CHAPTER III

RUBBER INDUSTRY
IN KANYAKUMARI DISTRICT: A PROFILE

This chapter has the purpose of discussing rubber industry in Kanyakumari District in necessary length and breadth. By way of providing a background, there is a brief description of the geography of the district preceding the descriptions of rubber and rubber industries. This chapter has three broad sections: the geographical background of Kanyakumari district, the rubber industry in brief and socio-economic background of the workers in the rubber industry.

A. GEOGRAPHY OF KANYAKUMARI DISTRICT

Kanyakumari is one of the 30 districts in the State of Tamil Nadu. It is the southernmost district and the tip of India. This small district accounts for 1.3 per cent of the total geographical area of the State, that is, 1,685 km$^2$ out of 130,058 km$^2$. In the north of Kanyakumari is the district of Tirunelveli, in the west is that of Kerala State and the Arabian Sea, in the south is the Indian Ocean and in the east is both Tirunelveli district and the Bay of Bengal.

Climate. Being located at the tip of the Peninsula, the district is in an advantageous position, in terms of climate. While the climate is decidedly tropical, the maximum temperature is around 38$^\circ$ C and the minimum is about 20$^\circ$ C. The months of November to January are the cool months, with temperature hovering at 30$^\circ$ C. May is the hottest month, at 36.5$^\circ$ C. The humidity ranges between 62 per cent in July to 81 per cent in
December at 8.30 hours while it ranges from 45 per cent in February to 63 per cent in November at 17.30 hours.

**Rainfall.** The total normal rainfall is 1,173.4 mm while the actual during 1997-98 was 946.9 mm. The normal rainfall during the southwest monsoon is 435 mm whereas it is 443 mm during the northeast monsoon. During 1997-98, the district suffered a shortfall in the normal rainfall during the southwest monsoon at 373.8 mm and experienced an excess over the normal rainfall at 503.7 mm during the northeast monsoon. There is rain also during the winter (normal 33.8 mm) and hot weather season (261.4 mm). However, the year 1997-98 showed shortfalls at 0.2 mm and 131.4 mm during the two seasons, respectively.

**Soils and Forests.** The soils of Kanyakumari are primarily that of sandy coastal alluvium. The forests account for 16.5 per cent of the total geographical area. The area under forests is 2.2 million ha, of which reserved forests are in 1.93 m ha. Timber is cultivated in 550 ha, whereas fuelwood in 8,338 ha and other plantations in 42,568 ha. The land area reserved for grazing is 0.23 ha per head in the land area and 0.04 ha in the forest area. The share of forest area to land area is 17.5 per cent.

**Irrigation.** Irrigation is widely available in the district, with gross area irrigated is 45,778 ha and net area irrigated is 29,262 ha. The intensity of irrigation is thus 156 per cent. Plenty of rains from the southwest and northeast monsoons substitute the canal irrigation in the district. Part of the area is of hills, where irrigated hill agriculture is also practiced with typical hill and plantation crops.

**Cropped Area.** Gross cropped area of 1996-97 stood at 101,321 ha, which was 45.2 per cent of the total geographical area. Net area sown stood
at 82,179 ha in the same year, which were about 36 per cent of the total geographical area of the district. The cropping intensity was 123.3 per cent.

Area under principal crops was such that paddy, in 1996-97, was spread over 33,659 ha, black gram 1,854 ha, green gram 5 ha, and pulses 2,131 ha. Total food grains area was 35,790 ha. Paddy under crop I accounted for nearly a third of the area under principal crops (33.2 per cent). Paddy under crop II accounted for a mere 1.5 per cent, meaning that irrigation was available for only one crop. Groundnut was grown in 240 ha while pulses were grown in 730 ha, which was a negligible 0.3 per cent of the total cropped area during that year.

The farmers of Kanyakumari are into modern cultivation that they use fertilisers and pesticides, besides mechanical methods. Traditional practices still hold sway, but gave way to modern methods among the farmers. The traditional practices are being revived in recent years to overcome environmental hazards of using mechanical and chemical methods to crop cultivation. Nitrogenous, phosphatic and potassic fertilisers are all used towards improving crop yields. Pesticides are dusted as well as sprayed as liquids to the tune of 55,237 litres.

Production of Principal Crops by Districts

Kanyakumari district has produced 138,930 tonnes of rice, which is 2.4 per cent to the total area. Pulses produced is of 730 tonnes, 0.3 per cent to the total production. Groundnut has yielded 240 tonnes, which is very very negligible.

