

# **Sector Overview – Rubber, Plastic and Allied Industries Sector**

## **1. Introduction**

### **1.1 Core Business /Principle activities**

#### **Rubber**

The Sri Lankan rubber industry consists of three main sectors namely the plantation industry that grows and harvest latex, the rubber products manufacturing industry and the rubber wood based industry. The value-added rubber products manufacturing sector has recently emerged as the key driving force in the industrial based development of the economy.

The main types of rubber produced in Sri Lanka are Ribbed Smoked Sheets (RSS), Latex Crepe, Sole Crepe, brown crepe, technically specified Rubber (TSR) and Centrifuged Latex. For its unique properties, Sri Lanka's natural Rubber has a high demand in the world market.

#### **Plastic**

Plastic processing has been a flourishing, industry in Sri Lanka for over 45 years. Currently. The production of plastic begins with the distillation of heavy crude oil into hydrocarbon fractions, the most important of which is called naphtha. Polymerisation and polycondensation are the two key processes used to produce plastics. Plastics can be grouped into two main polymer families: these are thermosets, which do not soften once moulded; and thermoplastics, which soften on heating and then harden on cooling.

Plastic Processing Technologies Available in Sri Lanka are Pipe and Profile extrusion, Cast Film Extrusion, Blown Film Extrusion, Injection Molding, Extrusion blow molding, Rotational Molding and EPS Molding. Other sub – process Used in Sri Lanka related to Plastic Processing are Laminating, Printing, Weaving and Thermoforming. Water Supply and sanitation, Telecommunication, Construction, Packaging, Automobile, Medical and Electronics & Consumer durables are the major Allied Industries.

### **1.2. Sector Vision**

Sri Lanka Rubber and Plastic industry to be a desired area for investors and entrepreneurs that provides superior stakeholder value, attractive employment to its workforce and socio-ecological benefits to the citizens while occupying a

preeminent position in the national export scene with a significant presence in global markets.

### **1.3. Sector Mission**

Sustain global competitiveness of Sri Lanka Rubber and Plastic industry by enhancing performance in all value chain activities related to manufactured products while strengthening the local supply chain to be a reliable source of raw materials that gives a comparative advantage in achieving Superior customer value, Unequivocal excellence, Science and Technology based innovation, Development of workforce , Productive public-private partnerships based on openness and fairness, Sustainable production and resource optimization and Equitable sharing of benefits.

### **1.4. Subsectors**

- Rubber
- Plastic

### **1.5. Institutions operating under the subsectors**

#### **Rubber**

- 1) Camso Loadstar (Pvt) Ltd.
- 2) Ansell Lanka (Pvt) Ltd
- 3) Trelleborg Lanka (Pvt) Ltd
- 4) Industrial Clothings Ltd
- 5) Eu Retec (Pvt) Ltd
- 6) Lalan Rubbers (Pvt) Ltd
- 7) Global Rubber Industries (Pvt) Ltd
- 8) Samson Rubber Industries (Pvt) Ltd
- 9) Dipped Products PLC
- 10) Samson Rubber Products (Pvt)Ltd
- 11) Michelin Lanka Pvt Ltd.
- 12) Lalan Rubbers Pvt Ltd.
- 13) Ferentino Tyre Corporation Pvt Ltd.

#### **Plastic**

- 1) JAK PLASTICS (PVT) LTD
- 2) Lanka Plastic Industries (Pvt) Ltd
- 3) Southern Plastics (pvt) ltd
- 4) Lalan Plastics (PVT) Ltd.
- 5) ND Plastic Lanka (PVT) Ltd
- 6) AG Poly Packs Private Limited
- 7) Jeewa Plastic (Pvt) Ltd.
- 8) Nippon Plastic Industries

- 9) Mona Plastics (Pvt) Ltd.
- 10)PET CONTAINERS (PVT) LTD
- 11)POLYPAK SECCO LTD
- 12)Thermo Plastics (Pvt) Ltd
- 13)ACL Cables PLC

### **1.6. Number of employees (local/ foreign/Gender wise)**

There are around 51 Rubber Manufacturing Companies and the Rubber sector provides direct and indirect employment opportunities to over 400,000 persons. Sri Lanka has over 300 companies engaged in plastic processing and the Plastic sector provides direct and indirect employment opportunities to over 200,000 persons.

