MARKETING OF RUBBER BY SMALL GROWERS IN NEDUMANGAD TALUK

By

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DISSERTATION

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DECLARATION

I hereby declare that this dissertation entitled "**Marketing of rubber by small growers in Nedumangad taluk**" is a bonafide record of research work done by me and that this dissertation has not previously formed the basis for award to me of any degree, diploma or other similar titles of any other University or Society.

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CERTIFICATE

Certified that this dissertation entitled "**Marketing of rubber by small growers in Nedumangad taluk**" is a record of research work done independently by **Sri.M.Abdul Rasheed** under our guidance and supervision and that it has not previously formed the basis for the award of any degree or diploma to him.

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Introduction

INTRODUCTION

Hevea brasiliensis Muell. Arg. which is reckoned as the prime source of natural rubber is considered as a unique raw material indispensable for the production of a wide range of industrial, agricultural and household goods. Consequent to the rapid industrialisation, the demand for natural rubber has increased tremendously. Nevertheless, there is a wide gap in production and consumption which warrants substantial imports of natural rubber off and on.

Historically, the primary marketing of natural rubber has been controlled by intermediaries and other agents. In the natural rubber producing countries, there exists varied marketing channels. The major form of natural rubber sold till the development of technically specified rubbers was sheet rubber, which is being graded visually and relative prices determined on the basis gradation. At the same time, the competing synthetic rubber which accounts for more than 65 per cent of the world's total rubber requirements has been marketed by the producers in technically specified grades, with the support of modern marketing techniques. The development of the technically specified block rubber since 1970 has contributed considerably to the changes in the pattern of primary marketing of natural rubber. The share of block rubber in the major natural rubber producing countries such as Indonesia and Malaysia are 75 per cent and 70 per cent, respectively, whereas sheet rubber dominates in Thailand and India accounting for 85 per cent and 75 per cent, respectively.

In the case of major natural rubber producing countries, small holding sector contributes the major share (80%). The farm gate price of natural rubber in

India was reported to be 80 per cent of the terminal market price in 1994-'95. However, it is very often observed that the intermediaries/dealers take definite advantage from the prevailing grading system and the growers are exploited in the process of visual grading.

Among the various rubber growing regions in Thiruvananthapuram district, Nedumangad occupies a dominant position. Rubber was first planted in the eastern belt of the taluk on a plantation basis by the British Colonial Authorities and since then there was substantial expansion of area under rubber in this region and at present an area of 14,000 ha is estimated to be under rubber cultivation in the taluk. The majority of the rubber growers in this region are having an area ranging between 0.5 ha to 2.0 ha. Albeit much improvement has been achieved with respect to area, production and productivity of rubber; a scientifically sound and systematic marketing system is still lacking in the country. It has been generally observed that while consumers pay increasingly high prices for agricultural commodities, the real producers do not receive a reasonable price. About 75 per cent of the natural rubber produced in the country reaches the market as RSS (Ribbed Smoked Sheets) which are graded according to the specification laid down by the RMA (Rubber Manufacturers Association) and are known as RMA grades. Grading is usually done by visual observation which usually leads to unhealthy trading practice of down grading. A good percentage of growers also sell their produce as latex to the Rubber Producers Societies and other private agencies. Usually the price of latex is calculated on the basis of DRC (Dry Rubber Content) and there is often complaints on the measurement of the DRC. As the common rubber growers are unaware of the technique of calculating DRC, there is ample chance for cheating the growers. Therefore, the investigations reported herein were undertaken with an objective to

examine the nature and extent of exploitation of small scale rubber growers in Nedumangad taluk of Thiruvananthapuram district with respect to marketing of their produce.

Review of Literature

REVIEW OF LITERATURE

Studies on natural rubber marketing are rather scanty. However, earnest attempt is made to scan the available literature in this aspect and are furnished hereunder:

Iype (1986) has studied the short term supply response of rubber to price changes and analysed the structure and performance of the rubber market in Kerala. The analysis revealed the positive and appreciable growth rate of natural rubber prices in Kerala and the competition among the dealers with larger volumes was found to be decreasing which resulted in the possibility of increasing share of total market for rubber.

Cyriac (1988) had stated that as in Malaysia and in other major rubber producing countries, a sizable portion of natural rubber in India was processed into latex concentrates and the availability of Ribbed Smoked Sheets (RSS) came down.

Sekhar (1992) observed that marketing and price determination remained as the "Achiless heel" of natural rubber industry. The need to assure and ensure markets also encouraged natural rubber producers to establish direct links with consumers. Along with this, national aspirations were driving producing countries to establish separate individual markets. It was further commented that the marketing system should enable the primary producers to realise as near as possible the intrinsic value of natural rubber to consumer. He has also stated that the fragmented commodity marketing system which was in vogue need to be substantially overhauled.