Population Distribution. Table 3.1 shows the distribution of population by region in Tamil Nadu and Kanyakumari in 1991. The total
Chart 3.1a: Population in Tamil Nadu 1991

Population

Number in '000

Male

Female

Total

Rural

Urban
population of the State was 55.86 million, of which 28.3 million were males and 27.6 million were females. Rural population was of the order of 36.78 million, with 18.6 million males and 18.2 million females. Urban population was 19.1 million, with 9.7 million males and 9.3 million females. The urban population accounted for 34.2 per cent of the total population, which put Tamil Nadu in position next only to Maharashtra, which tops the States of Indian Union in urbanisation (Census 1991).1

Table 3.1: Area and Population

<table>
<thead>
<tr>
<th>State/District</th>
<th>Region</th>
<th>Area in km²</th>
<th>Persons</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamil Nadu</td>
<td>Total</td>
<td>130058</td>
<td>55,858,946</td>
<td>28,298,975</td>
<td>27,559,971</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td>36,781,354</td>
<td>18,567,717</td>
<td>18,213,637</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td></td>
<td>19,077,592</td>
<td>9,731,258</td>
<td>9,346,334</td>
</tr>
<tr>
<td>Kanyakumari</td>
<td>Total</td>
<td>1685</td>
<td>1,600,349</td>
<td>803,839</td>
<td>796,510</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td>1,330,240</td>
<td>668,856</td>
<td>661,384</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td></td>
<td>270,109</td>
<td>134,983</td>
<td>135,126</td>
</tr>
</tbody>
</table>

Source: Directorate of Economics and Statistics, Government of Tamil Nadu, Statistical Handbook of Tamil Nadu 1998

In Kanyakumari, the 1991 population stood at 1.6 million, with 0.8 million males and 0.796 million females. Rural population was 1.33 million, with 0.669 million males and 0.661 million females. Urban population was 270,109, of which 134,983 were males and 135,126 were females. In sum, the urban population constituted 16.9 per cent of the total population of the district (Charts 3.1a, 3.1b and 3.1c).

**Occupied Residential Houses.** There are 327,516 households living in 323,813 occupied residential houses in the district. Urban households number 55,094 living in 54,064 occupied residences, whereas rural households number 272,422 living in 269,749 occupied residences. There are thus 1,011 households for every 1,000 occupied residential houses in
Chart 3.1b: Population of Kanyakumari District 1991

Urban: 135

Rural: 661

Total: 797

Number in '000
the district and the ratio is 1010 and 1019 households for every thousand houses in rural and urban areas, respectively.

**Literacy.** In literacy, the district is in the forefront (Table 3.2), being one closely resembling that of developments in Kerala State. There were 30.34 million literates in Tamil Nadu, constituting 54.3 per cent of the total population of the State. Male literacy was of the order of about 64 per cent, while female literacy was 44.6 per cent. Urban literacy stood at 68.4 per cent while rural literacy stood at 45.9 per cent. The total number of literates in the district stood at 1.15 million (71.9 per cent), with male literacy at 74.9 per cent and female literacy at 68.7 per cent. Urban literacy was at 78 per cent while rural literacy was at 70.5 per cent. Thus, education in Kanyakumari is an important, development contributing aspect for the population Charts 3.2a and 3.2b).

Table 3.2: Literates in Tamil Nadu and Kanyakumari District

<table>
<thead>
<tr>
<th>State/Region</th>
<th>Literates in million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>30.34</td>
</tr>
<tr>
<td>Rural</td>
<td>17.31</td>
</tr>
<tr>
<td>Urban</td>
<td>13.02</td>
</tr>
<tr>
<td>Total</td>
<td>1.15</td>
</tr>
<tr>
<td>Rural</td>
<td>0.94</td>
</tr>
<tr>
<td>Urban</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Source: Directorate of Economics and Statistics, Government of Tamil Nadu, Statistical Handbook of Tamil Nadu 1998

**Infrastructures.** Education is the most important of all infrastructural facilities. Seven of the 156 polytechnics and 3 of the 84 engineering colleges of the State are in the district (Department of Economics and Statistics, 1998). There are five self-financing and 1 each of government and government aided polytechnics in the district. All three
Chart 3.1c: Area: Tamil Nadu and Kanyakumari District (in sq. km)
engineering colleges are self-financing. There are numerous educational institutions, of various descriptions. The private institutions far outnumber the government institutions.

Kanyakumari has a total road length of 2,948 km, of which 1,499 km is of bituminous topping and 1,383 km are of water-bound macadam. There is about 852 km of unsurfaced roads in the district. There are 672 registered motor vehicles, 2,285 auto-rickshaws, 138 taxis, 1,066 motor cabs, 1,026 maxicabs and a variety of other vehicles in good number. Light commercial vehicles number 1,268 and those with State permit are 73. There are some 1,330 tractors and 807 tractor-trailers and a total of 9,702 commercial vehicles. The motorcycles number 13,151, scooters 7,103, mopeds 21,572, motor cars 5,035, and jeeps 625. In all, there are 58,732 motor vehicles, with 49,030 non-commercial and 9,702 commercial vehicles. The State transport corporation vehicles in operation have a fleet strength of 656. In 1996 alone, there were 637 road accidents, in which 536 persons were injured and 138 persons were killed.

There are 123 commercial banks operating in the district. The demand from agriculture constitutes 85.39 per cent whereas that from industries 22.02 per cent and services 41.11 per cent. The recovery rate in agriculture is 70.89 per cent while in industry it is 10 per cent and in services 33.65 per cent. The percentage overdue in industry is 54, in services 18 and in agriculture 17.

