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## **FOREIGN TRADE OF RUBBER PRODUCTS IN INDIA (1971-72 TO 1992-93) AN EXPLORATORY ANALYSIS**

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### **ABSTRACT**

The intricacies of foreign trade of rubber products of India have been reviewed for a period of 22 years (1971-93). The paper indicated that the foreign trade in rubber products displayed a favourable balance of trade. The structure and pattern of exports and imports needs reorientation in the context of post GATT era. There is a need for restructuring of the exports giving emphasis for the latex based products. These have been discussed in the light of available data.

### **INTRODUCTION**

Among the four major NR producing countries, India occupies an unique position in terms of its captive market and its inward oriented rubber goods worth Rs. 6000 crores (Rubber Board, 1993). The structure of the manufacturing sector is dominated by the dry rubber products with a relative share of more than 85 per cent in the total rubber consumption. This is in sharp contrast to the prevailing structure of the manufacturing sector in the other countries, viz., Malaysia, Thailand and Indonesia. The share of internal consumption of NR in these countries is marginal and the recent growth of the manufacturing sector is mainly propelled by the efforts to take locational advantage in the production of latex products. The present study assumes significance in the context of certain emerging trends in the production and consumption sectors having the potential of affecting the viability of natural rubber (NR) cultivation in India. In the post-GATT scenario, the implications of these trends will have far reaching consequences as the structure of the Indian rubber products export is operationally an extension of the industrial structure catering the internal market.

### **OBJECTIVES**

1. To study the trend in the export and import of rubber products during the last 22 year period, viz., 1971-2 to 1992-3;
2. to analyse the commodity composition of foreign trade of rubber products.
3. to examine the change in the value of exports and imports of rubber products in real terms over time;
4. to analyse the destination-wise trends in exports and imports of rubber products and;
5. to highlight the policy implications emerging from the analysis.

### **MATERIALS AND METHODS**

The study is based on the data provided in the series, viz., "Monthly Statistics of the Foreign Trade in India" published by the Directorate General of Commercial Intelligence & Statistics, Government of India. The data at the disaggregated (8 digit) level contains information on quantity, value and destination on exports and imports. The reference period of the study is from 1971-2 to 1992-3. The choice of the period has been influenced by two factors, viz., (1) availability of comparable data and (2) the period is characterised by a general policy change on the foreign trade regime of India in terms of a

shift from import substitution to export promotion.

For analytical convenience, the rubber products are classified into three broad categories, viz., dry rubber products, latex products and intermediate products. Dry rubber products are further classified into tyre and allied products, belts and beltings, houses and other products. In the destination-wise analysis, countries are broadly grouped as developed and developing economies. The analysis is confined to the dry rubber products group as it is the major product group in India's foreign trade of rubber products.

The trend in the value of the trade is assessed in real terms by using US \$ as the deflator. The implicit GDP (Gross Domestic Product) deflator at 1980-1 price was also attempted but found irrelevant as the weightage of rubber products in the total commodity composition of GDP is negligible.

## RESULTS AND DISCUSSION

The relative share of primary forms of rubber and finished rubber products is insignificant in India's total value of exports and imports. During the period 1971-2 to 1992-3, the share of rubber and rubber products recorded an increase from 0.36 to 0.84 per cent. The value of exports increased from Rs 775 lakh to Rs 66025 lakh against the increase in import value from Rs 667 lakh to Rs 40641 lakh. A drastic change resulting in a favourable balance of trade is observed during the year 1992-3 mainly due to the dynamic growth in the export of dry rubber products.

The share of primary forms of rubber in import has been on the increase for the last two decades while the share of the same in export has been marginal. The structure of India's exports of rubber and rubber products is in sharp

contrast to the other three major NR producing countries as 93 per cent of the total exports from this sector is in the form of finished rubber products. The rising share of primary forms of rubber and declining share of rubber products in imports are indicative of the growth of the indigenous rubber goods manufacturing sector in India. The negative balance of trade reports can be attributed in part to the higher proportion of primary forms of rubber, in imports. However, the balance of trade for rubber products (excluding primary forms of rubber) has been positive throughout the period under study (Table I). Among the three major categories of rubber products, latex based goods registered an increase from 0.45 to 5.35 per cent in exports while the share of dry rubber products declined from 95.25 to 90.28 per cent during the 22 year period of analysis (Table II). On the other hand, the share of dry rubber products in imports declined significantly and that of latex and intermediate products displayed periodic variations. The index of the change in the value of exports with 1971-2 as base showed that, over time, exports grew faster than imports (Table I) (Anon, 1993). The value of imports of rubber products as a percentage of exports decreased from 40 per cent in 1971-2 to 23 per cent in 1992-3.