Jacob (1990) had opined that the marketing in a crop like rubber is all the more important because the bulk of the produce comes from a vast number of small farmers owning on an average less than one hectare of rubber area. The peculiarity of rubber plantation industry has also brought in its wake many complex and complicated problems in marketing. Small holders account for 82 per cent of the total rubber area in the country. Their share in the total natural rubber production is 79 per cent. These are bound to increase substantially in the coming years.

The present system of marketing in rubber has been evolved over many years. The Rubber Act of 1947 and the Rubber Rules framed in 1955 gave new dimensions to the present marketing system. With the implementation of the Rubber Act and Rules, rubber became a regulated and controlled commodity.

There are distinct differences between the marketing systems in vogue for the estate sector and the small holding sector. The estate sector had developed a fairly good marketing system. Some of the big plantation companies sell their produce directly to consumers, thereby taking full advantage of the prevailing market prices. Some companies have their own agents who organise sales at attractive price. Most of the medium and small estates sell their produce directly to big dealers operating at Kottayam and Kochi, thereby securing comparatively better prices. But the small holders are not favourably placed in marketing vis-a-vis the estates. Economically weak, widely dispersed and disorganised as they are, the small holders are heavily dependent on intermediaries to market their produce.

The main intermediaries are the rubber dealers, both licensed and unlincenced, co-operative marketing societies and of late the Rubber Producers' Societies (RPS).

There was a general complaint among the small growers that they were not getting a reasonable price for their produce. Hence, in order to create an awareness among the growers, processing campaigns were held by the Rubber Board through its various offices with the participation of growers, dealers and Rubber Producers' Societies in the main plantation centres in the states of Kerala and Tamil Nadu (Rubber Board, 1992). In these campaigns, scientific methods of processing latex into quality grade sheets were demonstrated. But no fruitful result was achieved and planters are of the opinion that eventhough they process quality sheets systematically, as they are assessed as ungraded, why all pains be taken for processing quality sheets.

Material and Methods

MATERIALS AND METHODS

The information envisaged in the study were gathered by conducting field survey in selected rubber holdings and dealers/traders in Nedumangad taluk using a pretested questionnaire which is reproduced as Appendix-I. The selected holdings are planted with three different clones, of which RRII 105 forms the major one occupying more than 80 per cent of the area and the rest being occupied by GT 1 and RRII 600. The observations recorded on the various aspects investigated are furnished hereunder.

3.1 Size classification of the growers

The growers selected for the study were classified into three size classes based on the extent of area as follows.

Class No.	Extent of area (ha)
I	Upto 1.00
II	1.01-2.00
III	2.01-4.00

The list of growers as well as dealers selected for the study are furnished in Appendix-II.

3.2 Tapping system followed

The number of growers in each size class who adopted the various systems of tapping such as ½S d1 and ½S d2 was recorded and their respective percentages worked out and presented in tabular form.

3.3 Details of labour involved for tapping

The details of labour engaged for tapping were collected class wise and presented as hired labour and family labour. The respective percentages were also worked out.

3.4 Yield performance

The total quantity of sheet rubber as well as scrap rubber obtained during the past one year was gathered separately for each holding. The total production for each size class was also calculated from the data gathered. The productivity with respect to sheet, scrap as well as total dry rubber were worked out with respect to each size class.

3.5 Total income and price realized by the holders

The total income and average price received by the growers for the rubber (sheet, latex and scrap) produced during the past one year were collected and the averages worked out separately for each size class.

3.6 Classification of growers based on sheet production

The only method of rubber processing followed in Nedumangad taluk is the production of RSS. Therefore, the selected growers were classified as those who produced graded sheets and ungraded sheets.

3.7 Details on the use of sieve for straining latex

The number of growers who used the recommended sieve (40/60 mesh)

and those who did not use the same were gathered with respect to each size class and their percentages worked out.

3.8 Details on the use of acid for sheet production

The number of growers who adopted the correct dose of acid recommended for sheet production and those who have not used correct dose with respect to each size class were recorded and the corresponding percentages estimated.

3.9 Details on the use of sodium bi sulphate in sheet production

As in the case of usage of acid, the details of the growers who used sodium bi sulphate to impart colour and to prevent surface darkening of rubber sheet were collected and presented class wise along with the computed percentages.

3.10 Use of paranitrophenol

The use of the chemical paranitrophenol (recommended to prevent the mould growth on the rubber sheet by the growers) was assessed and presented separately for each size category and their respective percentages calculated.

3.11 Use of smoke house for smoking sheets

During the survey, the details on the extent of use of smoke houses for the production of quality sheets, by the farmers under each size category were gathered and their respective percentages calculated.

3.12 Marketing and price realization

The mode of disposal of rubber as sheet (RSS), latex, scrap etc. adopted

by various growers, as well as price realised for each item were also assessed based on the data collected from the selected holdings. The DRC of latex calculated by the dealers were rechecked by drawing latex samples directly from the growers field and was compared with the DRC noted by the dealers to find out whether there is any difference in DRC which elucidate the willful malpractice if any, on the part of the dealer.

