber consuming centres at Chennai, Bangalore, Secunderabad, Ahmedabad, Kanpur, Mumbai, Kolkata, Jalandhar and New Delhi. These offices function mainly to assess the suitability of applicants who apply for licences to deal in rubber/acquire rubber for rubber goods manufacturing. The purchase made by the rubber goods manufacturers and dealers and stock held by them were verified at random. Verifications of the books

of accounts and records of the license holders were also done to ensure that all rubber procured by them were properly accounted and subjected to assessment of cess. Surprise inspections were conducted to detect unlicensed dealing in rubber and manufacturing of rubber goods in contravention of the provisions of the Rubber Act and Rules in order to prevent loss of revenue towards cess. The other functions of these Offices are to inspect the Factory/Business premises of the Manufacturers & Dealers to verify the correctness of the returns submitted by them and to check the inter-state transport of rubber to detect malpractices.

## PART VIII

### PROCESSING AND PRODUCT DEVELOPMENT

The Dept. of Processing and Product Development continued to provide technical and financial support to the rubber and rubberwood processing units particularly in the small holdings sector for improving the quality of their products and its marketing through various measures.

Upon lifting of the Quantitative Restrictions on natural rubber with effect from 1/4/2001, the Govt. of India approved a scheme for providing technical and financial assistance to the Technically Specified Rubber Processors in the various sectors for improving the quality and consistency of block rubber produced by them, reducing cost of production and strengthening environmental protection systems. The total outlay sanctioned for the scheme was Rs. 5 crore. Under the scheme financial assistance was given to 26 block rubber factories, 26 latex centrifuging factories. 242 Rubber Producers Societies were equipped with facilities for raw material collection from the small holdings for regular supply to the TSR factories. Financial assistance was also given to a rubberwood processing factory in the RPS sector under the scheme. The total expenditure made during the year under the scheme was Rs. 496.15 lakh.

The Board organised a visit of a 12 member delegation from Rubber Board and block rubber processors to the block rubber factories in Thailand and Indonesia to study the latest developments in processing and quality control.

The Board continued to check the quality of rubber imported through the designated ports of Kolkatta and Vizakhapatnam. During the year 2002-03, a total quantity of 24591 M. tonnes of rubber was inspected and recommended for clearance by the customs. 320 M. tonnes of rubber was rejected as it did not meet the prescribed quality standards. The Board also continued to monitor the import of rubber through non designated ports.

During the year, the Board promoted export of various grades of sheet rubber, block rubber and latex concentrate by providing incentives. To ensure the quality of rubber so exported, the board carried out the quality check of rubber from December, 02. During this period, 3383 M. tonnes of block rubber, 6225 M. tonnes of latex concentrate and 24826 M. tonnes of RSS grades were put to quality check and cleared for export. During the same period 121 M. tonnes of block rubber, 21.5 M. tonnes

of latex concentrate and 1393 M. tonnes of RSS grades were rejected upon quality check.

The Dept. conducted 172 inspections to check quality of block rubber and latex concentrate produced in the country. Testing facilities for raw rubber, latex, chemicals, effluents etc.

major natural rubber producing/exporting countries to promote export of rubber from India. These have already been discussed in a meeting convened by the BIS and further steps are in progress at BIS level.

The Board continued to give technical and



*Technically Specified Rubber (Block Rubber)*

to the processors and consumers of rubber were provided and 16846 samples were tested. The Board also participated in the international and national Round Robin Cross Checks for its Central Testing Laboratory.

The Board continued to provide demonstration and training facilities to the rubber processors in processing and quality control, environmental protection and ISO 9000 Quality Management System through its Model TSR factory, Pilot Latex Processing Centre (PLPC), Pilot Crumb Rubber Factory (PCRF) and Radiation and Vulcanised Natural Rubber latex (RVNRL) plant.

The Board submitted a proposal to the Bureau of Indian Standards to bring out specifications for RSS grades and also to amend the standards in force for block natural rubber and latex concentrate to align with standards of the

financial assistance to the processing and trading companies in the RPS and Co-operative sectors for processing and marketing of rubber and distribution of estate inputs.

