CHAPTER-8
CONCLUSION

8.1. Introduction

Indian rubber market has been under the governmental patronage even before the independence of the country. It enjoyed the shield of a number of protective measures related to price, production and import of NR. But these protective measures were lifted one by one since 1991-92 under the liberalisation policies. Consequently the rubber market witnessed fast changes in production, import, consumption and price of NR. The new developments such as drastic reduction in the import duty of NR, curtailment in subsidies given to growers, high import of rubber goods, import of polyurethane, import of used and new tyres etc., are surfaced in the market due to the policy changes of the Government in a liberalised economy.

The present chapter highlights the findings of the study together with the suggestions to formulate a long term marketing strategy to overcome the problems of Indian Rubber Market emanated from liberalisation and globalisation policies of the Government.
8.2 Findings and Suggestions

The important findings relating to the supply and demand sides of Indian rubber market, rubber marketing system in India, WTO Agreement affecting NR and the domestic price of NR are given under the following heads. Relevant suggestions on the basis of findings are also given at the end of each heading.

8.2.1 Supply Side of Indian Rubber Market

1. India ranked third in the production of NR. Though rubber is produced in Karnataka, TamilNadu, Kerala and in some north-eastern states like Assam, Tripura and Nagaland, Kerala holds near monopoly in the production as well as area under rubber cultivation. Kerala State alone contributes 93% of the total production of NR in India and hence rubber marketing activities are mainly taking place in the state. Total production of NR in India reached 622265 tons in 1999-2000.

2. Supply of rubber in the Indian rubber market consists of three different segments such as natural, synthetic and reclaimed rubber having the respective shares of 81%, 10% and 9%. These percentages were more or less equal during the pre as well as post-liberalisation periods.

3. The product mix of Indian rubber growers includes Ribbed Smoked Sheet (RSS), Latex Concentrates(LC), Technically Specified Rubber(TSR), Pale Latex Crepe(PLC) and Estate Brown Crepe(EBC). RSS is the most important item constituting by 72.1% followed by LC(10.7%), TSR(10%), EBC(7%) and PLC(0.2%).

4. In India, the supply side of NR is highly dominated by small and marginal cultivators. They contribute about 88% of the NR production in India. They are unorganised, large in number and do not possess any infrastructure facilities for processing and marketing of NR.
Rubber produced by them are treated as low grade and is called ‘off grade’ or ‘lot rubber’ in the Indian rubber market. The share of the estate sector has been shrunked to 12%.

5. The Indian rubber market has no mechanism to regulate the supply of NR especially after the cessation of Buffer Stock Scheme of the STC in 1994.

6. Rubber trees are tappable seven years after planting and they give yield continuously for 25 to 30 years. Therefore, cultivators are not able to shift to other crops easily and quickly when the price is not remunerative. They are compelled to continue the production even under unfavourable circumstances. Hence, the supply of rubber cannot be regulated at the time of price crash. Infact, this peculiarity leads to further decline in the price.

7. NR production in India had thrived well during 1950s and 1960s of the pre-liberalised period with the help of two special schemes of the Rubber Board, viz, Replanting Subsidy Scheme 1957 and Interest-Free Loan Assistance Scheme 1962. Kerala Land Reforms Act of 1962 and the success of R&D of the Rubber Board in developing new high yielding clones of NR were other favourable factors for the high growth during 1950s and 1960s.

8. Production of NR was started in non-traditional areas during 1970s and 1980s and now these areas contribute only 2% of the total NR production of the country. An average growth rate of 4% was attained during 1970s and 1980s.

9. During the first five years of the post-liberalisation period the production of NR has grown at an annual growth rate of 7.7%, thanks to high prices prevailing in the country till 1995-96. But the growth rate declined to 3.63% in 1998-99 and again to 1% in 1999-2000 due to the continued low prices from 1996-97 onwards.
The decreasing trend in the growth rate shows the hesitation of growers to produce more and they are investment shy. During the post-liberalisation period, 86% of rubber growers have no genuine interest in continuing rubber cultivation. But they continue the rubber cultivation due to the absence of any other suitable alternative cultivation programme. The Rubber Board has no inducement plans during the post-liberalisation period to motivate the growers to produce more, as was done in the pre-liberalisation period. The revised subsidy of Rs.12000/- per hectare upto 2 hectares of land does not attract the growers to maximise the yield.