Across countries, the commodity composition of exports is generally related to the phase of historical development and the industrial structure. The export structure of India resembles its rubber based industrial structure and is in sharp contrast with the export pattern of Malaysia which is the largest rubber products exporter among the four major NR producing countries. (Table III). Malaysia's rubber goods sector is characterised by concentration in NR consumption by the latex goods sub-sector compared to India. Moreover, about 78 per cent of Malaysia's export is accounted by latex based products whereas the share of the same in India

**Table I. Foreign Trade of Rubber Products in India (Rs. lakhs)**

Year	Exports	Imports	Balance of trade	Exports Index	Imports Index	Imports as % of Exports
1971-2	785	306	459	100	100	40.00
1975-6	1117	711	406	146	232	63.00
1981-2	3508	2220	1288	459	725	63.28
1985-6	8326	4705	3621	1088	1538	56.51
1990-1	24799	10116	15683	3242	3306	40.79
1992-3	64131	14583	99548	8383	4766	23.00

**Table II. Foreign Trade of Rubber Products by Categories (Percentage Share)**

	EXPORTS			IMPORTS		
	Latex Products	Intermediate Prod.	Dry Rubber Prod.	Latex Products	Intermediate Prod.	Dry Rubber Prod.
1971-2	0.45	4.30	95.25	4.49	18.34	77.17
1975-6	0.40	9.64	89.96	1.29	14.93	83.78
1981-2	5.12	4.06	90.82	3.31	33.51	63.18
1985-6	0.18	8.70	91.12	5.42	47.51	47.07
1990-1	4.36	5.19	90.45	10.57	32.59	56.84
1992-3	5.35	4.37	90.28	9.45	25.16	65.39

**Table III. Composition of Natural Rubber Consumption**

	India	Malaysia
Tyre Sector	57.50	12.90
Latex Products	9.90	67.00
Others	32.60	20.10
Total	100.00	100.00

Sources :

(1) Indian Rubber Statistics

(2) Malaysian Rubber Review

Table IV. Destination of Exports of Foreign Trade of Rubber Products 1992-3

Commodity	Developed Market Economies		Developing Economies	
	% Share	Unit Price (Rs.)	% Share	Unit Price (Rs.)
Conveyor Belting	15.00	67.00	85.00	69.00
Transmission Belting	13.00	46.00	87.00	51.00
Tyres - Lorries and Buses	33.00	2330.00	67.00	2765.00
Tyres for bicycles	7.00	51.00	93.00	31.00

is only 5 per cent. To a large extent, structure of the industry in Malaysia is an outcome of the efforts to capitalise the comparative advantage in the production of latex goods arising from resource endowment.

The destination-wise analysis of foreign trade of rubber products indicates that developing economies account for major portion of the exports. It may be mentioned at the outset that the destination of the exports of the rubber products is, to a very great extent, depends on the market for the dominant commodity group, tyre and allied products in general and tyre products in particular. The direction of rubber products exports from India is also characterised by a very high degree of concentration. However, the share of developing countries in the exports has declined from 97 per cent in 1971-2 to 70 per cent in 1992-3. The structure of destination changes as the share of tyre and allied products drops in the total. It is reported that there exists a significant price difference in exports between developed and developing economies (Table IV). The trend in the destination of imports shows a reverse pattern.

#### ➤ Dry rubber products

As dry rubber products account for more than 90 per cent of the total export value of rubber products, its trend decisively influences the country's total exports in rubber products. The

share of the tyre and allied products was 96 per cent during 1992-3 (Table VI). The share of this sector in imports recorded a steep fall from 73 per cent to 26 per cent during the study period. (Anon, 1992). Belts and beltings claimed a significant share of export during 1980s partly due to the declining share of tyre and allied products sector. The decline in the share of tyre sector in exports and imports during the early 1980s, appears to be an outcome of recessionary tendencies prevailed in the world tyre market. Other two categories, hoses and other dry rubber products, do not show any specific trend and the combined share in exports is insignificant throughout the period of analysis. The share in the import of these three categories except tyre sector, has gone up and the 'others' in the dry rubber products category has registered a relatively higher growth, contributed by the products like rubber ring, seals, blankets and gaskets. The import of dry rubber products as a percentage of export has recorded a steady and significant decline from 32 to 16 per cent during the study period. The tyre sector has consistently improved its balance of trade while other groups showed negative balance of trade in certain periods. At the aggregate level, except in 1985-6, the balance of trade of dry rubber products has consistently improved during the period of analysis.