The Model Rubberwood factory set up under the World Bank Aided Project viz. India Rubber Project continued to provide demonstration and training facilities to the Rubberwood processors and the new entrepreneurs in processing and value addition, quality control and environmental protection systems.

The Rubberwood Testing Laboratory set up under the World Bank Aided Project provided testing facilities to rubberwood processors, offered training facilities and also participated in a few R & D projects relating to rubberwood undertaken by the Rubber Research Institute of India.



The Bureau of Indian Standards had brought out standards for chemically treated and kiln dried rubberwood. With a view to promoting the use of rubberwood in Govt. institutions, the Govt. of Kerala has approved processed rubberwood for manufacture of furniture and the Store Purchase Rules of the Govt. of Kerala have been ammended accordingly.

Steps were taken to introduce processed rubberwood as an eco friendly timber suited for furniture and interiors. The Indian Institute of Science, Bangalore has decided to go for furniture from processed rubberwood for furnishing their new hostel complex consisting of 920 rooms. This will help in the promotion of rubberwood in furniture and interior among premier research/educational/Govt./Quasi Govt. institutions in India. The Board participated in the following national/international fairs and distributed technical literature and catalogues on rubberwood/rubberwood products to promote its use in the national/international market.

#### National Fairs

01. Inside outside Megashow, Chennai, September, 2002.
02. Society Interiors Expo, Chennai, October,

2002.

03. Index—2002, Mumbai, October, 2002.
04. Inside outside Megashow, Bangalore, October, 2002.
05. India International Trade Fair, New Delhi, November, 2002.
06. Interbuild, New Delhi, December, 2002.
07. India International Furniture Fair, Bangalore, February, 2002.
08. IIWT—2003, Chennai, February, 2003.

#### International Fairs

01. India Trade Fair, Osaka, Japan, November 2002.
02. ASFI, Birmingham, UK, November, 2002.
03. IFFT, Tokyo, Japan, November 2002.
04. IFEX, Abudhabi, February 2003.
05. International Furniture Fair, Singapore, March 2003.

Participation in these fairs would help to project India as a potential supplier of processed rubberwood among the major consuming countries. As a result, a few serious enquiries for export were received.

## PART IX

# TRAINING AND TECHNICAL CONSULTANCY

The Department of Training and Technical Consultancy consists of two Divisions viz. Training Division and Technical Consultancy Division. The Training Division is conducting different training programmes for the benefit of the industry consisting of Rubber Plantation sector and Processing & Product Manufacturing sector. The Technical Consultancy Division provides technical assistance to entrepreneurs for setting up of Rubber based units, and to rubber goods manufacturers for solving production problems and assessment of quality by way of testing of rubber products.

The T & TC Department also provides technical support and guidance for the export of natural rubber.

### A) TRAINING DIVISION

The Rubber Training Centre is located near Puthuppally, 8 km. east of Kottayam, adjacent to the Rubber Research Institute of India. It is housed in a picturesque building of 3710

m<sup>2</sup> area having 5 lecture halls with modern amenities. The Centre has a hostel to provide accommodation for 30 participants. The Centre has also a library, museum and an auditorium. The Centre has two Demonstration labs to impart training in Rubber Processing and Product Manufacturing Technology during training programmes.

The major target group identified for training are:

- \* Farmers
- \* Managers/Superintendents
- \* Rubber Producers Societies
- \* Rubber Marketing Societies
- \* Rubber Dealers
- \* Rubber Processors
- \* Rubber Products Manufacturers
- \* Entrepreneurs
- \* Rubber and Rubber Products Exporters

- \* Production Managers
- \* Quality Control Managers
- \* Women including SC/ST categories
- \* Students