3.13 Periodicity of disposal

The periodicity of disposal i.e., daily, weekly, monthly, quarterly, half yearly or yearly and the price realised were also assessed by collecting data from the sample growers selected. Details on the prevailing channel for the marketing of rubber in Nedumangad taluk were also investigated and presented as flow chart.

Results and Discussion

RESULTS AND DISCUSSION

The data collected during the course of investigation are systematically arranged and presented in various tables. The results of the study are discussed hereunder to arrive at valid conclusions.

4.1 Size wise classification of holdings selected

The data pertaining to the size wise classification of the holdings selected for the study are furnished in Table 1. The extent of area of different holdings (including rubber and other crops) varied from less than one hectare to four hectares. Accordingly, three classes could be formed comprising of 20 holdings each in class I (up to 1 ha) and class II (1.01 to 2.00 ha). The third class consisted of 10 holdings with an area ranging from 2.01 to 4.00 ha. However, the average size of rubber holding was only 0.46 ha under category I, 0.49 ha under category II and 1.32 ha under category III. General observation made during the survey was that many of the large farmers are reluctant to plant rubber in larger area, mainly due to the disadvantage of monospecies cropping.

4.2 Systems of tapping adopted

The results of the data collected on the details of tapping system followed by the growers (Table 2) revealed that 90 per cent of the farmers are following ½S d1 system and the remaining 10 per cent of growers adopted ½S d2. However, none of the farmers have gone for ½S d3 system of tapping. It is also generally observed that tapping rest is not given during dry months i.e., January to March.

Table 1. Size wise classification of holdings selected

Class No.	Extent of area (ha)	No. of holdings	Total area under possession (ha)	Total area under rubber (ha)	Average size of rubber holding (ha)
I	Upto 1.00	20	9.41	9.19	0.46
II	1.01-2.00	20	24.77	9.86	0.49
III	2.01-4.00	10	27.13	13.23	1.32
Total		50	61.31	32.28	

Table 2. Details of tapping systems adopted

Size class	Tapping system			
	½S d1		½S d2	
	No. of units	Percentage	No. of units	Percentage
Upto 1.00	20	100	-	--
1.01 - 2.00	17	85	3	15
2.01 - 4.00	8	80	2	20
Total	45	90	5	10

4.3 Details of labour engaged for tapping

Table 3 shows the details of labourers employed for tapping by the growers under different size category. The results revealed that hired labourers are employed in 90 per cent of the units and family labourers in the remaining 10 per cent units. The results also show that under the size class 2.01 to 4.00 ha, only hired labourers are employed for tapping and no family labourers are engaged. This may be due to their financial stability and engagement in other assignments.

4.4 Yield performance

The details of the yield obtained from the sample holdings are furnished in Table 4. In the case of class I (upto 1.00 ha) the average yield obtained was found to be 1870 kg^{-1} whereas it was 2062 kg^{-1} in class II (1.01 to 2.00 ha) and 2448 kg ha^{-1} in class III (2.01 to 4.00 ha). The results indicate that the yield increases with increase in the size of holdings. This may be due to the timely and judicious adoption of scientific technologies by the comparatively larger growers who are also financially sound. The yield decline noted in the lower size classes elucidate the poor management of the plantations. The difference in the clones might have also contributed to the differential yield.

4.5 Classification of growers based on processing

The data furnished in Table 5 reveal that all the rubber growers irrespective of the size class processed the latex into ungraded sheets. This may be due to the reason that usually the growers are not in receipt of premium price for the better quality sheets produced as per the prevailing marketing system in the locality.

Table 3. Details of labour engaged for tapping

Size class (ha)	Hired labour		Family labour	
	No. of units	Percentage	No. of units	Percentage
Upto 1.00	18	90	2	10
1.01 - 2.00	17	85	3	15
2.01 - 4.00	10	100	-	--
Total	45	90	5	10

Table 4. Yield performance

Size class (ha)	Total extent of area (ha)	Average yield (kg/ha)
Upto 1.00	9.19	1870
1.01 - 2.00	9.86	2062
2.01 - 4.00	13.23	2448
Total	32.28	2126

Table 5. Classification of growers based on sheet production

Size class (ha)	Growers who processed graded sheets	Percentage	Growers who processed ungraded sheets	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	--	--	10	100
Total	--	--	50	100

4.6 Details of the sieve used for straining latex

The data collected on the details of the sieve used for straining latex for the removal of dirt and other impurities are shown in Table 6. It is revealed that none of the growers have used 40-60 mesh sieve for straining and even they are unaware of the fact that straining is essential for the production of superior quality sheets eventhough its benefits were popularised by the Rubber Board (RRII, 1980).

4.7. Details on the use of acid for the production of sheet rubber

The data collected on the dosage of acid used for the production of sheets are tabulated in Table 7. From the study it is understood that the growers under the category I and II (upto 2.00 ha) are not aware of the correct dosage of acids (acetic/formic) to be used for the production of quality sheets, though Rubber Board has made wide publicity in respect of the correct usage of acid for the production of quality sheets (RRII, 1980). In the case of large holders (2.01 to 4.00 ha) also, only 30 per cent growers are following the correct dose of acid. Out of the 50 growers interviewed only 6 per cent of them are using the correct dose of acid. Due to improper dosage and mixing of acid, small bubbles appear along the edges of the sheets leading to stickyness and further result in inferior quality. As the small farmers are not usually in receipt of better prices for the quality sheets, they are not so keen about the correct use of acids for the production of better quality sheets.

