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Natural Rubber : Agromanagement and Crop Processing
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Chapter 27

Marketing

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1. INTRODUCTION

An important feature which distinguishes the marketing of perennial crops from that of annual crops is their comparatively inelastic supply response to prices. The major factors underlying the low price elasticity of perennial crops are the relatively long gestation period and inbuilt operational constraints in short-term supply adjustments. These specific features have imparted distinct dimensions to the marketing of perennial crops. Among the commercially important perennial crops, natural rubber (NR) has a unique advantage in processing options which also provide marketing options for the producers and enable them to design their marketing strategy according to the prevailing marketing conditions.

2. MARKETABLE FORMS OF RUBBER

The common marketable forms of NR are ribbed smoked sheet (RSS), crepe rubbers, technically specified rubber (TSR), preserved latex and latex concentrates. Compared to other major NR producing countries, with the exception of Thailand, India's NR processing sector is characterized by the dominance of sheet rubber with a relative share of about 72 per cent (Table 1).

Table 1. Processed forms of NR in India

Form	Share (%)
Ribbed smoked sheet	72.1
Latex concentrates	10.7
Technically specified rubber	9.9
Pale latex crepe	0.3
Estate brown crepe and others	7.0

Source : Rubber Board, 1998

The choice of a processing method by an individual grower depends on factors like investment capacity, expected production, availability of technical know-how and potential demand for the processed rubber. Sheet rubber dominates the NR processing sector in India as it is the oldest and the simplest method of processing latex. The dominance of sheet rubber is also the outcome of relatively less initial investment, inward orientation of NR production in the country and structural characteristics of the rubber products manufacturing sector. The classification of grades in India follows the international standards with minor changes. The international standards were originally set by the Rubber Manufacturers' Association (RMA) Inc., Washington, in 'International Standards of Quality and Packing for Natural Rubber Grades', also known as 'The Green Book'.

According to rule 48 of The Rubber Rules, 1955, TSR in block or any other form and preserved latex and latex concentrate shall be graded and marketed in conformity with the standards specified by the Bureau of Indian Standards (BIS) from time to time.

The processed sheets are visually graded into six grades of ribbed smoked sheets, *viz.* RSS 1X, RSS 1, RSS 2, RSS 3, RSS 4 and RSS 5 according to the standards laid down in the Green Book. The sheets processed by smallholders are generally of poor quality due to the lack of cleanliness in latex collection, handling and coagulation, inadequacies in adding chemicals, *etc.* Consequently, the smallholders generally sell their sheet rubber in ungraded lots consisting of a mixture of RSS 3, 4 and 5. Pale latex crepe (PLC) processed from pure latex is priced higher than RSS 4 in the market. The major crepe rubber, estate brown crepe (EBC), is processed from field coagulum (FC). The grading of crepes is also done visually as per the standards laid down in the Green Book.

The production of TSR was started in India during 1974-75. TSR is presented in blocks of convenient size catering to the specific requirements of the consumer. BIS specification prescribes six grades of block rubber, namely, ISNR 3CV, ISNR 3L, ISNR 5, ISNR 10, ISNR 20 and ISNR 50 depending upon the chemical and physical requirements. Latex concentrates are generally marketed in two forms : centrifuged latex and creamed latex having dry rubber contents (DRC) 60 and 55 per cent respectively and meets the requirements of BIS specifications. Preserved field latex is another form of marketable NR common in the primary market and is consumed mainly for the production of latex concentrates.

3. INDIAN RUBBER MARKETING SYSTEM

The term rubber marketing encompasses the entire spectrum of activities connected with movement of rubber from the primary producers to the ultimate consumers. Among the major NR producing countries, the marketing system in India is distinctive on account of various historical and structural factors. The salient features of the NR marketing arrangements in India, evolved over the last nine decades, are the logical consequences of the sectoral and geographical concentrations of production, the market orientation and the government control/intervention in the market.

The main characteristic of the rubber plantation industry in India in the initial phase was its export orientation until the late 1930s. All the rubber produced was exported since rubber goods manufacturing industry was practically non-existent in India. But the great depression during the 1930s changed the whole situation and exports and prices of NR declined to an unprecedented low level.

With a view to bringing stability to the industry, India along with other NR producing countries, joined the International Rubber Regulation Agreement (IRRA) in 1934, whereby NR exports and new planting of rubber and consequently the production was sought to be regulated. By the agreement, export quotas were assigned to each participating country. The Rubber Licencing Committee was appointed in India under the Indian Rubber Control Act in 1934, for the enforcement of the regulation. This restriction on export of rubber encouraged the growth of indigenous rubber goods manufacturing industry in India, which had its humble beginning in 1922.