In this circumstance, it is suggested that the government must motivate the small growers to invest more in rubber plantation by giving subsidy at the present rate of Rs.12000/- per hectare for the actual area of land under rubber cultivation without any restriction for maximum area.

With a view to exercise proper regulation on the supply side of the Indian rubber market and to help the growers to produce more qualitative NR it is suggested that Rubber Producers’ Societies should be re-oriented and re-structured. They should be re-organized on a three-tier basis, enabling them to undertake three different tasks in different levels. The system of RPS should consist of primary societies at the village level, an organization at the district level and an apex body at the state level. The primary societies should be entrusted with two specific tasks of processing and procurement of NR from the rubber growers. They should assist and persuade the growers especially the small ones to maintain good quality in their produce at the lowest cost possible for the purpose of international trade. On procurement of NR, primary societies should send it to the godowns established at the district levels.
It should be the duty of the district level organization to market the rubber procured by the primary societies and handed over to the district godowns. This organization should collect vital market information and supply it to the primary societies under their control helping them to guide the growers properly. Sufficient financial support should also be made available to primary societies necessary for processing and procuring.

The apex body should carry out manufacturing as well as export of NR and rubber goods in addition to policy formulation. It should start rubber manufacturing companies consisting of both small and large scale in the important rubber producing countries. Again, it should be the duty of this apex body to develop export marketing of NR and handle all the matters relating to its export.

RPS can do some commendable job for stabilizing the price of NR especially at the time of price slide by helping the growers to withhold their produce till the price increases. By providing safe and sufficient godown facilities, the RPS can help the growers to postpone the sale of their produce till the price improves. By giving sufficient godown facilities, supply of NR can be regulated in accordance with the demand and price by blocking the immediate entry of NR in the market. The Rubber Board and government should provide necessary funds for the construction of godowns to the RPS. Arrangement should be made to extend advance payment to rubber growers on giving NR for safe custody to the godowns of RPS at the district levels. It will be helpful to the growers to tide over their financial problems to a certain extent. The system of RPS after the re-structuring is shown in chart 8.1.
8.2.2 Demand Side of Indian Rubber Market

1. During the post-liberalisation period too, India remained fourth in the consumption of NR in the world. The country consumed 628110 tons of NR in 1999-2000. India had attained an average growth rate of 13.54% in the consumption of NR during 1950s and 1960s. But it was 9.29% during 1970s and 1980s. During the post-liberalisation period too, consumption of NR was increasing but the growth rate shows a decreasing trend. During 1997-98 and 1998-99 consumption of NR was lower than its production. In all the other years, consumption was always greater than its production.

2. Rubber consumption in India includes three segments such as NR, SR and RR. Natural rubber constitutes 72% of the total demand for rubber in the country followed by SR at 19% and RR at 9% during pre as well as post-liberalisation periods. In India the total consumption of NR stood at 631475 tons in 2000-01.

3. The composition of the demand side of the Indian Rubber Market consists of small, medium and large scale rubber goods manufacturers. They are
scattered all over the country. Kerala, Punjab and Maharashtra are the major rubber consuming states in India. Small scale manufacturers constitute about 85% but they consume only 12% of the total rubber consumption of the country. Medium scale operators come around 13% and their consumption touches about 16%. Large scale manufacturers are only 2% but they consume 72% of the total rubber consumption in India. These manufacturers are playing a decisive role on the demand side of the Indian rubber market. These large scale manufacturers are the tyre and tyre related goods manufacturers and are considered as the traditional users of natural rubber.

4. In India, the NR sector is not an independent sector but evolves as an auxiliary sector to provide raw rubber required for the automobile industry. The demand for NR depends upon the growth of automobile industry. Whenever the automobile industry registered impressive growth records, consumption of NR has also increased substantially and vice-versa.