**Community Economic Development.** The people of the district have been beneficiaries under various community development programmes. Under the Prime Minister’s Rozgar Yojana, 1,575 applications were received in 1997-98, seeking financial help. In all, 547
Chart 3.2a: Literates in Tamil Nadu 1991

- Literates
- Male
- Female

Population in m:
- Total
- Rural
- Urban
applications were accepted and Rs. 26.94 million was disbursed. Loans disbursed for the year 1997-98 amounted to Rs. 10.6 million for 215 people. Under human capacity building, 467 people were trained. The progress under Integrated Rural Development Programme was that Rs. 18.2 million was allocated, Rs. 15.73 million worth of subsidy was utilised, and out of the Rs. 44.01 million targeted credit Rs. 29.6 million was disbursed. There are 580 community nutrition centres operating in the district, covering a total of 38,049 children of 0 to 36 months and 12,422 women. The pre-school children of 37-60 months covered numbered 18,944 in 1995-96.

Under the Government’s nutritious meal programme for school children, 702 panchayat union schools and 22 municipal schools have benefited a total of 243,124 children of ages between 2 and 15. Uniforms were distributed to 98,401 boys and 94,276 girls. Textbooks were distributed to 113,047 boys and 96,300 girls. Under the free housing programme, 389 houses and 311 house sites were distributed to the scheduled castes.

B. RUBBER INDUSTRY

The geographical location of chief natural rubber districts in Kerala and Kanyakumari in Tamil Nadu is excellent for rubber, with adequate and well distributed rainfall in the Western Ghats. Elsewhere in southern India, the climate is hardly suitable and the area of rubber is correspondingly limited. Costs of producing rubber in Kanyakumari are low, even though the land is heavily priced. Wages are still small that rubber production is undoubtedly profitable. The popularity of rubber amongst Indian farmers is evidenced by the rapid rise in plantings since the 1960s (Barlow, 1978).
Chart 3.2b: Literates in Kanyakumari District 1991

Number in m

- Female
- Male
- Literates

Legend: □ Total □ Rural □ Urban
The Indian natural rubber is grown in both estates and small holdings. Estates are rather a small sub-sector, with public and private sector sharing the cultivation and production of rubber. The organisational structure of small holdings also includes other crops and activities which supplement what averages less than 1 ha per farm of planted rubber (Kulkarni, 1982; Rubber Reporter, 1989; Mahajan and Ghatge, 1983).

**Rubber Industries in Tamil Nadu**

In the Southern region, Tamil Nadu is the second major producer of natural rubber. Rubber is cultivated over an area of 15,000 hectares. The annual production of rubber in Tamil Nadu is estimated to be around 15,000 million tonnes per annum.

In Tamil Nadu, the rubber goods are manufactured both in the organized and small-scale sectors. There are about 13 centres in the organized sector and about 60 to 70 small-scale units manufacturing products like tyres, tubes, belts and reclaimed rubber, whereas the small scale sector manufactures rubber balls, washers, tread rubber, and rubber sheets. The number of licensed manufacturers during 1983-84 in Tamil Nadu was as many as 253 and in 1998 it was 480 units (Menon and Unni, 1990).

Since Tamil Nadu is one of the major producers of rubber, in the southern states, there is a good scope for rubber based industries in this state, especially in Kanyakumari district. In Tamil Nadu, a few units like the Madras Rubber Factory, Dunlop, and Sri Chakra Tyres are manufacturing tyres and tubes in the expanded sector. During 1984 and
1985, the products of tyres in the state was around 7,215,000 and 7,378,000 in number, respectively. The additional capacity has also been sanctioned (Raman, 1993).\(^9\)

**Rubber Industry in Kanyakumari District**

Kanyakumari district is blessed with a natural beauty and the land here is suitable for several rubber varieties and cultivation. Among the cash crops, rubber cultivation is famous. It is a proud fact that rubber of standard variety is available in India in Kalkulam and Vilavancode taluks of Kanyakumari district. It is spreading over 25,000 ha of land. Nearly 18,000 ha have matured plantations and the rest is immature. The average yield per hectare is 1,500 kg. It varies from 900 kg to 4,000 kg. The maximum yield is found in Kalial Village.

The workers of large plantations are paid a wage of Rs. 65 per day while those of small plantations Rs. 50 per day only. Workers employed on plantations of 5 ha or more are also given a bonus, every year and the bonus is normally a month's salary. Rubber Board maintains a labour welfare fund, covering benefits such as health, housing, educational subsidies.

Rubber production in Tamil Nadu in 1995-96 turned out to be 2,666 metric tonnes, valued at Rs. 166.6 million. This is the highest in the last few years, both in terms of production and in terms of value. Arasu Rubber Plantation in Nagercoil is on forest lands, on lease from Forest Department, in 4,789.7 ha. The plantation is operated with an authorised capital of Rs. 40 million and a paid-up capital of Rs. 20 million. The production figures for the year 1996-97 amounted to 2,591 tonnes and 1997-98 2,800 tonnes, valued at Rs. 142.9 million and Rs. 146.6 million, respectively. The latest
figure for production is 2,800 tonnes, valued at Rs. 142.9 million. In the last two years, however, revenue and expenditures have been such that rubber industry has shown a loss of Rs. 5.4 million in 1997-98 and Rs. 6.6 million in 1998-99. The revenue by sale of rubber has been of the order of Rs. 190.75 million for the year 1996-97. The expenditure for the same year has been Rs. 182.12 million. This has given a profit of Rs. 8.63 million, after the taxes. In the next two years, however, the decline has set in. In 1997-98, while the revenue by sale of rubber has been Rs. 169.64 million, the expenditure incurred was Rs. 175.04 million. In the subsequent year, the revenue from the sale of rubber has been Rs. 158.33 million while expenditure has been at Rs. 164.93 million.