An important development in the early 1940s, which basically altered the situation was the invasion of the major sources of NR supply to the allied nations by Japan. All the restrictions on production and exports were removed and price was brought under statutory control in 1942, which marked the beginning of government intervention in the market. The Rubber Production Board was set up under The Rubber Control and Production Order (1942). Between 1942 and 1946, the Government resorted to a monopoly purchase scheme at fixed prices, with a depot at Cochin.

Though the Rubber Control and Production Order lapsed in 1946, the price regulation had to be continued since India's internal consumption of raw rubber had outstripped production by this time. There was also demand from the growers to set up a permanent body to look after their interests. The Government enacted

The Rubber (Production and Marketing) Act, 1947 under which the Indian Rubber Board was constituted. The enactment of The Rubber Act, 1947 and The Rubber Rules, 1955 thereunder was a landmark in the evolution of a fairly developed marketing system for rubber. Natural rubber became a controlled and regulated commodity, as its production, processing, marketing and consumption were to be carried out in accordance with the statutory provisions.

4. SALIENT FEATURES OF THE PRODUCTION SECTOR

4.1 Geographical concentration

A notable feature of the NR industry in India is that the producing units are located deep down in the south while the consuming industries are concentrated in the western, northern and eastern regions. Over 98 per cent of the rubber is produced in the southern states of Kerala, Tamil Nadu and Karnataka, with Kerala virtually having a monopoly with a contribution of about 94 per cent. Consumption of rubber in Kerala being only about 12 per cent, there is a regular flow of rubber to upcountry consuming centres from the State. This geographical set up necessitated the evolution of a marketing system to take care of the problems created thereupon.

4.2 Dominance of smallholdings

The NR production in India is characterized by the dominance of smallholdings. The share of area under the smallholding sector increased over time, currently accounting for 86 per cent, whereas the estate sector comprising plantations above 20.23 ha, has a share of only 14 per cent (Rubber Board, 1997). The rubber plantation industry in the initial phase was characterized by the dominance of the estate sector, which in 1955-56 comprised 55 per cent of the planted area. But the diffusion in the structure of the industry in the post-independence phase, accelerated by a host of socio-economic and political factors, increased the share of smallholding sector gradually and by 1957-58 the share of area under smallholdings surpassed that of the estate sector (George *et al.*, 1988). About 98 per cent of the producing units have an extent of only 2 ha or below (Rubber Board, 1997).

5. PRIMARY MARKETING

There are distinct differences in the primary marketing system in the smallholding and the estate sectors.

5.1 Marketing by smallholders

The smallholders are not favourably placed compared to large estates in marketing mainly due to the non-existence of flexibility in product mix and generally sell their produce in the form of RSS, latex and FC (Fig. 1).

5.1.1 Sheet rubber

The marketing system commonly adopted by the smallholders for sheet rubber is sale through village/town level dealers and merchants in interior markets. They buy smallholders' sheet rubber in ungraded lots with a price differential determined by market demand. The small growers also sell sheet rubber to the purchase depots of cooperative societies and Rubber Producers' Societies (RPS).