### **1.7. Total investment**

**Rubber** – USD 800 million

**Plastic Processing** - USD 75 million. Almost 50% of this has come through Foreign Direct Investments. Out of this 66 % of total investment is exclusively for processing of plastic products for the export market.

### **1.8. Contribution to GDP by the Sector – 0.8%**

## **2. Production and Consumption**

### **Rubber**

Two types of Latex

Natural Rubber - Total Annual Domestic Production - 70,000 Mt

Imports - 50,000 Mt (100% imported by BOI Companies)

Synthetic (100% BOI imports) – 50,000 Mt

<b>1.1 Natural Rubber(NR)*</b>	<b>Mt</b>
Total Annual Production	76,884
Exported as Raw Rubber by Non- BOI Companies**(Crepe – FOB USD. 1.90)	(13,000)
Available for Local Consumption	63,884
Imports (100% by BOI Companies)	50,000
Total NR used for export oriented production	113,884
<b>1.2 Synthetic Rubber (SR)</b>	<b>Mt</b>
Imports (100% by BOI Companies)	50,000
Total of NR and SR used for export oriented production	163,884

The use of NR in Products	Mt
Gloves	22,400
-Household (20%)	
-Surgical (80%)	
Tyres (80% BOI, 20% Non-BOI)	67,200
Non-Tyre Products (Carpets, Gasket,Washer) – DSI,Ceyesta etc.	22,400
Total	112,000
The use of Synthetic Rubber	
-Gloves	30,000
-Tyres	20,000
Total	50,000

## Plastic

The capacity of the local plastic processing industry at present is nearly 140,000 MT per annum with an annual average growth rate of around 10%. – 12 %.

### 2.1. Product types

#### Rubber

- 1) solid tyres
- 2) pneumatic tyres
- 3) latex gloves
- 4) rubber flooring
- 5) mats
- 6) automotive components
- 7) sealing rings
- 8) rubber bands
- 9) straps
- 10) hoses
- 11) hot water bottles

#### Tyres

Sri Lanka is the largest solid tyre manufacturer in the world catering to nearly 25% of the global demand. The country also produces pneumatic and semi-pneumatic tyres, tubes, and retreading materials for the global market. Produced under environmentally sustainable manufacturing guidelines, EU REACH regulation (EC) No 1907/2006, and global quality standard, country's tyre sector accounted for more than 60% share in the total rubber exports while solid tyres and new pneumatic tyres accounted for 61% and 38% of the exports respectively.

**Table 1: Tyres Exporters**

Company	Products
Camso loadstar (pvt ) ltd	Solid tyres, Pnuematic tyres
Trelleborg Tyres Lanka Pvt Ltd	Tyres
Eu Retec Pvt Ltd	Pneumatic & Retreated Rubber Tyres & Tubes
Global Rubber Industries Pvt Ltd	Solid Tyres
Associated Ceat Pvt Ltd	Radial Tyres, Bias Tyres
Aroma Natural Rubber Pvt Ltd	Bicycle Tyres - Tubes, Solid Tyres
Associated Motorways Pvt Ltd	Solid Tyres, Rubber Compound, Thread Liners, Retreading Material And Pneumatic Tyres Of Two/Three Wheeler Automotives.
Ceat Kelani International Tyres Pvt Ltd	Tyres
Ceat Kelani Radials Pvt Ltd	Pneumatic Cross-Ply And Radial Constructions Tyres For Trucks, Light Trucks, Passenger Car, Passenger Van, Three Wheeler, Two Wheeler And Agriculture Equipment Tyres (Farm Tyres). The Company Also Markets Tubes & Flaps (Rim-Tape)
Elastomeric Engineering Company Ltd	Industrial Solid Tyres
Laugfs Corporation Rubber Ltd	Industrial Solid Rubber
Eu Retec Pvt Ltd	Pneumatic & Retreated Rubber Tyres & Tubes
Faga Tyres Pvt Ltd	Industrial Solid Resilient Tyres
M R F Lanka Pvt Ltd	Retreading Tyres
Marangoni Industrial Tyres Lanka Pvt Ltd	Industrial Tyres, Otr Tyres
Samson Rubber Industries Pvt Ltd	Bicycle Tyres & Tubes, Motor Cycle Tyres & Tubes, Golf Cart Tyres, Agricultural Tyres, Turf Tyres, White Rubber Tyres, Three-Wheeler Tyres, Wheel Barrow Tyres, Snow Hog Tyres, Pneumatic Trolley Wheel, Light Truck Tyres
Samson Rubber Products Pvt Ltd	Industrial Tyres, Solid Tyres
Super Solid H P	Pneumatic & Retreated Rubber Tyres & Tubes
Trelleborg Lanka Pvt Ltd	High Quality Rims And Wheels For Agricultural, Forestry And Industrial Tires
Trelleborg Wheel Systems Lanka Pvt Ltd	Pneumatic And Retreated Rubber Tyres And Tubes
Ferentino Tyre Corporation (Pvt) Ltd	Tyres