Of the total land area, 85 per cent belongs to small holdings and 15 per cent to larger holdings. Out of this, the Government Rubber Corporation holding of 4,000 ha accounts for 15 per cent. The yield is around 1,000 kg per hectare. Total number of workers employed in this area is about 50,000. Of them, 5,000 workers are permanent while the rest are casual.

The total production is around 500,000 tonnes. Of this, 2 to 3 per cent is consumed within Kanyakumari district. It is consumed mainly by the Kurian Group of Companies and the rest by petty consumers such as rubber band and balloon manufacturers (Philip, 1980; Mappillai, 1986).

Rubber Production in India, Tamil Nadu and Kanyakumari District

The total area under rubber cultivation during 1997-98 in India was 544,534 ha, with a total production of 583,830 tonnes. Of the traditional region, Kerala state accounted for 85.45 per cent (or 465,282 ha) and Tamil
Nadu accounted for 3.4 per cent of the total area of cultivation in the country. In terms of production, the traditional region accounted for 96 per cent of all production in the country (561,110 tonnes out of 583,830 tonnes). While Kerala accounted for 92.9 per cent of the country's production, Tamil Nadu for just about 3.3 per cent of the country's production.

In India, the production of natural rubber increased by 3.9 per cent and touched 43,355 tonnes during April 1999 as against 49,705 tonnes during April 1998. On the other hand, there was a decline in the consumption of rubber to the extent of 2.6 per cent in auto-tyre sector and 7.2 per cent in general rubber goods sector. Yet, the consumption during the same month in the previous year was higher by 10 per cent. India exported 152 tonnes of natural rubber during the month. The total stock of 182,160 tonnes of natural rubber held in the country at the end of April 1999 was higher by 78,330 tonnes against the quantity normally required for two months of consumption in the country.

The country produced 4,880 tonnes of synthetic rubber during April 1999 as against 6,169 tonnes in the previous month. The stock at the end of April 1999 was 17,445 tonnes. The consumption of synthetic rubber declined to 156,395 tonnes, a decline by 2.8 per cent during 1998-99. The relative use of rubber marginally tilted in favour of the natural rubber. It was 79:21 during the year as against 78:22 during 1997-98. There are 545 manufacturers in Tamil Nadu (9 per cent of the total manufacturers in the country), consuming 37,129 tonnes of natural rubber, 13,910 tonnes of synthetic rubber and 5,352 tonnes of reclaimed rubber, during 1997-98.
Kanyakumari district has an area of 25,000 ha under rubber, of which nearly 18,000 ha is matured and the rest immatured. The average yield is 1,500 kg per ha, but varies from 900 kg to 4,000 kg per ha. In the last few years, there has been a fall in the demand and as such there has been a 3 per cent fall in rubber cultivation due to fall in prices. Eighty-five percent of the rubber plantations are on small holdings while only 15 percent are on large holdings. In small holdings, rubber production averages about 1,000 kg per ha.

Rubber constitutes the basic raw material for production of all kinds of sophisticated and vital rubber products, without which technological and industrial growth in the country will be totally impossible. Every possible effort is taken by the government to nurture the growth of the rubber industry at all levels. The planners of our country have introduced numerous schemes for systematizing the process of growth in various sectors of this industry. Despite these programmes, the rubber industry is bristled with many a problem, which deserves an analytical study.

As far as Kanyakumari district is concerned, the problems of rubber industry are serious and unique, in several respects. It is with a view to make a scientific and analytical study of these problems, that this study is particularly undertaken.

In sum, Kanyakumari district, with its sizable arable land suitable for rubber cultivation can sufficiently contribute to the growing needs of the rubber goods industry in the country. Secondly, as rubber plantations can generate massive rural employment, it would help to remove the social malady of unemployment.
It would also create the congenial climate for self-employment through small-scale industries for the unemployed youth. Thirdly, for it is an industry capable of earning a good share of foreign exchange and thereby enhancing the living conditions of the people of the district. At the same time, no foreign exchange or import of know-how is involved. Fourthly, it is a boon to the tribal people as they are in a large number finding a way of life.

In rubber plantations, at low and affordable cost, they could earn income as an organized sector. Besides, culture and civilization reach their door through this sector. Finally, women in a large number could earn their livelihood and become self-dependent. This paves the way for finding a solution to the age old domination and suppression of the womenfolk, especially of the lower income group, in developing rubber plantations as are required in the case of establishing synthetic rubber capacity. Hence the topic “An Economic Study of the Rubber Industry” is chosen.