- \* Participants from abroad

During the year under report, 30 different training programmes were conducted for the various target groups. A brief profile of the beneficiaries are:

| Category                                  | No. of beneficiaries |
|-------------------------------------------|----------------------|
| * Rubber Processing                       | 155                  |
| * Rubber Product Manufacturing            | 186                  |
| * RPS Presidents & Rubber Dealers         | 33                   |
| * Farmers/RPS Members                     | 2885                 |
| * Tappers                                 | 402                  |
| * Agricultural/Rubber Technology Students | 55                   |
| * Persons on visit cum training           | 1028                 |
| * Employees of the Board                  | 117                  |
| <b>Total</b>                              | <b>4861</b>          |

The beneficiaries included 1058 Women and 237 Scheduled Castes and Scheduled Tribes.

The Rubber Training Centre of the Board at Kottayam was enrolled as a permanent member of the Indian Society for Training and Development, New Delhi.

#### B) Technical Consultancy Division

The Technical Consultancy Division provides technical assistance to promote the rubber goods manufacturing industry in the country. The major activities of the division are providing technical assistance to entrepreneurs in setting up rubber based industries, development of rubber products, solving production

problems of existing units and quality control by testing rubber chemicals/rubber compounds/products as per National and International standards. The Division also undertakes activities like conducting workshops and seminars to promote rubber based industries, preparation of detailed project reports, market survey reports, trade directories etc. With the aim of increasing the consumption of Natural Rubber, the division is now engaged in the setting up of Rubber Industrial Parks. The implementation of the Rubber Park Project is progressing and the status report of the Industrial Rubber Parks are as given below:

|   |           |                                                                                           |
|---|-----------|-------------------------------------------------------------------------------------------|
| 1 | Kerala    | 1st phase of the project has been completed. 2nd phase of the project is being completed. |
| 2 | Tamilnadu | Sanction of the project under ASIDE scheme with private participation is awaited.         |
| 3 | Tripura   | Project proposal is under consideration of Govt. of India                                 |

# I A brief report of the Activities of the Division is given under

- |   |                                                           |                                                                                                                                                                                                                                  |
|---|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Project Reports/Schemes prepared                          | 9 Nos.                                                                                                                                                                                                                           |
| 2 | Technical assistance                                      | 75 Manufacturing Units                                                                                                                                                                                                           |
| 3 | Rubber products developed for various units/entrepreneurs | 44 Nos.                                                                                                                                                                                                                          |
| 4 | Quality Control                                           | 1106 samples were tested for 5930 parameters                                                                                                                                                                                     |
| 5 | Rubberisation of Roads                                    | Promotion of natural rubber modified bitumen (NRMB) for road surfacing was continued. Performance Evaluation of NRMB roads in Kerala, Tamilnadu & Pondicherry was conducted in association with Central Road Research Institute. |
| 6 | Development of Seismic Bearings                           | The final report from Structural Engineering and Research Centre was reviewed and an interaction with Engineers from SERC was in progress towards design of the bearings and fabrication of moulds for preparation of bearings.  |
| 7 | Canal lining                                              | The lab scale experiments on lining of canals with latex compound was successful as reported by Kerala Engineering Research Institute. The trial has been extended to ponds as well and the results are awaited.                 |
| 8 | Major achievements                                        | The development of rubber components by the Division for floor cleaning machines of M/s. Roots Multiclean Pvt. Ltd., Coimbatore has been appreciated, being an import substitute.                                                |

The Division also monitors the export promotion of NR. The total quantity of NR exported from April 2002 to March 2003 was 55311 MT. In value terms, NR exported in 2002-03 was estimated at Rs. 185.12 crore, equivalent to US\$ 38.17 million. An "Export Promotion Cell" was constituted in the Division to provide the services for export marketing and an "Export Inspection Team" to conduct quality check and issue of Quality Certificates required for the export of rubber.

The Board has developed an interactive website facilitating electronic commerce exclu-

sively for export promotion of Natural Rubber. The Market Study Report conducted by the consultant, M/s. Accenture India Pvt. Ltd., New Delhi, has been completed and submitted the final report. Implementation of the recommendations of the study report is under progress. During the year 2002-03, the Board participated in three international trade fairs namely Europlast (held at Paris from June 3-7, 2002), China Plas (held at Shanghai, China from June 25-29, 2002) and SAITEX (held at Johannesburg, South Africa from October 2-6, 2002).