4.8 Details on the use of sodium bi sulphate

Table 8 contains the data pertaining to the use of sodium bi sulphate to prevent surface darkening and to provide attractive colour to the sheets. It is

Table 6. Details of sieve used for straining latex

Size class (ha)	No. of growers who used 40/60 mesh sieve	Percentage	No. of growers who have not used 40/60 mesh sieve	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	--	--	10	100
Total	--	--	50	100

Table 7. Details on the use of correct dose of acid for the production of sheets

Size class (ha	No. of growers who used correct dosage of acid	Percentage	No. of growers who have not used correct dosage of acid	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	3	30	7	70
Total	3	6	47	94

Table 8. Details on the use of sodium bi sulphate for the production of sheets

Size class (ha)	No. of growers who used correct dosage of sodium bi sulphate	Percentage	No. of growers who have not used correct dosage of sodium bi sulphate	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	--	--	10	100
Total	--	--	50	100

observed that none of the growers interviewed are in the practice of using sodium bi sulphate for the production of quality sheets. Moreover, nobody is aware of the chemical, sodium bi sulphate and its use (for sprinkling over the surface of the coagulam 1.2 g per kg DRC dissolved in water) despite Rubber Board had taken all possible measures to popularise this chemical through seminars, group meetings, pamphlets and other literatures (Peries, 1970). The growers are not taking much pains in producing better quality sheets for they are getting a reasonable price for the ungraded sheets now being produced.

4.9 Details on the use of paranitrophenol

The results of the data gathered on the use of paranitrophenol (PNP) by the growers (Table 9) revealed that none of the growers in any of the size classes are in the practice of using paranitrophenol against mould growth on rubber sheets. They are also unaware of the fact that mould growth on sheet rubber can be prevented by treating the freshly machined sheets in a dilute solution of paranitrophenol 0.05 to 0.1 per cent in water though Rubber Board has also given much publicity on the use of this chemical (RRII, 1980).

4.10 Details on the use of smoke house for smoking sheets

The results of the data collected on the use of smoke houses by growers (Table 10) revealed that 20 per cent of the growers under size class III (2.01 to 4.00 ha) have resorted to smoke houses for smoking sheets and growers under the other size classes have adopted chimney smoking or sun drying. When the sheets are smoked in smoke house at a temperature between 40°C and 60°C, the sheets get dried gradually without blisters and mould/yeast growth as a result of the action of

Table 9. Details on the use of paranitrophenol for the production of sheets

Size class (ha)	No. of growers who used paranitrophenol	Percentage	No. of growers who have not used paranitrophenol	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	--	--	10	100
Total	--	--	50	100

Table 10. Details on the use of smoke house for smoking sheets

Size class (ha)	No. of growers who used smoke house	Percentage	No. of growers who adopted other methods for drying/smoking sheets	Percentage
Upto 1.00	--	--	20	100
1.01 - 2.00	--	--	20	100
2.01 - 4.00	2	20	8	80
Total	2	4	48	96

the creosotic substances present in the smoke (Thomas, 1971). The farmers are of opinion that the smoked sheets and kitchen chimney/sundried sheets are considered as ungraded and the price realized is the same for both and hence they are not interested in using smoke houses. However, most of the growers are unaware of the scientific advantage of smoking sheets in smoke houses.

4.11 Total income and price realised by the growers

The details on total income and price realised by the growers for their produce are furnished in Table 11. The produce is disposed in three ways, i.e., as latex, sheet and scrap. However, the growers in the second category are not selling latex as such. The main mode of disposal by the small holders (upto 1.00 ha) is by latex fetching about 75 per cent of the total income received from the holding (Rs.407550 out of total income Rs.625185) the farmers in the third category disposed their produce mainly as sheets. From the data it could be seen that with respect to the average price realised, the highest was Rs.73624 per ha by the growers under the third category and the lowest price per ha was realised by the first category (Rs.68028 per ha). In general the price realised increased with the increase in the size of the holdings. Comparatively better price received by the higher size class groups may be due to the fact that better facilities are available for the processing of latex, contributing to the production of better quality sheets. Another possible reason may be that the growers with larger extent of area are financially in a better position and usually they do store the produce for a reasonable period so as to fetch better price.