C: **SOCIO-ECONOMIC CONDITIONS OF WORKERS IN RUBBER INDUSTRY**

It is necessary to have an appreciation of the nature of the work process in plantations, in general. The main activity is the cultivation of one or two types of crops and consists of soil preparation, planting, intercropping, weeding, crepe treatment, harvesting, transportation and storage of production. The following may also be undertaken as part of the plantation work: raising livestock, processing of crops, maintenance and repair of buildings, plant machinery, implements, roads and railway tracts. In some plantations, it may be necessary to generate electricity, dig wells,
maintain irrigation trenches, operate engineering or woodworking shops and transport products to the market.

Main work in any rubber plantation starts with the planting of rubber. A rubber tree requires 6 to 7 years to produce latex. Tapping starts only after this gestation period, known as the 'immature' period. Field workers are employed during this period or even before this. Work in rubber plantation starts with the appointment of field workers.

Work and Workers: Duties and Responsibilities

Rubber plantation workers are those who are employed on a monthly wage basis. Their monthly earning often does not exceed a sum of Rs. 750. The plantation workers of the rubber estates are classified into four important types as follows:

1. Field Workers;
2. Tappers;
3. Factory Workers; and

Field Workers. Field workers are appointed in the very beginning of a rubber plantation. On completion of selection of land for rubber cultivation, the field workers are employed to clear the area, erect contour bunds, dig salt pits, and raise terraces, provide drainage, approach roads and footpaths. These, in the forest lands, involve risk of snake bites, which is a common occurrence. Planters have therefore to provide necessary first aid facility in the plantations.
Budding or grafting is the next important work in the planting operation. The field workers plant the area cleared and prepared with germinated seeds or with seedlings. In either, the operation requires meticulous care. Preference therefore is for young field workers, whose fingers are supple and they are able to learn quicker and do work better than the old field workers.

Rubber trees require pruning and periodical manuring, weeding of wild grass and fencing of the area to prevent encroachment and to keep out the wild animals. Disease control is another major activity performed by the field workers. Diseases in the plants are caused by fungal and insect pests, which could affect the root, stem, branch, panel and leaf. Hence, the field workers are given training, on the job, in the preparation of fungicides and pesticides. Another serious danger in the plantations is fire. Field workers are expected to clean the vulnerable areas, within the plantation boundaries.

Rubber tree is considered as the 'kalpa vriksha' to those who have planted it. Every part of the tree is usable. Latex is used for manufacturing rubber products. Rubber wood is excellent material for fabrication of quality furniture. The branches and twigs can be used as firewood. For making soap, rubber seeds are used. Rubber trees facilitate delicious honey as well. Dried petiole twigs of rubber trees are used for manufacturing safety match sticks.

Many operations are thus carried out regularly in rubber plantations. Only then the trees could be kept to a healthy state. The work of the field workers is thus quite important.
Tappers. Tappers are those who extract rubber from the trees, while the field workers tend to the crop and provide for maintenance in the plantations. Tappers will have to be recruited when the rubber trees become fit for tapping. Generally, experienced tappers are highly preferred by the plantation owners. Tapping requires 'the cutting of a very thin slice of the bark of the tree' for collecting latex that oozes out along the edge of the cut in a cup. Tapping is not only collecting but also carrying the latex and scrap to the weighing spots.

Tapper first empties the cup that holds the latex into a pail and then reattaches the cup to receive latex further. At times, he makes fresh cuts with a chisel like knife. The operation lasts for less than a minute or sometimes slightly more. After tapping all the trees assigned to him, a tapper makes a second round to collect the latex into the pail. The latex is then taken to a collection station, where it is weighed. The weight is entered against the name of the collector.

Tapping does require skill and experience. Any wrong handling of the knife could wound the worker or the tree, damaging it permanently. This wounding of the tree is known as the 'shallow tapping'. Children are therefore not employed for tapping. Tapping is also not a daily operation and normally it takes place on alternate days. The standard system is to tap the tree every other day.

Each tapper taps a block of 250 to 300 trees. Tapping is intensive only when the trees are very old and earmarked for felling within three years. In such cases, even daily tapping is possible.
With increasing flow of latex, there is also a brisk collection. Tapping starts early in the morning, at 6.00 am. Different techniques of tapping are adopted to tap latex from the rubber tree. Under the most common system, a rubber tree is tapped only on one side, that is, half across its girth at a time. Under some other systems, tapping may be done on both sides of the tree. But the latter is adopted less frequently. In a year, about 15 cm of bark width is selected for tapping; that is, 2 cm a month for the whole year.

The cut is often made at a height within the convenient reach of the tapper. Under ‘ladder tapping’ however, tapping is done at a height of about 200-240 cm from top of the ladder. There could also be a low-level cut. Ladder tapping is used when tapping of renewed bark on base panels becomes uneconomical. New cuts may have to be opened up at higher levels, from about 165 cm to about 200 cm from the ground level or even higher as the tapper sees it fit.

Slaughter tapping is yet another method of latex collection. This is resorted to on rubber trees, which are intended for felling. The idea is to get a maximum of yield of latex. Here again, ladders are used for collection.

Owing primarily to the lack of proper footpaths or routes for carrying latex, the tappers are prone to accidents resulting from falling with the heavy weight of latex. It is also possible for the tappers to carry pails of latex over long distances to the factory.