## PART X

# STATISTICS AND PLANNING

### I. General Statistics

The activities undertaken by the Statistics & Planning Department during the period April 2002 to March 2003 included regular monitoring of the data on supply, demand, stock and price of rubber and presenting them to the Board and the Government. Demand-Supply position of natural rubber was reviewed periodically by the Board which met on 22/7/02, 30/11/02 and the Statistics & Import/Export Committee of the Board which met on 21/9/02 and 24/3/03. For discussions in these meetings, notes supplemented with statistical data reflecting the current and future scenarios in the NR sector were prepared by the Department.

The statutory monthly returns collected every month from rubber growers, dealers, processors and manufacturers were compiled and analysed. In order to ascertain the monthly variation in production, stock etc. pertaining to small growers, sample studies in small holding sector were continued. The data collected from various sources were compiled and production, consumption, import and stock of rubber were worked out on monthly basis. The required sta-

tistical information for publishing the 'Rubber Statistical News' (monthly) was prepared. This publication covers the trend in production, consumption, stock, import/export of natural rubber, synthetic rubber and reclaimed rubber, price of natural rubber and many other details. The Board published Indian Rubber Statistics Vol. 25, 2002 in April 2002. This publication covers detailed information on area under rubber, production, consumption, import, export, price etc of natural, synthetic and reclaimed rubber and manufacturers, dealers, rubber products, labourers etc. It also contains world rubber statistics. The Department furnished relevant statistical information to the Government and various organizations connected with the rubber industry.

Annual reports were collected from processors of centrifuged latex, block rubber, PLC and crepe mills to ascertain the production of various grades of rubber, installed capacity etc. Annual returns relating to the year 2002-2003 were collected from manufacturers of rubber goods to work out consumption of rubber according to end products, classification of manufacturers according to consumption.

Statewise consumption of Natural Rubber (NR), Synthetic Rubber (SR), Reclaimed Rubber (RR) were prepared from monthly returns collected from manufacturers.

The census of rubber holdings in selected villages in Kerala using stratified random sampling technique, was continued. On the basis of the data so generated, prepared suitable statistical tables and analysis done.

## II. Planning

Annual Plan proposals for 2003-04 on rubber were prepared and presented to the Govt. A comprehensive note on review of rubber plantation industry was also prepared and presented to the Government.

## III. Supply of information to World Organizations

The S & P Department continued to supply information about the NR industry in India to world organizations like the Association of Natural Rubber Producing Countries (ANRPC), Kuala Lumpur, Malaysia and International Rubber Study Group (IRSG), London.

On behalf of the Govt. of India, the Chairman, Rubber Board participated in the IXth meeting of ANRPC Co-ordinating Committee on Production and Marketing Strategies at Thailand in August 2002, 26th meeting of the ANRPC Executive Committee and 25th meeting of the ANRPC Assembly at Yogyakarta, Indonesia November 2002. The Joint Director (S & P) participated in the one-day Workshop on NR Statistics and Eleventh meeting of ANRPC Committee on NR Statistics held in Kuala Lumpur, Malaysia in September 2002.