Table 11. Details on total income and price realization

Size class (ha)	Total extent (ha)	Latex	Total income (Rs.)			Average income (Rs./ha)
			Sheet	Scrap	Total	
Upto 1.00	9.19	407550	175200	42435	625185	68028
1.01 - 2.00	9.86	-	611320	88931	700251	71019
2.01 - 4.00	13.23	131300	728650	114099	974049	73624

4.12 Mode of sale adopted by the growers

The data collected on the mode of sale adopted are shown under Table 12. It is revealed that 30 per cent of the growers have sold their produce as latex and 70 per cent as sheet rubber. It is further disclosed that all the growers under class II (1.01 to 2.00 ha) and 70 per cent of class III (2.01 to 4.00 ha) have sold their produce as sheet rubber. As the plantations were usually very near to the residence and they were having other infrastructure they resorted to the method of sheeting for sale. Usually the price of latex is calculated based on DRC in latex and cheating practice by dealers has been reported during the study. The common rubber growers are unaware of the technique of calculating DRC and hence there are chances for deceiving the growers. Hence, samples were taken from the randomly selected growers and DRC ascertained in the laboratory. The actual DRC ascertained was compared with the DRC noted by the dealer and differences were worked out in the case of growers shown against serial numbers 8, 10, 48, 49 and 50 in Appendix-II and furnished in Table 13. The shortage noticed varied from 14.50 to 20.00 percentage and the average is ascertained as 15.82 per cent; and as a result of this deception there is heavy loss to the farmers. It was also found during the study that all the dealers purchased rubber sheets from the growers as ungraded and they were selling the same to the next trader after sorting them as graded and ungraded. The prices given to the growers for sheet/scrap rubber did not tally with that published in the newspapers. Only one among four dealers effected payment on the basis of price published in the newspapers. The sheet rubber purchased by the dealers and traders at different levels is brought to the market at Kochi. In the terminal market, the dealers or commission agents sell sheet rubber either direct to

Table 12. Mode of sale adopted by the growers

Size class (ha)	No. of growers who sold their produce as latex	Percentage	No. of growers who sold their produce as sheet rubber	Percentage
Upto 1.00	12	60	8	40
1.01 - 2.00	--	--	20	100
2.01 - 4.00	3	30	7	70
Total	15	30	35	70

Table 13. Details regarding the shortage of DRC as calculated by the dealers

Sl.No.of growers	Size class	Weight of latex (kg)	DRC as per dealer	Actual DRC as per lab test	Difference in DRC (kg)	Shortage (%)
8	III	23.200	28.0	33.0	1.160	15.1
10	III	52.000	28.2	33.0	2.496	14.5
48	I	4.800	29.0	34.0	0.240	14.7
49	I	4.400	29.0	34.0	0.220	14.7
50	I	7.800	28.0	35.0	0.546	20.0
Average		18.44	28.44	33.8	0.932	15.82

the consumers or dealers based on the industrial centres of the country. Thus the produce from the small growers have to pass through different stages of marketing before reaching the final consumer. But an interesting factor to be taken into account is that difference between the farm gate price and the terminal market price is negligible. It was found that the producers received more than 80 per cent of the price paid by the consumer (RRII, 1980). The prices of lot rubber and RMA 4 prevailed during 1994-95 are given in Appendix-III.

It has been observed that a major share of the scrap rubber produced in the Nedumangad taluk is consumed by M/s.Ponmudi Rubbers (P) Ltd. at Palode, a holding company registered by Rubber Board and by another private factory owned by M/s.MKP and Sons at Vithura.

4.13 Periodicity of disposal followed by the growers

The data collected on the periodicity of disposal of the crop are shown in Table 14. The dried rubber sheets are sold to the nearby dealers and the latex to the private agencies and Rubber Producers' Societies in different parts of the taluk. The frequency of sales varied from monthly to yearly. It is revealed that out of the total 50 growers interviewed, 48 per cent have sold their produce monthly, four per cent quarterly, 14 per cent half yearly and 34 per cent as yearly. In the case of growers having area upto 1.00 ha, 70 per cent of them have sold their crop monthly because they were in need of money frequently. So also, 60 per cent of the growers under class II (1.01 to 2.00 ha) resorted to yearwise sales for their capital seasonal expenditure.

Table 14. Periodicity of disposal followed by the growers

Size class (ha)	Monthly	Percent-age	Quarterly	Percent-age	Half yearly	Percent-age	Yearly	Percent-age
Upto 1.00	14	70	--	--	3	15	3	15
1.01 -- 2.00	4	20	1	5	3	15	12	60
2.01 - 4.00	6	60	1	10	1	10	2	20
Total	24	48	2	4	7	14	17	34

merchants/primary dealers and then to the secondary dealers. The secondary dealer who is gaining much profit sells the scrap to the crepe mills and the crumb factories.

There is a well spread out net work of primary rubber marketing co-operatives in almost all the important rubber growing centres. There is also an apex organisation, namely the Kerala State Co-operative Rubber Marketing Federation, located in Kochi, which procures rubber from its member societies and arranges for its sale in terminal markets through their sales offices.

As Jacob (1990) discussed in "Rubber Asia", the Rubber Producers Societies (RPS's) entered the field only recently. Their entry was necessitated because the co-operative movement could cater to the needs of the small growers only to a limited extent. The Rubber Board is now giving full support and encouragement to the RPS's, to enter the marketing field. It is expected that within the coming few years, it will emerge as the main agency in the marketing of small holders' rubber.