Factory Workers. Factory workers are different from the field workers and are a special people who are technical and manage the factory in all its production categories. However, no special skill is necessary for latex processing. It is simple. Latex is collected in a tank. Water is added to
it and a little acid is also added to help the latex coagulate. The mix is taken in a coagulating aluminium pan and kept on rocks for the night. It takes only a few hours to coagulate and form itself into a thick flabby jelly.

Thick rubber sheets are taken out the next morning and are passed through roller presses and then pressed by groomed rollers to squeeze out water and make them into thinner sheets. The sheets thus made are dried upon the lofts by blowing hot air. For smoking, which is the next stage, the sheets are then sent to the smoke houses. It is after smoking that the sheets are graded and packed.

Crepe rubber is manufactured out of scrap rubber. The impurities in the scrap rubber are removed with the help of the scrap washing machines, which will later convert the scrap rubber into crepe rubber. After drying, the crepe is sorted out and graded according to colour.

Security Personnel. The security personnel are employed to guard the plantation. They are employed primarily to protect the plantation from theft and also damages due to animals. Only able-bodied persons are employed as security personnel for the protection of the rubber estates.

Considering the work process, and activities in the rubber plantation, the survey has indicated to the following:

1. Ladder tapping is resorted to in one Government Rubber Plantation and 2 private rubber estates, only.

2. Slaughter tapping has been adopted in 1976 in a big private estate, on a large scale, covering a few hundred trees, which were meant for felling.
3. It is learned that more than 80 per cent of the tappers have learnt their skills from experienced and senior tappers, on the job. There is also a Tappers’ Training School.

4. As most tappers in position have been trained already, they do not see the need to get further training. Ninety per cent of the tappers are of the opinion that training is unnecessary.

5. As for factories are concerned, the Government rubber plantations have two factories for latex processing and each of the private estates has one of their own and small.

As labourers, the plantation workers are all involved in Union activities. As early as 1942, All Travancore Estate Workers Union was started in Kanyakumari district, with Punaloor as its headquarters. Three hundred workers were enrolled as members of this Union. In 1948, the Kanyakumari District Workers Union was formed. In 1953, a Union affiliated to the Indian National Trade Union Congress (INTUC) was registered, while in 1974, the Central Indian Trade Union (CITU) was established. At present, there are several Unions for rubber plantation workers in the district, which all owe allegiance to the political parties, namely, the Dravida Munnetra Kazhagam, All India Anna Dravida Munnetra Kazhagam.

Likewise, there are employers’ Unions as well. To name a few, the Kanyakumari District Planters’ Association (KDPA), the Tamil Nadu Planters Association (TPA) and the United Planters Association of Southern India (UPASI). There is another association exclusively for the
owners of small holdings. This is known as the Kanyakumari District Small Growers Association (KDSGA) at Kulasekaram.

It is estimated that a majority of the workers are with the CITU, with 51 per cent of the Government rubber plantation employees, 60 per cent of the private plantation workers, making a total of 55.5 per cent of the rubber plantation workers. A fifth of the plantation workers are with the INTUC and lesser and lesser proportions under each of the others: TNTUC 14.6 per cent, DMK 4.6 per cent, and AIADMK 2.7 per cent.

The CITU has developed strong roots among the plantation workers of Kanyakumari district and among the factors responsible for this concentration are the ideology of the Union (76 per cent government and 82.5 per cent private employees), the leadership of the Union (12.3 per cent government and 9.7 per cent private) and the influence of the co-workers in their joining the Unions (6 per cent government and 6.1 per cent private).

The Unions are sound in their financial resources, because of the large membership in most cases while in others the small proportion of workers make up for small finances. The leadership of the Unions provides direction and goals for the Union. Among the plantation workers, the workers are not in a position to lead and hence they depend on 'outside leadership', with political parties nominating a leader for their respective Unions. In rubber plantations, the CITU has taken initiatives to strike towards improved wages for the workers and has won the battle against wages. In 1990, all the Unions joined in a strike, which lasted for 65 days, but the strike ended as a failure. There were comments that the strike was rather politically motivated than need-based. In Kanyakumari district, the trade union leaders are invariably political leaders, most importantly of the
National Congress. The workers think that the outside leaders are essentially well experienced in industrial practices and other organisational matters. They have political influence as well and uses it for the welfare ends of the Unions. Table 3.3 shows the causes, results of major strikes that occurred in the district since 1959.

Table 3.3: Strikes by Rubber Plantation Workers: Causes and Occurrences

<table>
<thead>
<tr>
<th>Year</th>
<th>Causes</th>
<th>Occurrence: Plantation Estates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959-60</td>
<td>Implementation of welfare acts</td>
<td>Private</td>
</tr>
<tr>
<td>1969-70</td>
<td>Permanency of workers plus a minimum of 240 days of work in a year</td>
<td>Government and private</td>
</tr>
<tr>
<td>1973</td>
<td>Bonus</td>
<td>Private</td>
</tr>
<tr>
<td>1976-77</td>
<td>Dearness allowance</td>
<td>Government and private</td>
</tr>
<tr>
<td>1981-82</td>
<td>Bonus and setting up of an Arasu Rubber Corporation</td>
<td>Government</td>
</tr>
<tr>
<td>1983-84</td>
<td>Dearness allowance</td>
<td>Private</td>
</tr>
<tr>
<td>1990s</td>
<td>Monthly salary, demand for increased salary and perks</td>
<td>Government</td>
</tr>
</tbody>
</table>

Source: Field Survey and Documentation on Strikes of the Rubber Plantation Workers 1991.

