LATEX THREAD: TECHNICAL UPGRADATION VITAL

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OFTEN, captive market and lower capacity utilisation are associated with industries characterised either by monopoly or oligopoly. The complementary features of such a market situation are high costs, high prices and relatively higher profits. However, in certain specific cases, it is not necessary that the product or the industry in question enjoy a seller's market. It is possible to attribute various reasons for such deviation from the generally accepted line of market behaviour.

One of the possible reasons would be a remarkable difference in the quality or the technological superiority of the product concerned among countries or firms manufacturing it. The problem becomes more serious if the product in question is an intermediate product, since the consuming industry stands to gain a lot by using the technologically superior input for its product which is exposed to stiff international competition.

The elastic rubber thread manufacturing industry in India is a classic example of such a situation which has a captive internal market, but is unable to increase its production owing to the disproportionately growing export-orientation of the consuming industry.

This article is an attempt to analyse the major problems facing the elastic rubber thread manufacturing industry in India. The study assumes significance as a pioneering effort to understand the problems facing the industry.

The elastic rubber thread manufacturing industry in India is a classic example of a queer market situation. Despite a captive market where demand is increasing steadily, the industry is unable to meet the demand with quality supplies. In fact, the production capacity is grossly underutilised to the extent of over 50 per cent.

Elastic rubber thread, also known as rubber thread, is manufactured from concentrated latex. The beginning of its commercial production in India can be traced to the late 1950's. An important characteristic of the rubber thread manufacturing industry in the country is that its production is reserved for the small-scale sector as a policy by the Central Government. According to the available data, there were 48 units in the country manufacturing rubber thread in 1985-86 (see Table 1).

Concentration of Units

From Table 1, it is evident that Gujarat and Kerala account for 68 per cent of the total number of existing units, which suggests the prevalence of a considerable degree of geographical concentration in the manufacturing of this product. Moreover, Gujarat, Kerala and Tamil Nadu account for 84.43 per cent of the total installed capacity and 82.51 per cent of the total production in the country. The concentration in geographical distribution and production suggest that the location of the manufacturing units mainly depend on two factors, viz. (a) easy availability of raw materials and (b) easy accessibility to the market. Gujarat has a concentration of the consuming industry, making use of elastic thread in readymade garments and hosiery products. Tirupur in Tamil Nadu also has the same characteristic, while Kerala is the single largest producer of the chief raw material, concentrated latex. There are considerable differences among the units with regard to

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TABLE 1 State-wise distribution of rubber thread manufacturing units in India during 1985-86

States	No.of units	Total installed capacity (in MT)	Total production (in MT)	% share in total installed capacity in the country	% share in production in the country
Gujarat	19	1085	394.459	43.31	49.34
Kerala	13	430	180.371	17.17	22.56
Tamil Nadu	9	600	84.825	23.95	10.61
Maharashtra	4	270	117.607	10.78	14.71
Karnataka	2	80	3.000	3.19	0.38
Delhi	1	40	19.222	1.60	2.40
Grand total	48	2505	799.484	100.00	100.00

Source : *Returns from 41 rubber thread manufacturing units*

Note : *Among the 48 units, 7 are new units which have not reported either installed capacity or production.*

installed capacity and capacity utilisation. The average capacity utilisation for the industry is estimated to be only 31.92 percent. Inter-regional differences in capacity utilisation are also considerable and Delhi and Maharashtra are ahead of other states in this respect.

Low capacity utilisation

Thus it appears from the available information that one of the major problems facing the industry is lower capacity utilisation. Even if due allowance is given to the possible under-reporting of production by the units, there are at least three important factors responsible for the lower capacity utilisation. First of all, many of the units do not have well established marketing outlets so as to enhance production up to the desired levels vis-a-vis the prevailing degree of competition in the market Secondly, many of these small-scale units lack sufficient funds to withstand a working capital crisis in the absence of timely realisation of sale proceeds But, the most important factor behind the lower levels of capacity utilisation appears to be the exacting demands and growing sophistication of the consuming industry, which requires a careful analysis.

In India, different types of rubber thread, varying in size and quality, are manufactured. Usually, the size is expressed in terms of the "counts." The higher the count, the lower the diameter of the thread and vice versa. It is estimated that more than 70 per cent of the rubber thread manufactured in the country belongs to the category of counts varying from 28 to 36. Only a handful of units are manufacturing rubber thread having counts above 60 which are expensive and technologically superior.

The consuming industry, consisting mainly of readymade garment making units and the hosiery units, can be broadly classified into two. One sector is mainly export-oriented whereas the other is catering to the internal market. The export-oriented sector requires rubber thread of higher count having "heat resistance". The quality of non-heat resistant variety of elastic thread deteriorates on account of oxidation during repeated washing in warm water and drying in hot air. Therefore, consuming industries prefer the heat-resistant variety.

For manufacturing heat-resistant elastic thread, a powerful non-staining type anti-oxidant is to be used in the latex compound. The anti-oxidant activity of the chemical available in India is very poor. However, it appears that the existing manufacturing units are reluctant to import the required chemical. Thus, the rubber thread having heat resistance quality of comparable international standards, is imported by the export-oriented consuming units which utilise the facility of replenishment allowance against their export of readymade garments and hosiery items. Accordingly, our dependence on countries such as Malaysia, Japan and UK are increasing steadily. (See Table II).

As can be seen in Table II, India has imported more than 86 tonnes of rubber thread from five major suppliers during 1984-85. The readymade garments and hosiery items have made steady increase in the export earnings in the face of stiff competition from Taiwan, China and South Korea. It is estimated that at present the export earnings from these two items are more than Rs. 800 crore and there are indications that this positive trend of increasing exports will result in growing dependence on imports of rubber thread in the coming years.