Since tyre and allied products sector

**Table V. Destination of Imports of Foreign Trade of Rubber Products 1992-93**

Commodity	Developed Market Economies		Developing Economies	
	% Share	Unit Price (Rs.)	% Share	Unit Price (Rs.)
Hoses- others	85.36	322.00	14.64	220.00
Conveyor Belting	99.43	210.00	0.57	296.00
Other Beltings	93.46	316.00	6.54	295.00
Bicycle Tyres	4.47	87.00	95.53	60.00
Tyre for off the Road Vehicles	83.76	151591.00	16.24	55779.00
Tyres for other Vehicles	95.24	36066.00	4.76	22955.00
Rubber Ring	89.28	1.00	10.72	2.00
Rubber Seal	87.52	19.00	12.48	16.00
Gaskets	92.55	12.00	7.45	4.00
Rubber Blankets	99.61	47.00	0.39	21.00

More than 80 per cent of the imports is from developed market economies and the unit price is found to be higher for the imports from developed economies (Table V).

accounts for more than 90 per cent of exports of dry rubber products, its structure was analysed independently. The share in exports of the first three ranked items in 1971-2 constituted 80 per cent against 89 per cent in 1992-3. The share of tyre cases for off the road vehicles declined drastically while that of tyre cases for bicycles and tyre flaps improved significantly.

In 1971-2, two products viz., tyre cases for truck and bus and tyre cases for off the road vehicles together accounted for about 75 per cent of the total value of exports. In 1975-76 and 1981-82, the concentration has declined but from 1985-86 the trend reversed again when tyre cases for lorries and buses alone formed 75 per cent of the value of exports. Volume of exports of this product group has increased from 3.9 lakh (No.) to 15 lakh during the period between 1985-86 and 1992-93.

The value per piece of tyre increased from US \$ 32.29 in 1971-72 to US \$ 105 in

1990-91 and it declined to US \$ 85 in 1992-93 (Table VII). However, during the same period, the volume of exports has increased by 78 per cent. The product with the highest unit value viz., air craft tyres, recorded a steady decline in the unit value from US \$ 307 in 1985-6 to US \$ 145 in 1992-93 (Table VIII).

#### Latex products

Export of latex products assumes strategic commercial importance from the point of view of NR producing countries arising mainly from the inherent locational advantage. Among the four major NR producing countries, Malaysia has shown a dynamic growth in the exports of latex based products and currently it is the leading exporter of examination gloves, surgical and other gloves and elastic rubber thread. Moreover, during the last one decade, there was a remarkable shift in terms of relocation and concentration of latex products manufacturing capacity to South-East Asia. Though the relative

**Table VI. Composition of Dry Rubber Products in Foreign Trade 1971-72 to 1992-93**

Year	Tyre & Allied Products (%)	Belts & Beltings (%)	Hoses (%)	Other (%)	Total (%)
1971-2 EX	96.02 (25)	1.03 (327)	1.95 (169)	1.00 (216)	100 (32)
IM	72.81	10.41	10.65	6.13	100
1975-6 EX	86.35 (21)	8.82 (347)	2.72 (250)	2.11 (164)	100 (59)
IM	30.97	51.72	11.49	5.82	100
1981-2 EX	37.29 (29)	38.67 (27)	13.35 (101)	10.69 (87)	100 (44)
IM	25.30	23.69	29.89	21.12	100
1985-6 EX	60.57 (5)	33.13 (283)	4.57 (160)	1.80 (523)	100 (113)
IM	9.69	32.47	25.31	32.53	100
1990-1 EX	84.31 (7)	11.34 (42)	1.97 (210)	2.41 (432)	100 (26)
IM	24.47	18.76	16.07	40.70	100
1992-3 EX	90.83 (5)	5.50 (57)	0.82 (338)	2.96 (213)	100 (16)
IM	26.05	18.94	16.80	38.21	100

Figures in Brackets show the percentage of imports to exports, EX-exports, IM - imports.