Table 2: Passenger Car Tyres - Rim size 12, 13 &amp; 14 inches: HS Code 4011.10.90

No	Tyre Size	Ply Rating (No of rubber laying on the tyre)	Vehicle Type
<b>Rim Size 10 &amp; 12</b>			
01	155/70 R12	4PR	
<b>Rim Size 13</b>			
02	145/80 R 13	4PR	Japan Alto Suzuki
03	155/70 R13	4PR	Japan cars
04	165/70 R13	4PR	Japan cars
05	175/70 R13 White Letter	4PR	Japan cars
06	185/70 R13 White Letter	4PR	Japan cars
07	175/50 R 13	4PR	Mini Cooper
<b>Rim Size 14</b>			
08	185/70 R14 White letter	4PR	Toyota Town Ace
09	195/70 R14	4PR	Toyota Micro Van
10	195/70 R14 White letter	4PR	Toyota Micro Vans
11	205/70 R14	4PR	
12	165/65 R 14	4PR	Viva Elite Car
13	165/80 R 14	4PR	Suzuki Ritz
14	185/60 R 14	4PR	Cars
15	195/75 R 14	4PR	Cars
16	205/75 R 14 White Letter	4PR	Micro Vans

Table 3: Light Truck Tyres (used for Ambulances) - Rim size below 17.5 inches: HS Code 4011.20.90 (TS)

No	Tyre Size	Ply Rating	Vehicle Type
01	195/70 R 15	8 PR	
02	205/75 R 15 White Letters	8PR	Toyota KDH Micro Van
03	195/75 R 16	10 PR	
04	205/75 R 16	10 PR	
05	215/75 R16	8 PR	
06	215/85 R 16	10 PR	
07	195/85 R 16	10 PR	Freezer Truck
08	205 R 16	8 PR	Freezer Truck
09	235/85 R16	8 PR	
10	255/85 R16	8 PR	
11	285/75 R 16	8 PR	
12	285/75 R 16 LT	8 PR	
13	285/70 R 17	10PR	
14	235/65R16	08PR	
15	225/75 R 16	10PR	
16	825 R 16	14 PR	Medium Truck

Table 4: Truck & Bus Tyres - Rim size 20 inches: HS Code 4011.20.19 (TS)

No	Tyre Size	Ply Rating
01	900R20	16 PR
02	1000 R 20	18 PR
03	1100 R 20	18PR
04	1200 R 20	18 PR

### **Plastic**

- 1) plastic sheets
- 2) pipes and tubes
- 3) Woven Polysack Bags
- 4) Polyethylene & HDPE Containers
- 5) plastic products for the construction sector (doors, frames and baths)
- 6) insulating and lighting fittings
- 7) articles of apparel and clothing accessories
- 8) cellulose

## **2.2. Required raw materials supply**

### **Rubber**

- 1) Synthetic Rubber (SBR, KBR and Butyl Rubber)
- 2) Nylon Tyre Cord
- 3) Carbon Black
- 4) Tube Valve
- 5) Steel Wire
- 6) Zinc Oxide
- 7) Rubber Stiickers
- 8) Reflective Tapes
- 9) Hisil
- 10) Resin
- 11) Nordal IP 4640
- 12) Mould Free 935
- 13) Santo Cure
- 14) Strucktol 40 MS
- 15) Stearic Acid
- 16) Santoflex
- 17) Flectol
- 18) Accimel – Peptizer
- 19)