## PART XI

### STATISTICAL TABLES

Table-1

#### PRODUCTION, IMPORT, EXPORT & CONSUMPTION OF NR

| Month     |      | Production | (Tonnes)<br>Import* | Export<br>(Indigenous&<br>Imported) | Consumption |
|-----------|------|------------|---------------------|-------------------------------------|-------------|
| April     | 2002 | 39800      | 2015                | 3928                                | 54510       |
| May       | "    | 42410      | 1242                | 2697                                | 56505       |
| June      | "    | 43635      | 936                 | 2917                                | 56740       |
| July      | "    | 45835      | 2096                | 3738                                | 58920       |
| August    | "    | 51475      | 5067                | 1200                                | 57835       |
| September | "    | 58480      | 687                 | 6159                                | 57380       |
| October   | "    | 63215      | 818                 | 6814                                | 57750       |
| November  | "    | 75410      | 317                 | 5872                                | 58470       |
| December  | "    | 80495      | 161                 | 4740                                | 59455       |
| January   | 2003 | 75525      | 3187                | 4264                                | 60210       |
| February  | "    | 35050      | 6114                | 4676                                | 59525       |
| March     | "    | 38105      | 3589                | 8306                                | 58125       |
| Total     |      | 649435     | 26229               | 55311                               | 695425      |

Source: DGCI & S, Calcutta.

**Table-2**  
**STOCK OF NATURAL RUBBER AT THE END OF EACH MONTH**  
 (Tonnes)

| Month     |      | Growers, dealers &<br>Processors | Manufacturers | Total  |
|-----------|------|----------------------------------|---------------|--------|
| April     | 2002 | 111200                           | 65290         | 176490 |
| May       | "    | 100030                           | 60950         | 160980 |
| June      | "    | 93835                            | 52015         | 145850 |
| July      | "    | 83875                            | 47335         | 131210 |
| August    | "    | 87595                            | 41125         | 128720 |
| September | "    | 91830                            | 32520         | 124350 |
| October   | "    | 87335                            | 34995         | 122330 |
| November  | "    | 100605                           | 34590         | 135195 |
| December  | "    | 111145                           | 40495         | 151640 |
| January   | 2003 | 119295                           | 46575         | 165870 |
| February  | "    | 84280                            | 57080         | 141360 |
| March     | "    | 65655                            | 52340         | 117995 |

**Table-3**  
**PRODUCTION, IMPORT & CONSUMPTION OF SYNTHETIC RUBBER**  
 (Tonnes)

| Month        |      | Production   | Import*       | Consumption   |
|--------------|------|--------------|---------------|---------------|
| April        | 2002 | 5680         | 8485          | 14885         |
| May          | "    | 6497         | 9481          | 15065         |
| June         | "    | 6791         | 11791         | 15545         |
| July         | "    | 5904         | 12147         | 16370         |
| August       | "    | 7505         | 13438         | 16790         |
| September    | "    | 6715         | 11988         | 16370         |
| October      | "    | 6247         | 15202         | 17365         |
| November     | "    | 6370         | 11730         | 17160         |
| December     | "    | 7209         | 9733          | 16860         |
| January      | 2003 | 7800         | 9360          | 16780         |
| February     | "    | 6642         | 5611          | 15615         |
| March        | "    | 7041         | 5509          | 16045         |
| <b>Total</b> |      | <b>80401</b> | <b>124475</b> | <b>194850</b> |

\* Source: DGCI & S, Calcutta.



Table-4

## PRODUCTION &amp; CONSUMPTION OF RECLAIMED RUBBER

(Tonnes)

| Month     |      | Production* | Consumption |
|-----------|------|-------------|-------------|
| April     | 2002 | 5580        | 5545        |
| May       | "    | 5405        | 5370        |
| June      | "    | 5545        | 5490        |
| July      | "    | 5675        | 5615        |
| August    | "    | 5705        | 5750        |
| September | "    | 5850        | 5860        |
| October   | "    | 5905        | 5925        |
| November  | "    | 5640        | 5670        |
| December  | "    | 5580        | 5650        |
| January   | 2003 | 5790        | 5840        |
| February  | "    | 5440        | 5390        |
| March     | "    | 5270        | 5215        |
| Total     |      | 67385       | 67320       |