Socio-Economic Conditions of the Rubber Plantation Workers

The rubber plantation workers in Kanyakumari district are, by and large, visited by the problems of ignorance and poverty. It is a pity that they are unable to extricate themselves from the cruel clutches of poverty despite their migratory character, assiduity and the massive support given by the trade unions and also a fairly high salary or wage rate.

The youngest rubber plantation worker is 25 years old and the oldest is aged 58 years. A majority of the workers (43.33 per cent) belonged to the
age group of 41-50 years. The mean age of the government rubber plantation workers is 40 years and the calculated mean age of the private rubber plantations is about the same. Of the workers, 77.50 per cent are males and 22.50 per cent are females. The percentage of female workers in government rubber plantations is greater (25.83 per cent) than the female workers (19.17) in private rubber plantations. So, it can be inferred that the government is keen on employing female workers to minimise industrial conflict.

It is felt that married workers are endowed with a relatively high sense of responsibility. As they happen to be the breadwinners of their respective families, they do not get themselves involved in activities that affect their incomes. About 91 per cent of the total workers in the rubber plantations in Kanyakumari district are married. What is important to maintain here is that of the plantation workers, who are married, 95.60 per cent are in private plantations.

The worker’s job satisfaction, status in the society, their earnings and all other related matters are directly influenced by their family size. Greater the number of dependents, the greater is the seriousness of the workers towards their jobs. Hence, there is a direct relationship between the worker’s eagerness to acquire better skills and to earn more and the size of their respective families. One worker who is employed in a private rubber plantation maintains a family of 12 members. The mean size of family members of government and private rubber plantation workers is 5.65 and 5.55, respectively.

One of the aspects of the rubber plantations and the workers is that they work together as men and women, in both government and private
plantations. A survey conducted in the early 1990s revealed that, among the total number of workers in the government rubber plantations, 74.17 per cent were men and 25.83 per cent were women. But in case of private rubber plantations, 80.83 per cent of the workers were men and women workers constituted only 19.17 per cent.

Of the total workers, 93.33 per cent are permanent workers and the remaining 6.67 per cent are casual workers. Casual workers are more in number in private rubber plantations than in government plantations.

Workers employed in rubber plantations are classified as under:

1. Local workers;
2. Workers belonging to the native district;
3. Workers from other districts of Tamil Nadu;
4. Workers belonging to other states; and
5. Workers from foreign countries.

Among the plantation workers, 91.67 per cent of them are immigrants. A majority of the workers (64.58 per cent) have migrated to the rubber estates from different parts of Kanyakumari district.

The sources of supply of workers can be classified as,

1. Internal sources; and
2. External sources.

While the first category includes transfer, promotion and demotions, the second category consists of

a. Advertising;
b. Employment agencies;
c. Recommendations of present employees;
d. School and Colleges;
e. Labour unions; and
f. Casual applicants both at the gate and through mail.

While recruiting workers in rubber plantations, it must be understood, one kept in mind that in rubber plantations

a. the level of skill is very low;
b. no specific skill is required;
c. rubber plantations are situated in the jungles;
d. damp conditions prevail in the rubber plantations;
e. there is danger through wild animals; and
f. the supply of workers is more than the demand.

Before the establishment of Arasu Rubber Corporation Limited in Kanyakumari district in the year 1985, all the workers were recruited in government rubber plantations directly. Whenever workers were required in the rubber plantations, there was an advertisement by the General Manager of the Government Rubber Plantations in the newspapers. Workers were recruited by a simple interview by the Divisional Officers assisted by the rangers and other officials of the concerned forest division where vacancies existed.

Employment exchanges were also used to recruit workers. After the establishment of Arasu Rubber Corporation, the recruitment of workers is done through Employment Exchanges only. Interviews are held to recruit the required number of workers. In all private plantations, different methods of recruitment are followed. In the early days of plantation
development, the Kankani system was said to have existed for the recruitment of required number of workers. This system was followed in private rubber estates owned by European planters.

Of the various methods in recruitment, two methods are very important. They are

i. through intermediaries; and

ii. through trade unions.

A system of recruitment through intermediaries is found in all private plantations even now. This method of recruitment is different from the familiar traditional *Kankani* system. In the *Kankani* system, the planters used to give commission to the *Kankanis* to bring workers to the estates. But under the system of recruitment through intermediaries, job seekers approached these intermediaries, commonly known as maistries, who have access to the private planters and request them to secure employment for themselves. In a majority of the cases, the intermediaries received money from the job seekers. Private planters also recruited the workers on the recommendations of the recognised trade unions of plantation workers in the district.