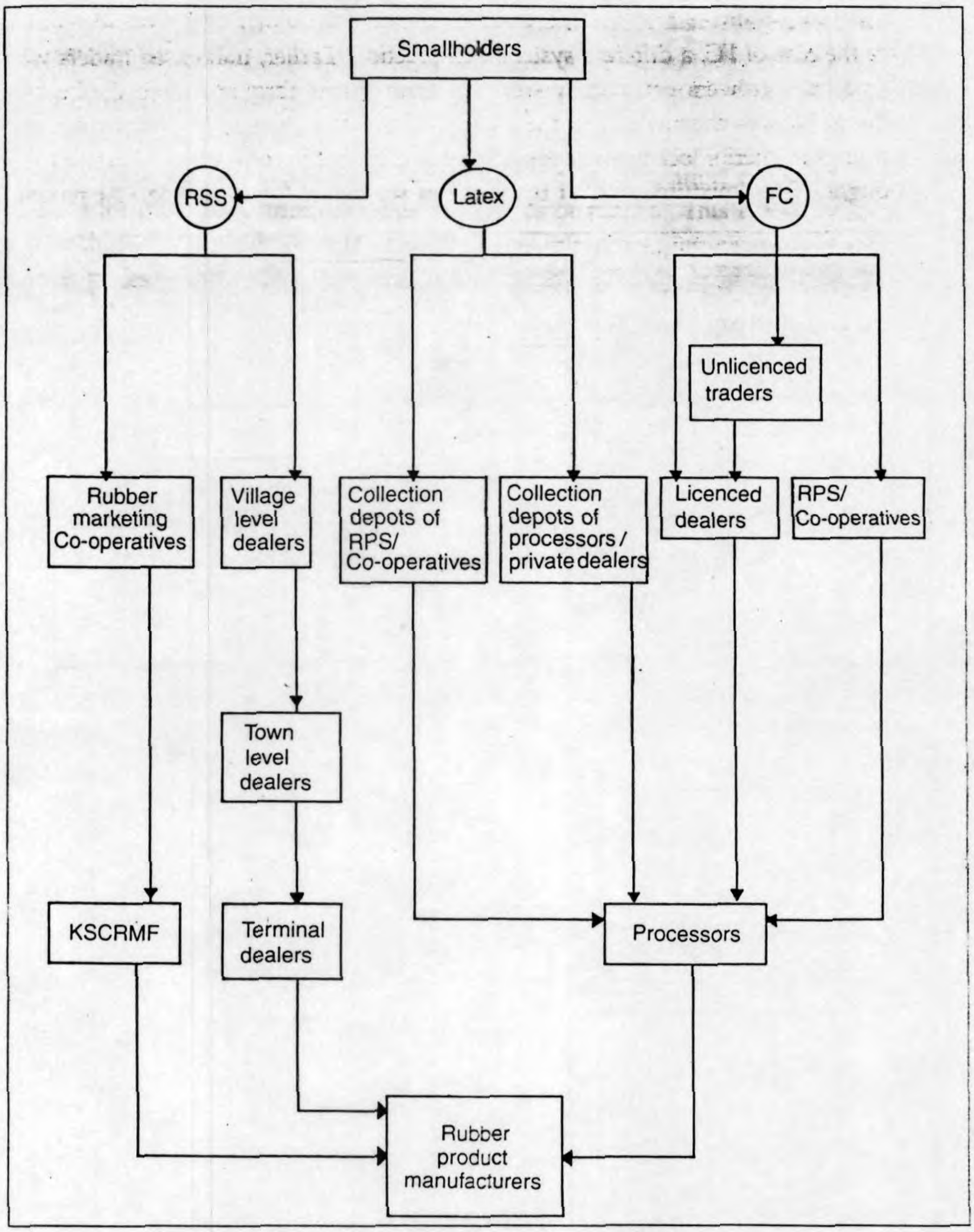

Fig. 1. Marketing channels for smallholders

5.1.2 Latex

The small growers sell the produce as latex depending upon the proximity of their holdings to the latex collection centres run by RPS, cooperative societies or private dealers. The small growers who have the flexibility to return to sheet making, will do so when the price of field latex becomes unattractive.

5.1.3 Field coagulum

In the case of FC, a different system is in practice. Earlier, unlicensed traders who used to visit the growers periodically were the main agents through whom the bulk of smallholders' FC was channelled into the market. This system was more prevalent among smallholdings in interior locations not easily accessible by public conveyance. These traders often bought FC as 'mixture' without fixing prices separately for each type. At present,