5. In the major NR producing countries such as Malaysia, Indonesia and Thailand, latex based industries are more prominent rather than dry rubber based industries. Whereas in India, dry rubber based industries are more prominent than that of latex based industries. When the dry rubber based industries consume 90% of NR in India it is only 10% by latex based rubber industries. That is, India is not able to exploit the vast marketing opportunities of the latex based rubber products in the international rubber market.

6. One superior quality of SR over NR is that its molecular structure can be modified easily to suit the end products. It tempted the rubber goods manufacturers to use more SR.
7. The decreasing trend in the consumption of NR during the post-liberalisation period is attributed to the following reasons.

i. Liberalised policies of the Government with regard to import of all types of tyre and tubes. The consumption of NR has been decreased by 7582, 7302 and 9494 tons of NR in 1996-97, 1997-98 and 1998-99 respectively due to the import of tyre alone.

ii. With the collaboration of multinational companies Indian made rubber products have obtained technological upgradation resulting in the improvement of their life.

iii. Increased use of radial tyres resulted in more mileage and consequently demand for new tyres decreased.

iv. Increase in the consumption of synthetic rubber as a result of phased reduction of import duties.

In this context, it is suggested that the NR sector should be made an independent sector and should not allow the traditional users to determine the fate of the sector any more in the liberalised economic environment. Towards this end in view, following suggestions are put forward.

a) Road Rubberisation programme and

b) Promotion of export marketing of NR

Road rubberisation implies the production of rubberised bitumen for road surfacing. When bitumen compound is prepared at oil refineries, rubber can be added with it to the extent of 2 to 4 percent of its weight. Rubber so added binds the particles of bitumen so as to prevent the bitumen from melting in summer and becoming brittle in winter. Rubber can be added to bitumen in different forms such as preserved latex, sheet rubber, powdered rubber, ground vulcanised rubber, reclaimed rubber etc. Bitumen added thoroughly with rubber is generally called rubberised bitumen.
Since road rubberisation has not taken root in the country, it will constitute a new use of NR in a tremendous way by keeping away the traditional consumers of NR. The Government of Kerala should come forward for this programme and the important roads under PWD should be brought under rubberisation programme to maintain its durability, and other advantages.

It is estimated that a minimum of 500 kg of NR is required to produce rubberised bitumen necessary for the rubberisation of one kilometer stretch of road by adding 2% of rubber to bitumen.

Kerala has 130000 Kms., of roads. If the State Government decides to rubberize the whole roads in the state it will require a minimum of 65000 tons of NR which may be increased to 130000 tons of NR. When the road rubberisation programmes are practised by other states, consumption of NR will increase substantially.

In this regard, the Government of Kerala should initiate necessary steps for the formation of consensus of opinion in favour of road rubberisation among the organisations such as Indian Road Congress, Central Road Research Institute of India, Ministry of Surface Transport, Ministry of Commerce, Ministry of Petrochemicals and Rubber Board.

Export of NR is the second measure to make the NR sector an independent one and to keep away the traditional users from determining the fate of the sector. But export marketing of NR has not been developed in India due to the following reasons:

a) The country was always been a net importer of NR due to the excess of demand over supply.

b) Since India was not present in the international rubber market, Indian rubber is unknown abroad.
Because of the protected market enjoyed by growers till 1991-92, they are not keen in maintaining international quality standards while producing NR.

Since the domestic price is greater than the international price, export is not profitable.

No serious effort has been taken by the Rubber Board for developing the export marketing of NR.

Considering the obstacles for the export marketing of NR in India and the urgency for its immediate promotion, the following suggestions are put forward.

i. India must be a regular supplier of NR in the International rubber market even in an unfavourable price situation and not to be an occasional supplier.

ii. Proper training is to be given to the rubber growers especially to the small and marginal growers, through the RPS to produce NR in accordance with the international quality standards.

iii. Conduct seminars and exhibitions at the international rubber marketing centres to popularise Indian Rubber among foreign rubber goods manufacturers.

iv. The Government should provide financial and technical assistance to the agencies such as RPS, RUBCO and Rubber Mark to export natural rubber. Government should attract more agencies within a short span of time to export NR.

v. Since export marketing of NR is not well developed in the country, agencies mentioned above have only very little expertise in export marketing. Hence, the Rubber Board should conduct market surveys
abroad to help the agencies to locate foreign buyers. Initial expenses in this connection should be met by the Government.

vi. The Rubber Board should fix a particular quantity of NR in each year as an annual target for export after considering demand and supply positions. The target so fixed must be exported even by incurring losses. It should be done compulsorily till the export marketing overcomes the problems of infancy.