The trade unions maintain a seniority list of such enrollment and, whenever planters notify vacancies, names are suggested from the seniority list for recruitment. Apart from the above mentioned methods of recruitment, the private planters are also giving importance to the dependents of existing workers and temporary workers whenever vacancies arise. This is not objected to by the trade unions. Vacancies for tappers and factory workers are being usually filled in from suitable field workers.
A little over 34 per cent of the workers got the job through recommendations of the officers, such as supervisors and clerks employed in the estates. While officers played a pivotal role in helping the workers to get job opportunities in government plantations (45.83 per cent), trade union is the main source of help to the workers employed in private rubber estates (26.67 per cent).

More than 14 per cent of the workers, employed in rubber estates, are through the recommendations of friends, relatives and politicians. When these people come to know about the vacancies in plantations, they recommend the candidates for the favour of appointments.

This is a clear indication of the fact that most of the rubber plantations workers were and are faced with the problems of not only earning their daily bread but also attending to the needs of the families.

An interesting feature of the rubber plantation workers is that they belonged to all the three prominent religions of Hinduism, Christianity and Islam. In spite of this apparent diversity, based on the religion, they stood united to fight for their rights. The varying religions of the workers lend credence to the conclusion that the rubber plantation workers in Kanyakumari district remained a monumental example for religious and communal harmony.

As regards the educational status of the rubber plantation workers, there was no denying the fact that there was a predominance of ignorance and illiteracy in most of the rubber plantations. Estimates have it that, in the government rubber plantations, 23.3 percent are illiterates. But those who have had primary education, middle school education, higher secondary
school education constituted about 52.50 per cent, 16.16 per cent and 7.50 per cent, respectively in the government rubber plantations. But the same has been estimated at 11.67 per cent, 39.17 per cent, 23.33 per cent and 25.83 per cent, respectively, in the private rubber plantations.

On studying the rubber plantation workers, still more closely, it was possible to find out that they could be further classified into (a) skilled, and (b) unskilled labourers and (c) casual and (d) permanent labourers. Skilled workers constitute 52.50 per cent and 47.50 per cent, respectively, in government rubber plantations. But the same was estimated at 52.50 per cent in government rubber plantations and 47.50 per cent in private rubber plantations.

What is unique about the rubber plantation workers is that they are highly migratory in nature. Hence, they were studied under the categories of local workers, workers belonging to the native districts, workers from other districts of Tamil Nadu and workers belonging to other states. Migration of the rubber plantation workers was mostly due to economic factors, geographical and physical factors and political factors.

Experience is one of the important factors influencing the efficiency of the workers. Workers with experience can do better than the inexperienced workers in any field. Nearly 56 per cent of the rubber plantation workers have gained experience ranging between 21 and 30 years. Five per cent have more than 31 years of experience. Mean years of experience of the workers in government and private estates are calculated to be 21.08 and 21.75, respectively.

Change is the law of nature. But change beyond a limit is undesirable. The change of employment fetches good wages to the
workers. Many reasons may be attributed to change of job may be made of the following important reasons. The most important among them are:

1. Less security;
2. Less pay;
3. Bad working conditions;
4. Bad relations with the employer; and
5. Employment opportunities elsewhere.

There are various reasons for not changing the present job. Important reasons could be listed as below:

1. Long experience in the present job;
2. Good job;
3. Good earnings;
4. No possibility of getting an alternative job; and
5. Old age.

The rubber plantation workers in Kanyakumari district were paid along with their wages, a dearness allowance, a bonus, an ex-gratia payment for over time. The wages are paid on the basis of the time period spent at the work place. This is called the time-wage system. Under this system, the unit of time may be an hour, a day or a month. There is yet another system of wage payment, the piece-rate-wage system. According to this system, the wages are paid in proportion to the quantum of latex produced.

The rubber plantation workers are faced with the problems of 'rest periods', which refer to a period during which the leaf fall occurs. It starts from the last week of February and continues up to the last week of March.
No wage is paid for the workers during the rest periods. But as the trade
unions are very active and powerful, they have been able to get their
members frequent hikes in their daily wages.

The rubber plantation workers in Kanyakumari district are faced with
the two other important problems: There is an excessive increase in their
indebtedness and addiction to drinks (liquor, country and western). The two
problems have considerably restrained the growth of the material prosperity
of the rubber plantation workers in Kanyakumari district.

The rubber plantation workers are generally of good health except
that of back pain and chest pain. Back pain is commonly found in the case
of almost all the workers in the age group of 41-50 years, whereas workers
below this age group rarely experience back pain. This may be due to their
physical strength. As far as chest pain is concerned, only workers who are
in the field for more than 20 years indicate that they are suffering.
However, what is very important to observe here is that rubber plantations
in Kanyakumari district are generally free from any dangerous and
contagious diseases.

The conclusions arrived at, from the study and the fieldwork, are:

1. The plantation workers, unlike other agricultural labourers, are
   able to earn higher wages and enjoy better working conditions.

2. As their interest is protected by the trade unions, they are not
   faced with problems of termination.
3. The plantation workers in the government rubber plantations are much better off than their counterparts in private rubber plantations.

4. The rubber plantation workers can become much better off than what they are now if they are assured of the benefits of the pension schemes.

Footnotes