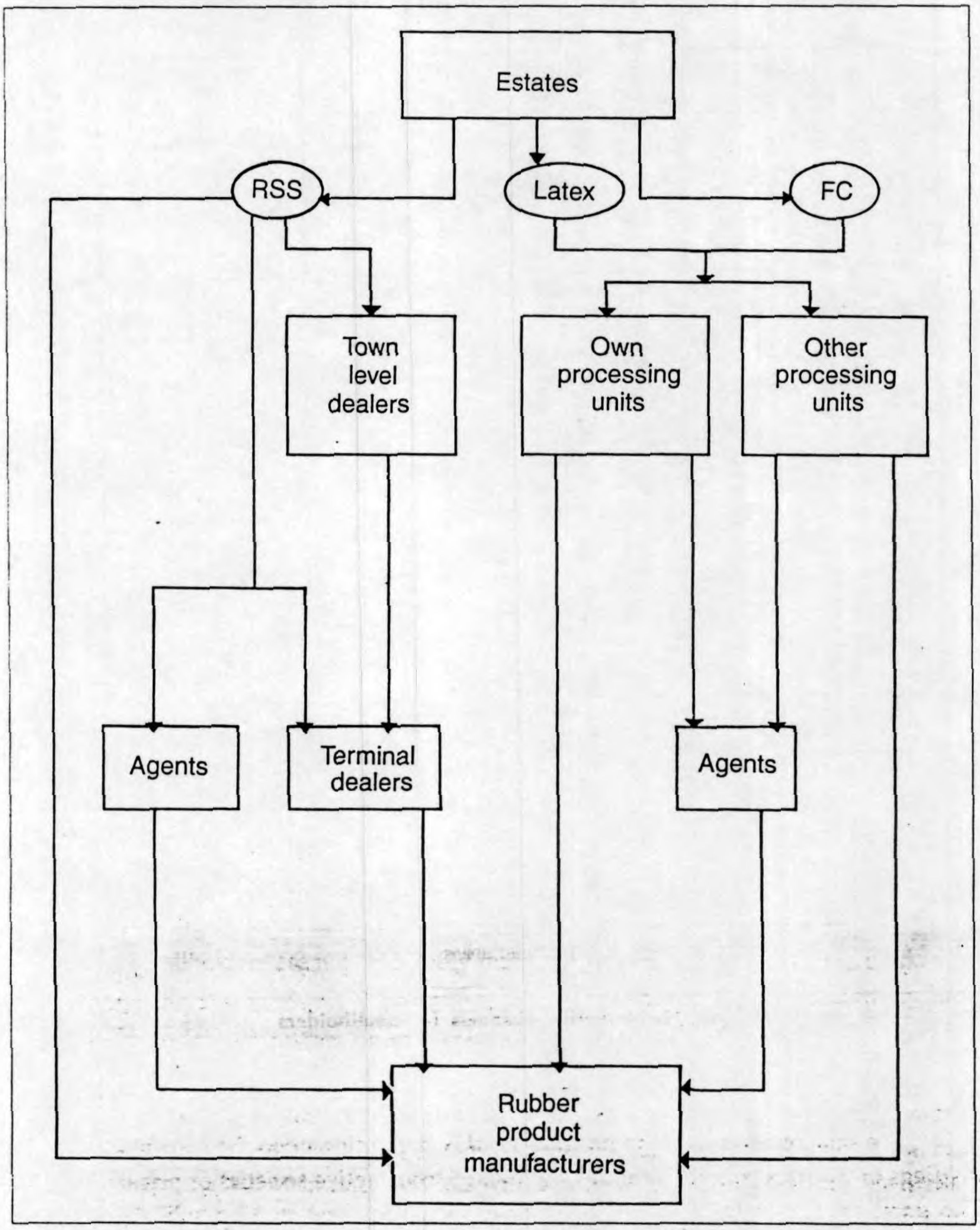

Fig. 2. Marketing channels for estates

along with these traders, licensed dealers, cooperatives, crepe mills and TSR factories also buy smallholders' FC.

5.2 Marketing by estates

The estates market their produce more efficiently. They have an improved marketing system which assures better price realization. Large plantation companies have the facilities for processing different types and grades of rubber. This flexibility in product mix enables them to divert their crop into profitable processing channels based on the market prices.

Large plantation companies also have their own centralized marketing set up, which helps them to make direct sales to consumers, thus avoiding margins to intermediaries. Such companies generally follow a system of either direct sales or tender or tender-cum-auction, though a few follow a system of sale through their approved agents at a mutually agreeable price formula. Medium and small estates have the facilities to process only sheet rubber and the FC is sold as such. They sell sheets to purchase depots of the manufacturers or to terminal dealers in Kottayam or Cochin and secure comparatively better prices. Some of the estates in this group sell latex to centrifuging units also (Fig. 2).

6. STRUCTURE OF NR MARKETING

The NR market in India is characterized by an oligopsonic structure. In the NR production sector, there are around 0.9 million producing units. The consuming sector is dominated by the automobile tyre and tube industry, which accounted for 47 per cent of the total NR consumed in India during 1996-97 (Rubber Board, 1997). Moreover, the tyre and tube industry is highly concentrated while the non-tyre sector consists of a large number of small-scale units.

6.1 Market forces

The price of NR is subject to wide fluctuations brought about mainly by the variations in demand and supply. The force of demand and supply primarily determine the price, subject to imperfection in the market structure and government intervention.Technology in the manufacturing sector, natural rubber-synthetic rubber price ratio, domestic and international price of NR, export-import policy of the Government, *etc.* are the other important factors influencing the NR market. The system of future trading, which is an integral part of the marketing system in major NR producing countries is practically non-existent in India.