Indigenous purchase by manufacturers

Table-5

## MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF NATURAL RUBBER IN INDIA

(Rs/Quintal)

| Month          | RSS 1 | RSS  | 2RSS 3 | RSS 4 | RSS 5 | ISNR 5 | ISNR10 | ISNR20 | ISNR 50 |
|----------------|-------|------|--------|-------|-------|--------|--------|--------|---------|
| April 2002     | 3738  | 3638 | 3538   | 3389  | 3101  | 3412   | 3312   | 3163   | 2912    |
| May "          | 3960  | 3860 | 3760   | 3589  | 3219  | 3547   | 3437   | 3257   | 3072    |
| June "         | 4315  | 4215 | 4115   | 3979  | 3625  | 3865   | 3764   | 3594   | 3416    |
| July "         | 4206  | 4106 | 4006   | 3830  | 3549  | 3808   | 3708   | 3535   | 3344    |
| August "       | 4106  | 4006 | 3906   | 3732  | 3484  | 3703   | 3603   | 3424   | 3245    |
| September "    | 4148  | 4048 | 3948   | 3765  | 3622  | 3840   | 3740   | 3608   | 3397    |
| October "      | 4038  | 3938 | 3838   | 3667  | 3515  | 3738   | 3638   | 3511   | 3298    |
| November "     | 4007  | 3907 | 3807   | 3677  | 3564  | 3730   | 3630   | 3499   | 3286    |
| December "     | 4516  | 4416 | 4316   | 4196  | 3911  | 4168   | 4068   | 3960   | 3692    |
| January 2003   | 4704  | 4604 | 4504   | 4300  | 4077  | 4428   | 4328   | 4182   | 3923    |
| February "     | 4753  | 4653 | 4553   | 4384  | 4280  | 4555   | 4455   | 4323   | 4101    |
| March "        | 4903  | 4803 | 4703   | 4517  | 4372  | 4691   | 4591   | 4417   | 4284    |
| ANNUAL AVERAGE | 4283  | 4183 | 4083   | 3919  | 3693  | 3957   | 3856   | 3706   | 3498    |

**Table-6**  
**MONTHLY AVERAGE PRICE OF VARIOUS GRADES OF NATURAL**  
**RUBBER IN KUALALUMPUR MARKET**

(Rs/Quintal)

| Month             |      | RSS 1 | RSS 2  | RSS 3  | RSS 4  | RSS 5  | SMR 5 | SMR 10 | SMR 20 |
|-------------------|------|-------|--------|--------|--------|--------|-------|--------|--------|
| April             | 2002 | 3517  | 3441   | 3422   | 3286   | 3221   | 3350  | 3267   | 3241   |
| May               | "    | 3509  | 3446   | 3426   | 3290   | 3225   | 3337  | 3274   | 3248   |
| June              | "    | 4152  | 4067   | 4047   | 3911   | 3846   | 4034  | 4008   | 3982   |
| July              | "    | 4142  | 4078   | 4058   | 3922   | 3858   | 4059  | 3988   | 3959   |
| August            | "    | 4153  | 4110   | 4090   | 3955   | 3891   | 4117  | 4056   | 4030   |
| September         | "    | 4395  | 4348   | 4329   | 4194   | 4129   | 4450  | 4399   | 4373   |
| October           | "    | 4046  | 4001   | 3982   | 3847   | 3783   | 4212  | 4167   | 4141   |
| November          | "    | 4000  | 3955   | 3936   | 3801   | 3737   | 4214  | 4169   | 4144   |
| December          | "    | 4007  | 3962   | 3943   | 3809   | 3745   | 4217  | 4168   | 4142   |
| January           | 2003 | 4219  | 4330*  | 4330*  | 4226*  | 4109*  | 4416  | 4366   | 4340   |
| February          | "    | 4568  | 4716*  | 4716*  | 4613*  | 4497*  | 4640  | 4552   | 4527   |
| March             | "    | 5008  | 5046*  | 5046*  | 4944*  | 4828*  | 4638  | 4563   | 4538   |
| ANNUAL<br>AVERAGE | "    | 4143  | 3934** | 3915** | 3779** | 3715** | 4140  | 4081   | 4055   |

From January 2003 onwards Malaysia discontinued publishing the price of RSS2 to RSS-5 grades of natural rubber.

\* Singapore price

\*\* Average for 9 months only.