In order to exploit the market potentialities for the latex based rubber goods in the international market, it is suggested that, Government should provide all sorts of assistance to persuade entrepreneurs to start manufacturing units to produce latex based rubber goods such as gloves, contraceptives, latex foams etc. Rubber parks and export processing zones are to be opened for starting such industries.

It is suggested that the Rubber Board should undertake scientific investigations for the following purposes with a view to increase the demand for NR.

a) To develop new uses of NR
b) For value addition to NR
c) For quality upgradation
d) To store NR for a longer period without any deterioration of its quality
e) For cost reduction to compete in the international market by offering NR at the lowest price possible
f) To modify the physical and chemical properties of NR easily according to the requirements of the end products. So that, the
8.2.3 Structure of the Indian Rubber Market

1. The structure of Indian rubber market has not changed much during the post-liberalisation period from the situations prevailing in the pre-liberalisation period. It is highly dominated by the individual sector of rubber dealers in three different levels such as village, taluk and terminal. These rubber dealers handle about 90% of rubber traded in the Indian rubber market. Small and marginal cultivators mainly depend upon these dealers to market their produce, whereas, estate holders sell their produce directly to the manufacturers.

2. There is a change in the composition of dealers to the effect of evolving imperfect competition in the Indian Rubber Market. Village level dealers have increased by 16.22 times during the period from 1965-66 to 1996-97. In 1965-66 they were 65% of the total rubber dealers followed by 67%, 68%, 71% and 68% in 1975-76, 1985-86, 1994-95 and 1996-97 respectively. It shows an increasing trend with mild fluctuations in their growth rate. In the case of taluk level dealers, their growth rate shows a decreasing trend. They were at 10% in 1965-66 followed by 7% in 1985-86, 6% in 1994-95 and 7% in 1996-97. Growth rate of terminal dealers is also in the decreasing trend. They were 4% in 1965-66, 3% in 1975-76 and only 2% in 1996-97. This situation will lead to the market concentration at higher levels of trade to the effect of imperfect competition.

3. In India, rubber dealers are available at the rate of one dealer for 38 hectares of tapped area in 1999-2000. But in 1970-71 it was one dealer for 79 hectares of tapped area. The network of rubber dealers are not evenly distributed all over the country. There are states like Punjab, Haryana, Himachal Pradesh and Pondicherry, where dealers are located even though...
rubber is not produced. In states such as Manipur, Mizoram, Nagaland and Arunachal Pradesh, rubber is cultivated and produced but no dealers are located.

4. Indian rubber market was successful in realising 92% of the terminal market price, as farm gate price to the growers, during the pre-liberalisation period. After the proclamation of minimum support price (MSP) on 13th September 2001 in the post-liberalisation period, the farm gate price slashed to 85% of the terminal price.

5. Indian rubber market is characterised by the presence of a combination of big dealers and large scale rubber manufactures to control the market, with a view to maximise their profits. They are in a strategic position in the rubber market to control the market, in accordance with the operations of this combination.

6. The co-operative sector started operations in the rubber market during 1960s with a view to minimise the number of middlemen and to reduce the influence of private sector. In the co-operative sector, co-operative rubber marketing societies, rubber producers societies and Rubco are the main agencies doing operations in the rubber market. But the performance of the co-operative sector is not satisfactory and did not make any significant influence in the Indian rubber market. The co-operative sector handles only 10% of the total rubber production of the country and the remaining 90% is still under the control of the individual sector.

7. Indian rubber market is marked with the emergence of some pressure groups like INFAM (Independent farmers movement) during the post-liberalisation period due to the prolonged impasse in the market.