It is in this context that the Rubber Board has taken steps to improve marketing in the small holding sector. The efforts of the Board in this regard can be broadly classified under three headings.

(a) Effective implementation of the statutory provisions and timely corrective action within the frame work of the Rubber Act and Rules.

(b) Promotion and development of organised processing and marketing of small holders' rubber.

merchants/primary dealers and then to the secondary dealers. The secondary dealer who is gaining much profit sells the scrap to the crepe mills and the crumb factories.

There is a well spread out net work of primary rubber marketing co-operatives in almost all the important rubber growing centres. There is also an apex organisation, namely the Kerala State Co-operative Rubber Marketing Federation, located in Kochi, which procures rubber from its member societies and arranges for its sale in terminal markets through their sales offices.

As Jacob (1990) discussed in "Rubber Asia", the Rubber Producers Societies (RPS's) entered the field only recently. Their entry was necessitated because the co-operative movement could cater to the needs of the small growers only to a limited extent. The Rubber Board is now giving full support and encouragement to the RPS's, to enter the marketing field. It is expected that within the coming few years, it will emerge as the main agency in the marketing of small holders' rubber.

It is in this context that the Rubber Board has taken steps to improve marketing in the small holding sector. The efforts of the Board in this regard can be broadly classified under three headings.

(a) Effective implementation of the statutory provisions and timely corrective action within the frame work of the Rubber Act and Rules.

(b) Promotion and development of organised processing and marketing of small holders' rubber.

(c) Evolution of a new marketing system distinctly different from the traditional system with the full involvement of RPS's.

Organised processing and marketing has been identified as the best course of action to modernise the small holdings. It is usually presumed that the small holders generally offer inferior quality sheet and scrap rubber. The latex and scrap received from the tree is fresh irrespective of whether it is from a large estate or a small holding. It is the processing practices which determine the quality. In order to achieve the twin aims of ensuring a better return to the small holders and improvement in the quality, the best course is to go in for organised or collective processing and marketing of small holders' rubber.

The fresh latex and scrap produced by the small holders are to be collected from them without processing and converted into high quality technically specified rubber or latex concentrate in the factories. These grades command premium prices in the market which can be secured by centralised marketing by the factories themselves. The crop from the small growers are to be collected through a net work of collection centres. Right from the beginning, the Rubber Board has encouraged organised processing and marketing of small holders rubber in the co-operative sector. These efforts received a great impetus with the setting up of six crumb rubber factories (each with 10 t/day capacity) in the co-operative sector with financial assistance from the World Bank. Even now the Board continues to assist such projects by providing various financial incentives. This strategy acquired a new dimension with the involvement of RPS's in it.

The strategy drawn up by the Rubber Board to revolutionise the marketing scene in the coming decades envisages the active involvement of RPS's in this

field. RPS will be the nucleus around which the entire structure is going to be built up.

Efforts are made to set up a chain of collection centres under the auspices of RPS's to procure latex and fresh scrap from the small growers. To begin with, these centres could collect latex and sell it to outside parties. Once the factories proposed at various places become operational, these centres could sell their latex regularly to these factories. Collection of the crop as latex itself will relieve the growers of the burden of processing and storage. This also enables the grower to secure better prices.

Summary and Conclusion

SUMMARY AND CONCLUSION

The study "Marketing of rubber by small growers in Nedumangad taluk" revealed that a major portion of the sheet rubber produced by the small holders is of inferior quality. It is a fact that differential pricing based on quality of sheets is not in vogue in the locality where the study was conducted. For the production of better quality grades, the existing facilities for processing as well as infrastructure should be further developed. With regard to the system of tapping adopted, it was observed that majority of the growers adopted daily tapping and not bothered about the ill effects due to daily extraction. Albeit, the beneficial effects of scientific processing of sheet rubber is well established, it is paradoxical to note that majority of the farmers are not aware/following scientific aspects of processing like use of correct concentration of acid, sodium bi sulphate, paranitrophenol, sieving, smoking etc. for the production of sheets. The reason for this anomaly is clearly understood that there is no marked variation in prices of quality and ungraded sheet rubber. However, an interesting factor to be noted in this aspect is that the difference between the farm gate price and the terminal market price is negligible as the producers received more than 80 per cent of the price paid by the consumer.

It was also found that the planters are opportunistic in the sense, very often they switch over from sheet rubber production to sale of latex as such and vice versa depending upon the prevailing market conditions. Regarding the mode of disposal, periodicity and marketing certain peculiarities were revealed during the study. The frequency of sales varied from monthly to yearly. In the case of small holders (upto 1.00 ha) majority of them have sold their crop monthly because they

were in need of money frequently; and farmers who are financially sound resort to yearwise sales for their seasonal capital expenditure. It was a general trend that the farmers who are having estates far away from residences sold their produce as latex.

