THE RUBBER INDUSTRY IN INDIA

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The Rubber Industry in India represents one of the fastest growing sectors of economic activity in the country. The spectrum of the rubber industry is so wide and diverse in nature that it engulfs a variety of interests such as natural rubber, Synthetic rubber, Reclaimed rubber, Rubber goods manufacture, Rubber machinery, Rubber chemicals, Rubber goods export and Rubber trade.

As the major source of raw material of the rubber industry, natural rubber enjoys a pride of place in the national economy. In view of its unique strategic value, natural rubber is rightly defined as 'nature's most versatile vegetable product', which serves as the base for the manufacture of over 35000 varieties of individual rubber goods in the country ranging from giant truck tyres to tiny button bushes, needed alike during war and peace.

Natural rubber, the unique, renewable resource of nature, is a new comer among plantation crops in India which found commercial introduction to this country only in 1902. Rubber Plantations registered phenomenal growth in the country since independence and it has spread to over an area of 3,00,000 hectares by 1984-85, yielding about 2,00,000 tonnes of rubber valued at Rs. 3,000 million.

Over a million people depend on this industry for their livelihood. An analysis of the rate of growth of this industry would reveal that the production was stepped up ten-fold within a span of 3 decades, while the area picked up a four-fold increase. The average yield per hectare also shot up to 890 kg. thereby registering 3-fold increase in 3 decades. This has pushed up India as the fourth largest Producer of natural rubber in the world and second only to Malaysia in productivity.

Rate of growth

The Union Ministry of Agriculture has testified the rate of growth in production of natural rubber as unmatched by any other agricultural commodity in the country. The average growth for rubber during 1949-50 to 1981-82 was 8.89% as against 5.95 percent for wheat, 5.17 percent for coffee, 2.53 % for tea and 2.59% for all crops. The rubber goods industry had attained an average annual growth rate of 6.7% in the last one decade, while the corresponding figure for natural rubber production was only 4.1%. This wide gap between demand and supply has necessitated an all out effort to maximise natural rubber production within the country, which is envisaged to be achieved through phased rehabilitation of old uneconomic units and introduction of rubber to new areas suitable for the same. The Rubber Board has fielded an ambitious scheme for the Development of Rubber Plantations, effective 1980, as a means to this end which has met with widespread acceptance from the planting community throughout the country. Over 90% of the area under rubber in India, is in Kerala. The rest is in Tamil Nadu, Karnataka, Tripura, Goa, Andamans etc. Recently, in a bid to produce more rubber, suitable areas outside the traditional tracts have also been identified. The State of Tripura has taken the lead, followed by Assam, Meghalaya, Mizoram, Arunachal Pradesh and Nagaland in the North-Eastern Sector and other non-traditional regions in Goa, Maharashtra and Orissa.

Small Holdings

Earlier plantations were fairly large in size while, of late, rubber has become a small holder's crop. Almost 75% of the area and 70% of the total production under rubber are shared by small holdings numbering around 2,50,000 having an average area of around 1 hectare. Large estates, above 20 hectares in extent, are as few as about 460. Being a highly labour intensive enterprise rubber plantation in the country is providing direct employment to over 2,00,000 people and indirect occupation to about a million.

Effective 1985, every year an additional output of over 15,000

tonnes of natural rubber could reasonably be estimated to come, as the material used for new planting and replanting since 1979 under the new scheme for promotion of rubber plantations is very high yielding capable of producing 1½–2 tonnes per hectare. As a result of the bumper production so anticipated, it is likely that by 1990 the natural rubber output in the country would touch an all time high scale of 3,00,000 tonnes.

The natural rubber produced by the plantations in India is consumed by over 3200 rubber goods manufacturing units situated all over the country. Among them, the number of units which consume more than 100 tonnes per year of rubber is as few as 175, which include 12 Tyre Companies whose consumption exceeds 50% of the total natural rubber produced. Others are small scale industries. The turnover of rubber production during 1984–85 was worth over Rs. 25,000 million. A part of the rubber goods made in India is being exported which earned Rs. 87 crores in 1984-85.

The foregoing description reveals that the rubber producing and rubber goods making industries are proliferated by vulnerable sections. Integrated and orderly developm-nt of these sections could be ensured only by the judicious evolution and adoption of an appropriate strategy, based on mutual appreciation of their inherent interdependance and indivisible nature. This aspect eminently points to the truth that the interests of the rubber producer and rubber consumer are just one and the same.

Requirements of the rubber goods industry against the domestic output of 1,86,000 tonnes of natural rubber in 1984-85, was 2,16,000 tonnes leaving a deficit of 30,000 tonnes. The gap between supply and demand is being bridged now by imports. India, along with China and Brazil, is a rubber producing country which has an industrial capacity to consume more than the domestic output of natural rubber. This is attributed to the existence of a strong and steadily growing rubber goods manufacturing industry within the country.

Synthetic Rubber

Synthetic rubber produced by the Indian Petrochemicals Ltd in Gujarat and Synthetics and Chemicals in Bareilly are effectively of setting the shortage of natural rubber. Though the synthetic rubber industry in the country has a capacity to produce 62,000 tonnes, both the existing plants put together manufactured only 37500 tonnes of Synthetic rubber during 1984-85. Demand for Synthetic rubber was lying low primarily due to the fact that the prices of natural rubber were ruling at rates lower than that of Indigenous synthetic rubber most of the time. Special purpose Synthetic rubbers, intended for exclusive uses are also imported in limited quantities.