8. For grading the NR, no scientific methods are being adopted in the Indian rubber market. It is done on a visual inspection by the dealers at the taluk
level. Through grading, higher price for the higher grade is obtained by taluk level rubber dealers and the growers are not always benefited from such high prices for the high grade. They are compelled to sell their produce as ‘lot’ or ‘ungraded’ rubber to village level dealers.

9. Though India is third in production and fourth in consumption of NR among countries of the world, it has no decisive role in the international rubber market. Not even an Indian rubber marketing centre has figured either as an important terminal or a primary market in the map of international rubber market. Malaysia has succeeded in transforming Kula Lumpur as the nerve centre of the international rubber marketing system. London, New York and Tokyo have also emerged as the important terminal rubber markets in the world.

10. Indian rubber market is a buyer’s market as its demand side is more powerful than the supply side.

11. During the pre-liberalisation period, domestic rubber market had certain devices such as BSS and STC’s market intervention to balance the demand and supply of NR. But such devices were either abolished or freezed during the post-liberalisation period and domestic rubber market has no mechanism to dispose off the accumulated surplus rubber to balance the demand and supply.

In this context, it is suggested that the predominance of individual sector on the rubber trading is to be reduced. For this, the co-operative sector must be strengthened further through Rubber mark, RPS and RUBCO so as to handle a major share of the total rubber production of the country. The formation of imperfect competition in the rubber market can be eliminated, by reducing the high influence of the individual sector. Working of the unhealthy combination of the big dealers and large rubber manufacturers can be controlled very
effectively, once the co-operative sector is able to handle a major share of the total rubber production of the country.

For the effective functioning of the co-operative sector, co-ordination in the working of Rubber Mark, RPS, and RUBCO is required. Rubber Board must act as the co-ordinator of the co-operative sector.

To inspect the quality of the NR, it is suggested that the R&D of the Rubber Board must develop a scientific method, if possible an automatic machine, so that grading will become easier and the growers will not be cheated by the dealers. By developing such a machine, the growers themselves can check the quality of the rubber they produce and fix the grade in which their product belongs.

8.2.4 WTO Agreements Affecting Indian Rubber Market

1. Bound Rate has been fixed at 25% which came into force in 1999 itself even though the country had time to implement it up to 31st March 2001. The effective total import duty on NR comes at 36.8%.

2. There is a considerable pressure on India for further reduction of import duty, as the average import duty prevailing in the USA, Japan, Canada and EU are at 3.8% and Asian Countries other than India at 16% as against 27% in India.

3. As a result of removing quantity restrictions by 1st April 2001, the position of NR has been transferred from negative list of restricted items to the open general licence list. Therefore, NR can be imported at any time at any quantity and by any person after paying a specified rate of import duty.

4. Though NR is produced by agricultural operations, it is not an agricultural product under WTO Agreement but an industrial raw material. Therefore,
the commodity lost the protections of high Bound Rate applicable to agricultural commodities, given in the WTO Agreement on Agriculture.

5. After completing the process of removing quantitative restrictions on 1st April 2001, Government of India announced two lists of commodities on the basis of the intensity of import restrictions to be exercised. They are 1) State Trading list, and 2) Sensitive list. The first list includes some agricultural commodities of which import is permitted only through a Government sponsored agency. Here the import is channelized with a view to exercise strict import control. The second list is for some non-agricultural commodities of which private parties are also allowed to import it. But the Government will watch its import periodically. NR is an item in the sensitive list. Therefore, effective import restrictions can not be exercised on NR as in the case of an item in the state trading list.

6. It was the policy of the Government to import rubber through the STC, a Government undertaking, since 1968 to exercise effective control on import of natural rubber. But this policy has been changed in the post liberalisation period from 1991-92 onwards and rubber goods manufacturers were allowed to import natural rubber directly under Advanced Licence Scheme. The STC stopped rubber import from October 1991 onwards. Because of the unbridled import of NR under ALS, the scheme was cancelled by the Government on 20th February 1999.