It was also revealed that the common farmers are unaware of the technique of calculating DRC which led to the deception of the farmers by the dealers causing heavy loss to the growers. It was also found that the primary dealers sell their produce to the secondary dealers as lot rubber and the secondary dealers sort out the lot rubber into different grades gaining much profit out of it.

As a remedial measures for improving the quality of processed rubber, long term policies should be taken to start central processing factories to produce quality rubber sheets or technically specified form of crumb/block rubber from latex collected from small rubber growers. The dealers chain can therefore be by passed and the financial benefit of small holders increased. It is a suggestion that the long term measures can be undertaken by the present Rubber Producers Societies scattered throughout the taluk. The latex/scrap collected by the RPS's can be processed into technically specified form of quality rubber or block rubber, as the case may be, in the factory owned by the apex society/company of the Rubber Producers Societies.

The Rubber Board has drawn up a scheme for assisting RPS's to set up smoke house. These smoke house will procure latex from the member growers, process it into higher grades of sheet rubber and sell it in bulk to secure maximum prices. The Rubber Board provides all help and assistance in these efforts. The main thrust is in strengthening of RPS's. The Board operate a scheme for giving subsidy for the construction of smoke houses.

The RPS at the grassroot level is the foundation on which this new marketing set-up is being built. Its success, therefore, depends on the active participation, patronage and involvement of the RPS's. If this is successfully accomplished, no doubt it will usher in an era of prosperity to the small farmers.

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Appendices

APPENDIX-I

Marketing of rubber by small growers in Nedumangad taluk

QUESTIONNAIRE

A. Interview schedule for growers

1. Name of the Farmer :

2. Address :

3. Location of the estate :

4. Location of the Market place :

5. Educational status of the family members : Primary - Secondary - College

6. a) Reg. No. of the estate :

   b) Whether replanted or newplanted under Boards aids :

7. Year of planting : Area in ha

8. Details of cropping system

Crop	Total area	Immature plants		Yielding trees (under tapping)	
		Area	No. of plants	Area	No. of trees
1. Rubber					
2. Other crops					
a)					
b)					
c)					
Total					

9. No. of tapping days in a year :

10. Maintenance of the area : Average/satisfactory/good

11. Tapping system adopted : S_2d_1, S_2D_2, S_3d_3, slaughter

12. Details of tapper : Paid tapper/owner himself/on contract basis

13. Details of production during the last year 1994-95 (kg)

Item	1994									1995		
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Latex												
Sheet												
Scrap												
Earth scrap												

14. Marketing cost incurred

Type of cost	Month	Quantity of sheet - scrap	Total	Remarks
Handling charge				
Bailing				
Loading and unloading				
Transportation cost				
Other costs				

15. Sales and prices received

Month/ Date of sale	Quantity sold			Price received			To whom sold (Society, RPS, Dealers)	Place of sale and distance to the place	Graded/ ungraded
	Sheet	Scrap	Latex	Sheet	Scrap	Latex			

16. Additional assistance, subsidy from Govt./Rubber Board received during the year (If so furnish details) :

17. i) If there is any grading done by the dealer to the whole sheet produced, if so mention the grade given : Yes/No

ii) If there is any part grading done for the lot, if so furnish details : Yes/No

iii) Whether the price realised is based on that published in the newspaper : Yes/No

18. Are you in the habit of adding correct proportion of the recommended water, acid and other chemicals to the latex for sheeting : Yes/No

If Yes, what is the dosage :

19. Are you dipping the sheets in Paranitrophenol solution against mould growth : Yes/No

20. What is the average latex produced daily :

21. What is the DRC range

a) As per Dealer's record :

b) As per actual binding :

22. Are you aware of the techniques of assessing DRC and its calculation : Yes/No

(If Yes, mention the procedure)

23. Have you ever verified/checked the DRC by yourself : Yes/No

If yes, how many times

24. Criteria for fixing the price of latex. Is it based on the price for grade/lot in the newspaper :

25. Scrap rubber :

a) What is the quality of scrap rubber marketed : Good quality/inferior quality

b) Whether the price fixed is based on that shown in the newspaper : Yes/No

If the answer is No. mention the price variation in different times of marketing :

26. Whether is the reason for the adoption of the present system of processing :

B. Interview schedule for dealers/traders

I. Category of dealers

a) Individual dealers

b) Rubber Producers' Societies

c) Rubber Marketing Societies

d) Service Societies

e) Registered Companies

II. Grading of sheets

i) Do you give any grading based on quality of the sheet rubber : Yes/No

If Yes, what are the grading system adopted :

ii) Scrap rubber

Do you purchase scrap rubber by assessing its quality and its DRC : Yes/No

If Yes, what is the criteria?