While the ratio of consumption of natural rubber to synthetic rubber is 32:68 in developed countries, in India, natural rubber has been able to maintain and ensure steady and uninterrupted supply to the goods industry. Synthetic rubber, in India, ever since its inception has always been playing a complementary role and not a competitor to natural rubber maintaining the consumption pattern between natural and synthetic rubber at 80:20 for many years. This is the most ideal and appropriate setting for a developing economy where natural resources are abundant.

Reclaimed Rubber

Emergence of reclaimed rubber as a source of raw material for certain specific uses is also assuming significance. It can be viewed only as an attempt to recover 'wealth from waste' and not as an alternative to replace natural rubber. Reclaimed rubber has the advantage that it is least expensive compared to natural rubber and synthetic rubber. During 1984-85 reclaimed rubber production touched an all time high of 30,000 tonnes. While discussing integrated development of the rubber industry, it is essential that proper co-ordination of eforts between the various sectors of the producing industry such as natural, synthetic and reclaimed rubbers should be ensured so that uninterrupted supply of the basic raw material is ensured, with synthetic and reclaimed rubbers identifying their roles as only supplementary to natural rubber.

India, with its vast stretches of arable land suitable for rubber cultivation, can easily take up the job of producing natural rubber adequate to meet the growing needs of the rubber goods industry. As rubber plantations can generate massive rural employment, utilisation of all the available land for planting rubber would help to remove the social malady of unemployment.

Prospects

Rapid sophistication and urbanisation in the life style of human beings in a developing economy cannot materialise without increased output of rubber, while an American consumes 15kg. of rubber per year, a Canadian consumes 12.5 kg, a German consumes 10 kg and a British consumes 8 kg per year. Three Indians put together are consuming only 1 kg of rubber per year. This would reveal the immense scope and vast vista of opportunities that await the Indian rubber industry. But the prospect of this industry, particularly the rubber plantation

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population, etc.; total geographical area, agricultural area, irrigated area, area under different crops, high yielding varieties, average yield of crops, etc; number of wells, tubewells, and canal and river, irrigation facilities; soil type, soil fertility, problematic soils if any; level of fertiliser use season and crop-wise, method of application; cooperative membership, credit facilities; and details on village institutions like Panchayat, school, post-office, hospital etc.

Chalking out a Programme ction

.. programme of activities is chalked out in consultation with the farmers and local officers. Feasible targets for each of the activities to be undertaken are set yearwise, well in avdance of the commencement of the activities. Yearwise targets are further broken monthwise. While fixing the activities and their timings, it is ensured that they coincide with the farming operations and the crop calendar Field representatives plan their visits at regular intervals. Each of the activites are planned in a manner so as to ensure maximum participation of the farmers. The progress of the activities are reviewed every month. The villages are adopted for a period f three to five years. After the illages reach the take off stage, their adoption is discontinued. In order to coordinate implementation, a village coordinator is appointed for each of the villages adopted and is provided with suitable honorarium.

Activities

The activities in adopted villages are oriented towards technology transfer, supply of agricultural inputs, provision of farm equipments, creation of motivation and awareness through promotional, educational and social welfare programmes.

(a) *Technology transfer and educational activities*

Some of the important activities organised in adopted villages are:— field demonstrations, field days, farmers meetings, crop seminars, farmers fairs, campaigns on, soil testing, seed treatment, plant protection, weed control veterinary care, human health care, rodent control.

(b) *Input support activities*

For improving the agricultural production, use of quality inputs by the farmers is a must. Input support activities are organised in the following manner: arranging adequate and timely supply of agricultural inputs viz. fertilisers, seeds and pesticides through the village cooperatives and input suppliers: assisting the farmers in getting timely credit; and making provision for agricultural equipments like dusters, sprayers, seed treatment drums, seed-cum-fertiliser drills, etc.

(c) *Monetary and organisational support for other activities*

adult education; improving the educational facilities in the village school; drinking water supply; medical facilities; strengthening the village cooperative society; road building; biogas development; and social forestry programme;.

Measuring Impact of Programme

The progress of the programme is constantly reviewed. Some of the major parameters adopted for measuring the progress are:— increase in total agricultural production and productivity per unit area; increase in fertiliser consumption; increase in area under high-yielding varieties; increase in number of input users: number and quality of promotional programmes organised; provision and addition of basic amenities and facilities in the villages including health, education, transport, supply of drinking water, etc.; improvement in the socio economic conditions of the villagers; and impact on the nearby areas.

Annexure-I summarises the impact of the village adoption programme on crop productivity and fertiliser use. The data compiled at the final year of the adoption reveal considerable improvement in the productivity of crops, fertiliser consumption and crop response to fertiliser application. □

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industry depends on how best it emerges competitive in respect of presentation, price and quality.
It is in this context that the role of the Rubber Board, a statutory body, functioning under the Union Ministry of Commerce, assumes relevance and significance. The Board has acquitted itself creditably well and lived up to its social and economic obligations.
Rubber Industry in India can rest assured of bright prospects in the years to come, provided the various sectors within this industry are able to appreciate the mutuality of interests and achieve the laid out objectives through proper mobilisation and allocation of resources to the best advantage. □

THE COMPREHENSIVE GUIDE

Will you be there? – in rubbicana – Europe 1986, the comprehensive guide to all sections of the rubber and polyurethane industries throughout Europe. This directory – the third in the series - will give full details of all companies involved in supplying materials, equipment and services to the rubber and PU industries. It will include details of their products – fully classified and cross-referenced in seven sections. Next year, for the first time, rubbicana – EUROPE will list product manufacturers and processors of rubber - and PU based materials, making it a vital guide to these industries.