6.2 Marketing channels

The main parties involved in the marketing of rubber are the producers, end-users and the intermediaries. The main intermediaries in the market are rubber dealers, both licensed and unlicensed, cooperative marketing societies and RPS and their companies.

The structure of the market for sheet rubber in India is basically characterized by a three-tier system of dealers operating at the village, town and terminal market levels (Fig. 1). The smallholders' rubber passes through a chain of agencies consisting of primary dealers, medium dealers and big dealers, before it reaches the end-users. This is often referred to as the marketing chain which links the producers and consumers located at far off places.

The rubber dealers, numbering 10559 (as on March 1999) can broadly be classified into three, depending on the nature and volume of transaction, as primary or village level dealers, medium or taluk level dealers and terminal or big dealers.

6.2.1 Village level dealers

These dealers who operate at the village level have direct contact with the small growers. They buy smallholders' sheet rubber without grading, at a price ranging from 10 to 20 paise per kg less than the market price of ungraded rubber at major rubber markets. The extent of reduction is more during a declining trend in prices and comparatively low during periods of upward movement in prices. In these transactions the entire rubber market revolves round the lot price even though there is no approved grade as 'lot'.

6.2.2 Town level dealers

Town level dealers located in taluk headquarters buy rubber from the primary dealers and medium holdings. The village level dealers sell their accumulated rubber to town level dealers, without grading and packing, once in a week or a fortnight depending on the stock and the market situation, at a small margin. Actual grading of sheet rubber starts only at this level. These dealers sort the sheets according to grades and sell them to big dealers in 50 kg bundles, which are properly covered with sheets of the same grade, doped with bale coating solution to prevent contamination while transportation and the grade stencilled on each bundle. Normally the weight of each such bundle is reckoned as 50.2 kg, with a permissible maximum limit of 200 g as the weight of doping material.

6.2.3 Terminal dealers

Terminal dealers buy rubber from town level dealers as well as small and medium estates and generally operate at major markets like Kottayam and Cochin. Such dealers negotiate sales with end-users and send the rubber to them directly or through their own branches in important rubber consuming centres, at increased margins. Due to transportation bottlenecks and the unprecedented increase in labour cost for loading and unloading, the traditional system of stocking rubber in the terminal dealers' godown for final grading, packing, doping and despatch is increasingly giving way to despatch of rubber from the source of purchase itself to various destinations, thus avoiding a second handling.

6.2.4 Cooperative societies

The entry of cooperatives in the primary market since mid-1960s was mainly to fill the vacuum of an agency to regulate the dominance of the intermediaries for the benefit of smallholders. The cooperative sector has an extensive network of primary rubber marketing cooperatives in almost all the important rubber growing centres. The Kerala State Cooperative Rubber Marketing Federation (KSCRMF) established in 1971, is the apex institution of the cooperative societies. This institution procures rubber from member societies and arranges for its successful sale in the terminal market, through its sales depots at important rubber consuming centres. The total volume of rubber sales by KSCRMF increased from 350 t in 1971-72 to 29000 t in 1998-99.

6.2.5 Rubber Producers' Societies and companies

Rubber Producers' Societies entered the field of rubber marketing during the late 1980s with the active support and encouragement of the Rubber Board. The establishment of RPS was complementary to the operation of cooperative societies at the micro-level. The RPS undertake and assist group marketing of member growers' produce at remunerative prices by offering grade differentials. The 15 private limited companies which were set up for strengthening the activities of RPS also undertake the marketing of different grades of NR.

6.2.6 Brokers

There are also brokers who are basically rubber dealers but their nature of operation is different from that of normal dealers. They do not normally undertake routine transactions but arrange sales by bringing the buyer and seller in contact and collect brokerage from both the parties.