7. Though the import of NR was allowed to bridge the gap between demand and supply it caused imbalances between the two in the Indian rubber market. Rubber has been imported even in the years in which there is no deficiency of it in the country. Imported quantity of NR was always greater than the deficit. Two to four fold of the deficit of rubber has been imported in each year from 1968-69 to 1999-2000. It caused accumulation of 223752 tons of NR as surplus in the Indian rubber market by 1999-2000.
This problem will again aggravate in the circumstances of liberalisation policies being pursued by the Government.

Hence it is suggested that, India should take necessary steps to regain the status of NR as an agricultural commodity. United Nations Commission for Trade and Development (UNCTAD) considered NR as an agricultural commodity. India should impress the WTO members that the NR is an agricultural product and not merely an industrial raw material. Indian authorities must argue effectively and successfully at WTO summits to be held in future, to treat the NR as an item in the Agreement on Agriculture of the WTO.

When it is included within the purview of Agreement on Agriculture of the WTO, NR can have the protections of the following measures.

(a) The Bound Rate of NR can be increased from the present 25% to 150% at par with cotton and tea, so that import of NR can be prevented and its supply can be regulated to a certain extent, to stabilize the domestic price.

(b) If it is treated as an agricultural product, domestic support in the form of subsidy, tax reduction, interest free loan etc. given to NR are to be included in the ‘Green Box’ of the AOA and are exempted from the calculation of Aggregate Measures of Support to impose counter-vailing duties under dumping.

(c) On declaring NR as an agricultural product, it can be included in the ‘state trading list’ of the union government to channelise its import through a government sponsored agency to exercise effective import controls. Private individuals can be kept away from importing NR discriminatingly to the effect of disrupting its demand and supply.
(d) If it is difficult to get rubber under AOA in WTO, steps should be taken to get special and differential treatment to natural rubber under WTO agreement.

(e) In case rubber does not qualify to be an agricultural product, the provisions of general safeguard measures may be applied by India from 2002, in order to restrict import surges which may cause serious injury to the domestic industry. These safeguard measures could be in the form of tariffs and quantitative restrictions as is provided under the agreement on safeguard action.

8.2.5 Price of Natural Rubber

1. In the price front of NR, Government pursued the protected price regime policy since 1942. Under this policy it was the practice of the Government to fix minimum or maximum price or both from time to time. Statutory price was in force from 1942 to 1981. The actual price was always 100% more than that of the minimum statutory price remaining in force from time to time during the period from 1942 to 1981. The union government did not announce any price policy on NR from September 1981 to January 1986. But the growers were in receipt of a reasonable price and attained an average of 6% growth rate in the annual price. There was a shift in the price policy from statutory price to Bench Mark Price (BMP) from February 1986 to September 2001. BMP has no legal binding like statutory price. It is only an indicative price based on cost of production. From October 2001 onwards, the Government again announced MSP under a court verdict. But the growers are not benefited fully from the MSP of Rs.32.02 per Kg. They are receiving only 75% to 80% of the MSP for their sheet rubber. During pre-liberalisation period, the actual price was always more than or equal to statutory minimum price or the Bench Mark price announced from time to time. But during the post-liberalization period, the
actual price was lower than the minimum support price or benchmark price as the case may be.

2. NR price in India has been subjected to wide fluctuations whenever the Government lifted controls and it was more or less steady when the control was imposed. NR price during 1935 to 1942 was subjected to wide fluctuations ranging from -26.02% to 49.6% as there was no control upon the price. From 1942 to 1981, price has been steadily increased with mild fluctuations. From 1981-82 to 1989-90, rubber price was free from any control and it varied from -1.34% to 21.67%. During the post-liberalisation period of 1991-92 to 1999-2000, it fluctuated very sharply from -26.95% to 102.57% and the price was free from any control.

3. Regulatory measures such as statutory price and buffer stocking scheme were effectively enforced during the pre-liberalisation period. But during the post-liberalisation period, regulatory measures were either eliminated or freezed. BSS was abandoned in 1994. STC’s market intervention by way of procurement has been done very effectively till 1990-91. But during the post-liberalization period, STC’s presence in the market is nominal.