## Plastic

- 1) Polypropylene - 3902.10.00 (Main Raw material – 87%, Imported from Saudi Arabia)
- 2) High Density Polyethylene Resin - 3901.20.00 (Marlex 5500 - Main raw material for Polyethylene & HDPE Containers, Imported from Qatar and Singapore)
- 3) Filler Masterbatch - 3206.49.00
- 4) Color Masterbatch - 3824.99.90
- 5)

## 3. Turnover

### 3.1. Export earnings

Table 5: Export Earnings (USD Million)

Product Sub Categories	2017	2018	2019	2020	2021
Pneumatic & Retreated Rubber Tyres & Tubes	513	549	515	424	595
Industrial & Surgical Gloves of Rubber	198	188	207	248	365
Gaskets, Washers, Seals etc. of Hard Rubber	99	113	118	91	65
Rubber Plates, Sheets Rods of Vulcanized or Unhardened Rubber	23	25	24	21	23
Other Rubber Products	2	1	1	1	1
Hygienic or Pharmaceutical Articles	1	1	1	1	1
Total:	890	875	866	786	1050

Sri Lanka is the leading solid tyre exporter in the world currently recording a 25 % of the world demand used in the agricultural, industrial and logistics sector vehicles including forklift trucks, airport vehicles, heavy-duty transport vehicles, platform trucks, and other industrial vehicles. Sri Lanka also manufactures pneumatic tires.

Sri Lanka is also the fifth largest exporter of latex based gloves in the global market. Presently Sri Lanka has huge demand for medical rubber gloves with Covid 19 Pandemic situation in the world and Tyre industry also fast-growing sector of the rubber product sector. Currently, Sri Lanka is the only manufacturer of the best quality Latex crepe rubber in the world and also the largest exporter of same.

The Rubber Product industry is the 5th largest export earning industry accounting for 7.2 % of the total national exports and has established a reputation for its quality and reliability internationally. The rubber products exports show a 34 % growth in 2021 when compared to 2020. Average growth rate is approximately 4.5%.



Table 6: Export Performance - Rubber & Rubber-based Products Sector

Year	Export Earnings (USD Million)
2012	981.78
2013	959.07
2014	935.06
2015	787.3
2016	800.56
2017	874.35
2018	906.92
2019	890.32
2020	816.18
2021	1,092.6
2022	1,018.4

Table 7: Rubber & Rubber-based Products Contribution to total merchandise exports

Year	Percentage
2012	10.6%
2013	9.6%
2014	8.47%
2015	7.79%
2016	7.83%
2017	7.79%
2018	7.79%
2019	7.57%
2020	8.23%
2021	8.92%
2022	7.97%

### 3.2. Export destinations

Table 8: Major Markets - Rubber & Rubber-based Products Sector - 2022

Country	Value in USD Million
United States	321.73
Germany	103.2
Belgium	53.8
Italy	50.02
Canada	34.2
France	33.55
United Kingdom	31.55
Australia	30.23
India	29.59
Brazil	29.09

#### Plastic Sector

United States, United Kingdom, Japan, Bangladesh and India.

## **4. Government Policy on Sector**

The government support is extended through several institutions for development and promotion of the Rubber & Rubber Products industry. Government Agencies include Ministry of Plantation Industries, Rubber Development Department, Rubber Research Institute of Sri Lanka, Ministry of Industries, Industrial Development Board, Sri Lanka Export Development Board etc. are involved in the development of the sector by implementing different strategies.

Rubber Research Institute of Sri Lanka (RRISL) is the major government agency which conducts research and development for increasing raw rubber productions and the development of manufactured rubber products. Other than RRISL several universities and Sri Lanka Institute of Nano Technology (SLINTEC) are engaged in R & D projects with Private sector involvement. The Plastic and Rubber Institute of Sri Lanka is the only institution which conducts graduate, diploma and certificate programmes for Rubber sector related workforce.

The following associations support the rubber products sector by addressing the sector related issues through coordination with the government institutions.