6.3 Licensing

With the enactment of The Rubber Act, 1947 and The Rubber Rules, 1955, rubber became a controlled commodity and its production, processing, marketing and consumption are to be carried out under a general or special licence from the Rubber Board. The Board has issued a general licence to all registered growers to sell or ortherwise dispose of rubber and another general licence to all manufacturers to acquire rubber not exceeding 68.03 kg per year. For quantities exceeding this, a special licence has to be obtained. Accordingly, every person other than a processor who wants to purchase, sell or otherwise deal in rubber should obtain a dealer's licence from the Board. Every person who wants to acquire rubber for processing or to sell the rubber so acquired after processing or otherwise should obtain a processor's licence and any manufacturer desiring a special licence to purchase or otherwise acquire rubber for manufacturing purpose should obtain a manufacturer's licence from the Rubber Board. Every licensed dealer, processor and manufacturer should submit to the Board, true and correct monthly returns in the prescribed forms giving particulars of their transactions. There are also regulations on the transaction of rubber across the state boundaries. Accordingly, prescribed declarations are to be used by consignors while transporting rubber from one state to another. The licences are liable to be revoked or cancelled if the Board finds any misrepresentation of facts or fraud or if the licensee fails to submit the necessary returns. The Rubber Act also provides for the collection of a duty of excise, called cess, on all rubber produced in the country at the rate notified by the Government of India from time to time. Though originally collected from the growers, the point of collection was shifted to rubber goods manufacturers from 1961.

7. GOVERNMENT POLICY

Natural rubber being a controlled commodity, its price, imports and exports are regulated by the Government.

7.1 Price control

The NR price in India was brought under statutory control in 1942 enforcing a minimum price which is still continuing today (Table 2). During the period from December 1947 to December 1963 and again from October 1967 to November 1968, the maximum price had also been enforced. Among the various price policy regimes, the major policy change, implemented in December 1968, was associated with the removal of maximum of RPS was complementary to the operation of cooperative societies at the micro-level. The RPS undertake and assist group marketing of member growers' produce at remunerative prices by offering grade differentials. The 15 private limited companies which were set up for strengthening the activities of RPS also undertake the marketing of different grades of NR.

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Table 2. Government control on price of NR in India

Period					Policy		
From			To		Min. price	Max.price	Others
May	1942	–	September	1946	Yes	No	
October	1946	–	November	1947	–	–	
December	1947	–	December	1963	Yes	Yes	
January	1964	–	September	1967	Yes	No	
October	1967	–	November	1968	Yes	Yes	
December	1968						Entry of STC
December	1968	–	August	1981	Yes	No	
September	1981	–	February	1986	No	No	
February	1986	–	September	1988	Yes	Yes	BSS
October	1988	–	January	1991	Yes	Yes	BSS
January	1991	–	Till date		Yes		

Source : Burger *et al.*, 1995 BSS : Buffer Stock Scheme

7.2 Import control

To stabilize the prices in the domestic market, the Government had imposed various tariff and non-tariff barriers on imports of NR into India. The major tariff barrier has been the duty on imports which was introduced in 1957. The non-tariff barrier consisted of the regulations on the mode of imports namely canalized and direct (Lekshmi *et al.*, 1996). In 1968, the STC was brought into the field for importing NR (Burger *et al.*, 1995). From 1968 to 1991, the major share of imported rubber was canalized through the STC. Since NR is still in the negative list of restricted items for import, under the present Export and Import (Exim) Policy of 1997-2002, its free import is not permitted. At present, rubber can be imported into the country through three channels, *viz.* against Public Notice, Special Import Licence (SIL) and Advance Licence. Import against Public Notice is resorted to by the Government as and when required, to supplement the availability of rubber within the country. Actual users should apply for import licence against Public Notice issued for the purpose and the Government will issue the licence after proper scrutiny. Such import may be with or without import duty as decided by the Government. Large business houses doing outstanding export business are eligible for SIL. Under this system, the normal import duty and a premium for the licence are to be borne by the importer in addition to normal value of rubber which make the cost of imported rubber considerably high. Advance Licence is a facility given to exporters of rubber products to import raw materials used in the finished exported products and specified in the licence, subject to certain conditions. Imports under Advance Licence are made free of duty. There are Value Based Advance Licence (VBAL) as well as Quantity Based Advance Licence (QBAL) Schemes. In 1998, the Government replaced the VBAL Scheme with a new Duty Entitlement Pass Book (DEPB) Scheme. Since February 1999, the Government has temporarily suspended the import of NR through QBAL channel and the licence holders are now asked to meet their requirements by purchasing NR from STC, which has procured it from the internal market.

7.3 Export policy

Under the current Export and Import Policy (GOI, 1999), there are no restrictions on export of any grade or form of NR. However, all intending exporters of NR shall obtain a Registration-cum-Membership Certificate (RCMC) from the Rubber Board. Only those who own a registered rubber plantation or have a dealer's/processor's licence and possess valid importer and exporter code number and Reserve Bank of India code number will be eligible for RCMC.