**Table VII. Trend in Quantity and Unit price of Tyre cases of Trucks and bus**

Year	Quantity (No)	Unit Price US \$	% Change in Qty	% Change in Qty. Price
1971-2	160562	33.29	--	--
1975-6	42909	54.95	-73.28	65.06
1981-2	87533	73.31	104.00	33.41
1985-6	393170	75.36	349.17	8.25
1990-1	849138	105.00	115.97	32.31
1992-3	1514304	85.00	78.33	-19.05

**Table VIII. Trend in the unit prices of Air-craft tyres 1985-86 to 1992 -93**

Year	Quantity Exported (No)	Quantity Index	Unit Price US \$	Price Index	% Share in Exports
1985-6	120	100	307.07	100	0.10
1990-1	363	302	282.72	92	0.10
1992-3	1690	1408	145.28	47	0.14

share of latex products in India's total rubber products exports was only 5.35 per cent in 1992-93, it represents a steady growth in recent years as the increase in share was from 0.45 per cent in 1971-72 to 5.35 in 1992-3. An adverse balance of trade to the extent of Rs.1028 lakh in 1971-72 was reversed in the 1980s and in 1992-93, the net balance of trade was favourable to the tune of Rs. 2052 lakh. Table IX shows the composition of foreign trade in latex products.

Balance of trade for the latex products sector has turned favourable during the terminal year of the study. Although the export base of the latex product has widened during the period

### Intermediate Products

In 1992-93, the relative share of this product group in the exports and imports were 4.37 and 25.16 per cent. During the 22 year period, the relative shares were showing periodic changes. While the share in exports was stagnant, there was a steady increase in the share in import from 18.34 per cent to 25.1 per cent. The value of exports has increased from Rs. 32 lakh to Rs. 2803 lakh compared to the increase in import value from Rs. 56 lakh to Rs. 3668 lakh during the reference period. An important characteristic of this product group is that, except during 1975-76, the value of imports

**Table IX Composition of Latex Products in Foreign Trade**

Products	1971-72		1992-993	
	Exports	Imports	Exports	Imports
Contraceptives	81.00	57.00	5.00	44.00
Hygienic Pharmaceuticals	15.00	1.00	37.00	2.00
Thread and cord	2.00	33.00	1.00	42.00
Others	2.00	9.00	57.00	12.00
Total Value (Rs. lakh)	3.46	13.74	3429.76	1377.44

under study the degree of concentration in exports has declined only marginally. The substantial decline in the share of contraceptives in exports has been compensated by the increase in the share of surgical and other forms of gloves. The composition of imports is also characterised by basic changes and the major products imported were contraceptives, thread and cord. Compared to 1971-72, thread and cord registered maximum increase in unit value of imports and exports during 1992-93. Concentration in the direction of trade has also shown considerable decline as the number of export markets increased from 15 to 30 and the sources of imports also increased from 9 to 25 during the period under study.

exceeded that of exports resulting in an adverse balance of trade.

Though at the aggregate level, the foreign trade in rubber products displayed a favorable balance of trade, the structure and pattern of exports and imports calls for a reorientation in the context of the emerging scenario in the post-GATT era. The structure of the Indian exports of the rubber products tends to show that it is virtually an extension of the existing industrial structure as evident from the analysis. The major products group, viz., tyres and allied products, is subjected to stiff competition in the international market arising from the technological change and the resultant cost competitiveness. As 98 per cent of India's exports of automotive

tyres and tubes consist of cross-ply tyres, the chances of maintaining a steady market share in the export market appear to be weaker. The increases in the total and unit values of the three categories of products in rupee terms provide only a magnified picture as evident from the respective changes in dollar terms during the twenty two year period. Among the three categories, the latex products group registered maximum increase in the total value of exports and the export value index rose to 26183 compared to the dominant dry rubber products group with an export value index of 2211 during 1992-93 in dollar terms. The product-wise analysis of the trend in unit value indices (1971-72 base) in dollar terms showed a comparatively higher increase in the case of contraceptives (748), tyre cases for trucks and buses (255), cycles tyres (224) whereas there

was a decline in the case of tyres for off the road vehicles (71). From a long term perspective, the trends emerging from the study underline the need for restructuring of the exports giving emphasis to latex based products having more NR content and inherent locational advantage as in the case of Malaysia. Such a change requires a specific export policy through which the demand from the domestic and external markets can be met.

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