III. Prices of rubber

Do you fix prices of sheet rubber/scrap rubber as published in the daily newspaper : Yes/No

If Yes, what is the criteria? :

IV. Latex

a) Do you take specimen of latex from each grower everyday for assessing DRC : Yes/No

If No, what is the criteria adopted for DRC calculation? :

b) Do you keep the dry specimen for convincing growers : Yes/No

c) Do you record the DRC of each grower regularly :

d) Are the growers, in the habit of random checking of DRC : Yes/No

e) Are the growers in the habit of checking the total weight of the latex : Yes/No

f) Do you fix the price based on any grade rubber : Yes/No

If Yes, give details :

g) Time of Cash settlement : Daily/weekly/monthly/yearly

h) Is there any advance payment : Yes/No

If yes, give details :

V. Purchase and sales during the year

(A) Purchase

Type/Grade	Month/period/Date	From whom purchased (individuals/other dealers)	Quantity	Price

(B) Sales

Type Grade	Month/period/Date	To whom sold	Quantity sold	Sale price	Remarks

VI. Marketing costs during the year

Type of costs	Quantity	Rate	Total	Remarks
a) Handling charges/loading/unloading				
b) Bailing charges				
c) Transportation costs				
d) Weighment charges				
e) Other costs (cost of ammonia, acid etc.)				
f) Wages				
g) Rent				
h) Telephone/postage charges				
i) Taxes, if any				
Total				

VII. Details of different marketing channels :

Place :

Date : Name of Investigator

APPENDIX-II

LIST OF SELECTED GROWERS AND DEALERS INTERVIEWED

Sl.No.	Name	Area (in ha)
1	2	3
A. GROWERS		
1	S/s.Moses Bhaskaran	4.00
2	Subaida Beevi	2.21
3	Balachandran Nair	0.40
4	M. Ramla	1.10
5	D. Balakrishnan Nair	1.00
6	Varghese John	2.00
7	P.R.Jalaludeen	0.50
8	Shahul Hameed	1.21
9	Shaji	0.41
10	Sheeja Beegam	0.40
11	C.Sobhana	0.40
12	Muraleedharan Nair	0.20
13	Souda Beevi	0.25
14	A.Aliyarukunju	0.60
15	M.Nusaifa Beevi	0.46
16	C. Manoharan	0.16
17	J. Nadeera and A.R. Basheer	1.00
18	Badarudeen	0.90
19	Raveendran Nair	0.20
20	M. Abdul Azeez	0.70
21	Nazeer and Zeenath	0.48

Appendix-II. Continued

1	2	3
22	Parisha	0.46
23	Iliyas	0.32
24	P. Abdul Samad	0.32
25	C. Nalinakshy	0.40
26	A. Salim	0.73
27	Nazeema Rasheeda	0.60
28	R.Gopalakrishnan Nair & K. Padmavathy Amma	0.60
29	Madhavan	0.40
30	Shahida	0.60
31	President, Chullimanoor Jamaath	0.76
32	R.Fhr.Bijly	0.40
33	N.Lekshmanan	0.16
34	R. Madhavan Nair	0.16
35	Kochukunju and Baby	0.30
36	Ambika Devi	0.10
37	Cherian Varky	0.20
38	Muslim Jamaath Devanpara	0.60
39	R. Bhaskaran	0.60
40	R.Raveendran Nair	0.64
41	R.Pankajakshan	0.80
42	R. Najeema	0.80
43	M.R.Beena	0.40
44	Priya, P.C.	0.80
45	Sathyabhama	0.80
46	Mohammed Basheer	0.22

Appendix-II. Continued

1	2	3
47	R.Sundram	0.41
48	B.K.Rajayyan	0.20
49	Chellayyan, A.	0.20
50	C. Chandran	0.50
		Total 32.28

B. DEALERS

		Ref. No.
1	Sundaresan, Rubber Dealer, Pazhakutty, Nedumangad	D No.1401299
2	Navas, Theepachumugal, Pulimoodu, Tholicode, P.O.	D No.1413541
3	M.M.Basheer, Safi Rubber Depot, Pulimoodu, Tholicode, P.O.	D No.1407512
4	A.A.Rasheed, M.P.Rubber Traders, Pangode, P.O.	D No.1408598
5	A.K.Kurian, Mekedathu Rubbers, Tholicode	D No.1401528
6	M.P.Sasidharan Nair, Peringamala	D No.1411530
7	M.Nujumudeen, Hindustan Rubbers, Nedumangad	D No.1408930
8	J.A.Salam, Salam Traders, Market Jr., Nedumangad	D No.1402545
9	A.Saifudeen, Azeezia Rubber Traders, Nedumangad	D No.1407669
10	K.Abraham, Nadakkal Rubber Traders, Chullimannoor, P.O.	D No.1404022
11	Edavam Rubber Producers Society, Peringamala	R.P.S.
12	Mothakulangara Rubber Producers Society, Kothakulangara	R.P.S.

APPENDIX-III

Monthly average price for rubber during 1994-95 prevailed in the terminal market at Kochi

Month	RMA-4 (Rs.)	Ungraded (Rs.)
1994 April	25.10	24.90
May	27.00	26.30
June	28.30	26.80
July	31.50	28.70
August	34.00	31.00
September	41.50	35.00
October	34.75	33.70
November	32.00	30.40
December	38.00	35.50
1995 January	42.75	39.90
February	46.00	44.75
March	53.00	50.30