Constraints for upgradation

The foregoing analysis is suggestive of the need for a steady upgradation of our existing technology, which has to be brought in line with the international standards from a long term perspective. But it is pointed out that there are built-in constraints for such a change owing to the following reasons.

(a) Initial investment required for establishing a plant to manufacture rubber thread of higher

counts with heat resistance quality will be very high compared to the existing plants.

(b) As thread manufacture is reserved for small sector, the minimum installed capacity of such a plant will not be in tune with the present Government policy, since the unit can no longer be categorised as small.

Another important aspect which deserves attention is the cost of production. It is reported that the cost of production for the lower counts varies from Rs. 30 to Rs. 32 and for higher counts it varies from Rs. 50 to Rs. 55 per kg. The cost of production mainly depends on the counts, since with the increase in counts, the total production comes down and consequently the unit cost of production goes up due to relatively higher over heads and establishment charges added to the variable costs. The material waste is also higher for producing higher count threads of consistent quality.

It is also worth mentioning that in India, rubber thread of lower counts is manufactured mainly from the creamed latex, whereas centrifuged latex is used for higher counts. To a large extent, this practice also explains the relatively higher costs of production for the higher counts.

Garments and hosiery units

As mentioned earlier, the consumption sector consists mainly of the readymade garment making units and the hosiery units. The total consumption of rubber thread in India in 1985-86 is estimated to be 970 tonnes. An important characteristic of rubber thread marketing arrangements in the country is that compared to many other latex-based rubber goods, the role of intermediaries is limited. The only notable exception is the presence of brading units which purchase the rubber thread and process it to suit the requirements of the consuming industry. However, available information tends to suggest that many of the consuming units prefer to purchase directly from the rubber thread manufacturing units to suit their own specifications regarding elastic brading.

As is evident from the available data, the present level of production of rubber thread in India is insufficient to meet the requirements both in quality and quantity. The steadily increasing dependence on imports is necessitated by the growing export orientation of the consuming industry which is facing stiff competition in the international market. The quality of the elastic thread is very important in the case of export-oriented units and therefore, the future prospects of the conventional grades of thread manufactured in India mainly depends on the rate of growth of production of readymade garments and hosiery items to feed the internal market.

But there are indications to suggest that the internal market also will be turning quality-conscious, as a result of which there will be more demand for readymade garments and hosiery items backed by qualitatively superior rubber thread with heat resistance. This of course, will take time since it depends on a number of interdependent variables ranging from changes in per capita income, level of awareness

TABLE II. India's import of rubber thread

Country / year	1982-83			1983-84			1984-85		
	Quantity (in kg)	Value (in Rs.)	Unit Value (in Rs.)	Quantity (in kg)	Value (in Rs.)	Unit Value (in Rs.)	Quantity (in kg)	Value (in Rs.)	Unit Value (in Rs.)
Japan	1,005	52,972	52.71	3,692	2,13,651	57.87	2,933	2,14,701	73.20
Malaysia	2,002	47,414	23.68	16,298	5,17,740	31.77	64,802	23,46,869	36.22
Singapore	5,197	1,26,943	24.43	2,789	99,442	35.66	498	18,387	36.92
UK	7,439	10,27,062	138.06	11,023	3,57,194	32.40	17,867	6,45,321	36.12
GDR	—	—	—	555	14,888	26.82	—	—	—
Italy	—	—	—	—	—	—	87	3,543	40.72
Luxemburg	—	—	—	192	72,013	375.07	—	—	—
Total	15,643	12,54,391	80.19*	34,549	12,74,928	36.90*	86,187	32,28,821	37.46*

Source : *Monthly statistics of Foreign Trade of India, Vol II (Imports), Directorate General of Commercial Intelligence Statistics, Government of India, for respective years.*

* *Average unit cost*

of quality, the relative prices etc. But the most striking feature is that India is such a vast market that 50 per cent of its potential is yet to be tapped. In that sense, the existing potential for coventional grades of rubber thread is yet to ripen for exploitation. From a policy angle, what is required is a judicious policy of accommodating the present structure, while making all efforts to upgrade the existing technology in a phased manner to suit the Indian conditions for laying due emphasis on the export-orientation of the cosuming industry.

Prices and profitability

The average capacity utilisation in the industry is less than 50 per cent and there are a few units which are practically idle. But the well-established units which have been able to build up their own marketing outlets are making reasonably good profit margins as is evident from the prevailing market prices. The present average market prices for the lower counts range between Rs. 35 and Rs. 40 per kg and for the higher counts it is between Rs. 55 and Rs. 75 per kg. depending upon the quality of the product.

One of the main determinants of profit margin is the fluctuating prices of latex concentrates, for which there exists a market situation similar to oligopoly. Another important factor which appears to influence profit margins is the location of the units since the pattern of the geographical concentration of this industry suggests considerable savings on transportation costs being nearer either to the terminal markets or to the sources of raw-material supply. This pattern of clustering of the manufacturing units conforms with the familiar cases of individual industries which do have regional concentration either on account of easy availability of the basic raw-material or due to the easy accessibility to the market.

Technology upgradation

Even though the scope of this article is limited for want of adequate data, it gives a broad indication which is suggestive of the future prospects of the rubber thread manufacturing industry in India. The high cost regime owing to the lower capacity utilisation in the industry is sustained by the captive market and favourable Government policy. Across industries and nations, it is common experience that any positive change in consumption technology will naturally induce similar changes in intermediate manufacturing and allied areas. The hesitation to switch over to new technology may ultimately prove to be counter-productive in the long run in the case of this intermediate processing industry which at present enjoys a captive market. □