- Sri Lanka Association of Manufacturers and Exporters of Rubber Products (SLAMERP)
- Sri Lanka Society of Rubber Industry (SRI)
- Colombo Rubber Traders' Association (CRTA)
- Planters' Association of Ceylon (PA)
- Sri Lanka Association of Small & Medium Rubber Products Manufactures. (SLASMRPM)

## **5. Sector Strategies**

Developing essential common infrastructure facilities, both soft and hard, for value added industry that must be innovative to embark on the next cycle of growth and reach a sustainable competitive status in respect of customer value, sophistication of products, productivity and profitability.

Strengthening and consolidating the supply side with the development of a reliable supply line comprising of highly productive and hence resilient smallholder rubber farms and estates and

Providing enabling policy, institutional and investment support which is a sine qua non for rapid growth of the industry. This approach considers the rubber industry cluster from a holistic perspective and intends to serve national interests while achieving industry goals. The strategy is operationalized through the following specific initiatives.

- Supply superior rubber products for niche markets
- Produce sufficient raw materials locally
- Convert rubber wood to a value added material
- Enhance competencies at industry level to increase market responsiveness
- Develop a dynamic workforce
- Create an enabling environment

## **6.Sector Goals identified with KPIs**

- 1) Capture 0.5% share of the global market for rubber products.
- 2) Gain 1.0% share of the global NR market.
- 3) Add value to at least 90% of the rubber produced in the country.
- 4) Export the balance 10% as differentiated specialty raw rubber under a Sri Lankan brand.
- 5) Convert 50% of harvested rubber wood to high value added products for export.
- 6) Develop a thriving MSME sector that links to major firms and global value chains.
- 7) Double the quantum of investments in the rubber products manufacturing industry.
- 8) Establish a dynamic and effective technological platform to enable innovations for sector.
- 9) Develop a world class workforce with required competencies and work ethics.
- 10) Make the rubber and plastic industry an environmentally and socially responsible eco-industry cluster.

## **7.Sector Objectives**

- 1) Increase the area under rubber to 169,000 hectares by 2025.
- 2) Increase local rubber production to 300,000 metric tons per annum by 2045.
- 3) Reach national rubber plantation yield to 1,700 kg per ha year by 2045.
- 4) Turnover of rubber products industry to exceed U\$ 5.0 billion by 2030.
- 5) Increase consumption of rubber to 240,000 tons (157,000 metric tons of NR types and
- 6) 72,000 tons of SR types in addition to 11,000 Semi-processed types) by 2025.
- 7) Reach a conversion value equal to U\$ 15,000 per ton of rubber used by 2025.
- 8) Increase value of rubber wood based products turnover to US\$ 350 million by 2025.
- 9) Double the contribution of MSMEs to industry turnover by 2025.

## 8. SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"><li>▪ Established Industry in Sri Lanka as well as world wide</li><li>▪ Availability of Natural Rubber</li><li>▪ Trained workforce in the products industry.</li><li>▪ Incentives to attract foreign investment</li><li>▪ Availability of labour force</li><li>▪ Compliance with labour standards and ethical practices</li><li>▪ Rubber is environmentally friendly raw material</li><li>▪ Government support to develop and promote the sector</li></ul>	<ul style="list-style-type: none"><li>▪ Inadequate raw material and the price fluctuations</li><li>▪ Insufficient Research and Development</li><li>▪ High cost of testing and certifications</li><li>▪ High cost of machinery and technology transfer</li><li>▪ High cost of energy</li><li>▪ High Cost of production</li></ul>

## 9. Challenge(s) the sector is facing due to Government rules and regulations.

- 1) Sri Lanka output per hectare is near 50% lower than high end global suppliers of natural rubber.
- 2) There are massive labour issues in the plantation sector that would prevent local growers from increasing their output. The output in Thailand, Malaysia are between 1200- 1600 liters per hectare annually where as its around 800- 900 in Sri Lanka
- 3) products need to be cost competitive to be sold at international market

## 11. 10. Global Market Value –

Rubber - USD 400.07 billion-(2022)

Plastic – USD 609.01 billion (2022)

## 11. CAGR -

Rubber – 6.9%

Plastic - 3.7%

## 12. Current Sri Lanka market share - approx. 0.3%