8. INSTITUTIONAL SUPPORT

8.1 Role of the Rubber Board

In order to improve the marketing system, the Rubber Board has been giving active encouragement by taking a series of steps. The efforts of the Board, in this regard can be broadly classified under two headings, Regulatory and Promotional.

8.1.1 Regulatory activities

Effective implementation of the statutory provisions and initiation of timely corrective action within the broad framework of the relevant provisions under the Rubber Act and Rules comes under regulatory activities.

8.1.1.1 Licensing

The Rubber Board controls the production, sale and marketing of rubber, based on licences issued for the purpose.

8.1.1.2 Prevention of illicit trading

The Rubber Board has a market intelligence set up which is charged with the responsibilities of preventive vigilance and enforcing compliance of statutory provisions by the trading community. This unit prevents illicits trade practices which often affect the small growers adversely.

8.1.1.3 Control on imports and exports

The domestic market for NR to a great extent is influenced by the Exim Policy of the Government. In India, imports and exports of NR are controlled by the

Government in consultation with the Rubber Board. In performing the function of adviser to the Government, the Board regularly collects statistics of production, consumption and stocks from estates, dealers, processors and manufacturers and reviews periodically the demand and supply of rubber, and makes projections for future supply and requirements. When the domestic production falls short of consumption requirements, the Board advises to meet the deficit by imports against Public Notice. If the domestic industry cannot fully absorb the rubber produced internally, recommendation is made for domestic procurement.

8.1.2 Promotional activities

The activities initiated by the Rubber Board for the promotion and development of modern scientific processing of raw rubber and primary marketing of processed rubber come under promotional activities.

8.1.2.1 Training in processing and grading

Active encouragement is given by the Rubber Board, in the form of technical and financial assistance, for processing rubber into better quality sheet, through a network of extension offices. The Board is operating two schemes for the smallholders to improve the quality of sheet rubber by subsidizing the cost of sheeting rollers and providing technical and financial assistance for the construction of smoke houses.

8.1.2.2 Market information system

It is widely accepted that price is the most sensitive factor in a commodity market. It is therefore essential that market prices are correctly compiled, monitored and published so as to avoid exploitation of growers. The Rubber Board has evolved a system of market information by regular collection and dissemination of information on rubber prices. Daily market prices have been collected since December 1949. The daily prices of RSS 4 and ungraded rubber in India and the prices of various grades in Kuala Lumpur market are published in the leading newspapers. Besides, prices of higher grades in India are published in local dailies once in a week. The publication of prices, particularly those of RSS 4 and higher grades has been largely responsible for creating an awareness among small growers about price trends. In the case of field coagulum, the prices are published twice a week. The systematic collection and publication of market information strengthens the bargaining power of growers against traders.

8.1.2.3 Support for organized processing and marketing

The Rubber Board has been encouraging organized processing and marketing in the cooperative sector since it has been identified as the best course of action to modernize the smallholdings. The assistance provided includes organizational and technical assistance, share capital participation and working capital loans to cooperatives to establish factories for the processing of TSR, centrifuged latex and pale latex crepe. The establishment of six TSR factories in the cooperative sector during the 1970s under the Kerala Agricultural Development Programme (KADP) ensured a higher unit realization for the small growers' produce. The Rubber Board is providing financial assistance to the cooperative societies in the form of share capital contribution for the marketing of rubber in non-traditional areas, for the marketing of quality grade rubber and estate inputs, for establishing processing units and also for the establishment of new pollution control system.

Rubber Producers' Societies also are provided with financial assistance for setting up latex collection centres and construction of latex collection centre cum godowns, group processing centres and smoke houses. To strengthen the activities of RPS further, the Board has helped them to set up a number of processing and trading companies by providing financial and technical assistance.

8.2 Role of cooperatives

The cooperative sector has the dual role of ensuring a better return for the small-holders' crop and bringing about improvements in the quality of the crop. Earlier, since there were many intermediaries involved in the marketing process, the gross marketing margin was higher. The growers were also denied the grade differentials under the conventional system of visual grading. The cumulative effect of all these was a higher difference between the farm gate price and the price paid by the ultimate consumer. The cooperative sector entered the scene under such a situation to minimize the number of intermediaries, to cut the marketing margins to the minimum and to ensure a better return to the grower.(Jacob, 1985). The reported share of farm gate price of 92 per cent for sheet rubber in 1990 was one of the highest in the country (Sreekumar *et al.*, 1990). The cooperatives also provide an incentive to the small growers for processing superior quality sheets by offering grade differentials.