4. Statutory price control was successful only when it was implemented with the adequate backing of support measures such as BSS and STC’s market intervention. During the post-liberalisation period, statutory price control has been exercised without the backing of support measures and it failed to raise the market price even up to the level of statutory minimum price.

5. NR price in India has been moved regularly to the highest level during the months of June and May and to the lowest during the months of December and November in each year during the pre-liberalisation period. But this regularity has disappeared from 1993-94 onwards of the post-liberalisation period.
6. During the pre-liberalisation period, factors such as consumption, production and price of SR were the important variables affecting the price of NR in India. NR consumption and SR price were positively related to domestic price of NR. Import, stock and international price of NR did not exert any influence on the price of NR during the pre-liberalisation period. But during the post-liberalisation period international price is the only one variable, which exert significant influence upon the price of NR in India. Consumption and stock of NR are positively related to the domestic price together with SR price.

7. Growers have no role in the price formation of NR in India. It means the producers have no influence upon the price of NR. They cannot estimate the probable price of natural rubber on a particular future date depending upon the demand and supply of the commodity. They have no protective cover against the risk of price fluctuations and the consequent losses.

In this context it is suggested that the formation of rubber exchange and the introduction of futures trading system for NR in India is a necessity in the present context of globalisation and the rubber market bear much significance in the backdrop of the freezing of price protection mechanisms by the Government. It will be helpful for both rubber growers and manufacturers as follows:-

(a) Rubber producers and manufacturers are able to ascertain their future prices as the purchase and sale are done for a future date at a specified price. This price discovery is possible under futures trading system. It is an added advantage of the rubber growers as they have no role in the price formation of NR in the present set up of the Indian Rubber Market.

(b) Futures trading provides hedging facilities to cover the risk arising out of price fluctuations. Therefore, growers and manufactures of NR can reduce the loss due to price variations.
(c) Since the hedging and speculation in futures trading reduces the total marketing cost, growers are benefited by receiving an average higher price and the manufacturers are benefited by paying a lower price than what they would otherwise have paid.

(d) The futures trade assist in reducing the price variations resulting from the changes in the conditions of supply and demand. It would reduce the inter and intra-year variations in price.

(e) Rubber exchange will undertake the task of collection and dissemination of vital market information. It helps the growers and manufacturers to decide whether it is profitable or not to purchase or sell NR as the case may be, under various circumstances.

(f) It will bring out all the marketing infrastructure such as communication network, commodity grading system, transportation facilities, warehouse receipt system, facilities for speculation and hedging and an effective pricing system. It will also be helpful in eliminating some of the problems of Indian rubber market such as absence of a grading system, lack of modern storage facilities, non-availability of market information etc.

8.3. Conclusion

It is the need of the hour to understand the ground realities of Indian Rubber Market through which it is going on, in the new liberalised world. The facts so witnessed should open the eyes of growers, manufacturers, dealers, government and others who are directly or indirectly connected with the rubber market to know the fast changes taking place in the international rubber market. The protective environment of NR sector has been transformed into a new protection-free liberalised NR economy.

Liberalisation and globalisation policies of the Government have paved the way for international competition in the domestic market together with the
opening of new marketing avenues abroad. During the pre-liberalisation period rubber price in India has been influenced by production and consumption of NR and the price of SR. But during the post-liberalisation period international price of NR emerged as the only one variable which can exert much influence upon the domestic price.

It is indispensable to formulate a long term rubber marketing strategy for the purpose of containing the challenges of liberalisation and globalisation and to exploit the new marketing opportunities opened in a liberalised world. By adopting the recommended suggestions, it is hoped that a long term rubber marketing strategy can be formulated based upon re-structuring of RPS, introduction of rubber exchange and futures trading, development of export marketing and the application of NR for new uses.

Evolution of such a strategy will help the Indian rubber market to protect it from the adverse impacts of Structural Adjustment Programme initiated in the 1990s. It will also help to add new vigour and vitality to the Indian rubber market in the new millennium to be the King-pin of the international rubber market in the liberalised world.