At present, the cooperative sector is the single largest supplier of NR in the country. The 295 societies and 1675 RPS marketed 62900 t of rubber in 1997-98 accounting for 11 per cent of the total NR produced in the country (Rubber Board, 1999).

8.2.1 Rubber Producers' Societies

Rubber Producers' Societies are village level voluntary associations of small growers registered as charitable societies under the Societies Registration Act, 1860. The RPS undertake and assist group marketing of member growers' produce at remunerative prices by offering grade differentials. The RPS also help the small growers to organize at the grass root level, and group-process their crop to value-added marketable grades. Fifteen private limited companies were set up by the RPS in association with Rubber Board, of which seven undertake modern processing and the others undertake trading of rubber and estate inputs. The processing companies also undertake marketing operations. The companies handle field latex, sheet rubber, TSR, latex concentrates and plantation inputs.

9. MERITS AND DEFECTS

9.1 Merits

The well-spread out network of rubber dealers itself ensures better competition, which would be beneficial to the growers. Since about 90 per cent of the dealers fall under the category of primary dealers operating at the village level, the growers can sell their crop in their village itself, thus avoiding storing, packing and transportation. The rubber dealers offer incentives to the growers like advances without interest to meet immediate needs which could be settled by future supplies of rubber. Some of the dealers provide stocking facility to the growers. Under this system, the growers have to hand over their rubber regularly to the dealer and, in return, the grower is given the right to settle the deal partially or fully as and when he wants, at the prevailing market rates. The institutional support through the cooperatives enables the growers to get the maximum farm gate price.

9.2 Defects

Even though NR marketing can be rated as fairly developed, it is still not free from defects. Conventional system of processing of a major portion of the crop into sheet rubber, the visual grading of the sheets and the dominance of private dealers pave the way for all the defects of the present system. The major defect is downgrading of small growers' produce by the dealers since there is no grading agency to confirm or contradict the grading.

10. FUTURE SCENARIO

The dynamic growth attained by the NR sector in India can be attributed to the government patronage enjoyed by this sector since 1942 either through statutory controls or price support under different historical contexts with varying forms of policy intervention which is being continued even today. The major underlying factor behind the relatively remunerative price enjoyed by this crop in the country appeared to be the non-quantifiable policy inputs related to the price support and import controls. The growing process of liberalization and market integration in the 1990s have altered the prevailing equations in the process of price determination by simplifying the procedural formalities and by diluting the tariff and non-tariff barriers on import of NR and rubber products into the country. This emerging scenario of liberalization and growing market integration, subjecting the NR sector in India to the threat of competition from other NR producing countries, underline the need to revolutionize the processing and marketing scene to accommodate in its mainstream the changing consumer requirements and producer capabilities. The future development strategy should be drawn against the perspective of the quickly changing structural pattern of the industry, with importance being shifted to the small growers.

REFERENCES

Burger, K., Haridasan, V., Smit, H.P., Unni, R.G. and Zant, W. (1995). The Indian rubber economy: History, analysis and policy perspectives. Manohar Publishers and Distributors, New Delhi, 176 p.

George, K.T., Haridasan, V. and Sreekumar, B. (1988). Role of Government and structural changes in rubber plantation industry in India. *Economic and Political Weekly*, 23(48) : 158-166.

GOI (1999). Export and import policy : 1 April 1997 - 31 March 2002. Ministry of Commerce, Government of India, New Delhi, 65 p.

Jacob, G. (1985). Co-operative marketing in India. *Rubber Board Bulletin*, 21(2) : 22-27.

Lekshmi, S., Mohanakumar, S. and George, K.T. (1996). The trend and pattern of natural rubber price in India : An exploratory analysis. *Indian Journal of Natural Rubber Research*, 9(2) : 82-92.

Mani, S. (1984). Price movements of an agricultural raw material with inventory adjustments : Case of Indian natural rubber in 1970s. *Economic and Political Weekly*, 19(52&53) : A205-A212.

Rubber Board (1997). *Indian Rubber Statistics*, 22 : 85.

Rubber Board (1998). *Rubber Statistical News*, 57(6) : 2.

Rubber Board (1999). *Indian Rubber Statistics*, 23 : 75.

Sreekumar, B., Haridasan, V. and Rajasekharan, P. (1990). Farm gate price of natural rubber. *Indian Journal of Natural Rubber Research*, 3(2) : 111-115.