

## PRESENT SCENARIO OF TYRE INDUSTRY IN INDIA THE ROLE AND RELEVANCE IN INDIAN ECONOMY

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Dr. Poonam Rani\*

### ABSTRACT

*The tyre industry plays a very important role as an auto component in the vehicle segment. Tyre and tube are the basic supplement of the automotive vehicles. Tyre is an essential part of any type of vehicle, which shall be of premier quality to have a safe and pleasant drive. A large number of vehicles ply on the roads in India. According to the government's statistics portal, India has 220 plus million registered vehicles and research by the various agencies, India ranks in the world's 4th largest market for passenger and commercial vehicles. This paper aims to highlight present scenario of Tyre industry in India and factors that contribute to higher productivity, sales and latest technology in the industries.*

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**Keywords:** Tyre Industry, Automobile.

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### Introduction

The history of the tyre began with use of the wooden wheel. Tyres came into common use on the wheels of carts. The tyre industry is most important industry in India. Tyre industry is playing an important role in Indian economy. In 1926, tyre industry originated in India. In 1936, Dunlop rubber Limited set up the first plant in Calcutta (West Bengal), followed by MRF in 1946. But the origin of the Rubber industry in India dates back to 1921, when the first rubber goods plant was established in Calcutta. The tyre players were mostly foreign companies in the pre independence because raw material (natural rubber) of tyre was easily available and labour was economical. A various industries set up their plants in India with technical help from foreign companies. In 1956, on the advice of the Tariff commission, the Indian government inspired Indian companies to set up their manufacturing facilities.

The Indian tyre players are growing fastly and every year produces more than 9 crore tyres. Over all tyre market the maximum share is passenger cars in India.

The Domestic players produces the all range of tyres demanded by Indian automotive player, excluding the aero tyres and few specialised tyres. The Indian tyre players produce tyres for passenger cars, jeeps, buses, trucks, tractors, carts, motorcycles, scooters, mopeds, bicycles, special defence vehicles and off-the-road. Tyre producing process consists of mixing, milling, extruding, calendaring, bead making, cementing and making, cooling, culture, tyre building lubricating, curing and tyre finishing.

### Objective

- To assess the past and current position of tyres industry in India.
- To study the global and Indian tyre market and the challenges faced by the Indian tyre industry.

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\* Associate Professor, Department of Commerce, A.S. (P.G.) College, Mawana, Meerut, U.P., India.

**International: Tyre Market**

"Tyres- Global Market Trajectory and Analytics report March 28, 2022, due to covid-19 pandemic, the international tyre market reaches a volume of 2.1 trillion units in 2022, and 2.5 trillion units by 2026, growing at a CAGR of 4.4% between 2022 and 2026. But the U.S. tyre market is reached 562.8 billion units by 2022, however in future China reached 497.1 billion units in 2026.

IMARC Group expects, the international tyre market is estimated to reach 2665 million units by 2027, growing at a CAGR of 2.8% between 2022 to 2027. The international tyre market demand for tyre is estimated to reach around 3378 million units, growing at a CAGR of around 4% during 2016 to 2020. (According to tyre market: Global Industry Trends). China was showing tyre market for 49% of the global tyre industry. China was tracked by united states, Europe, Japan and India as group of the main tyre market in global.

According to IRSG (December 20 outlook) world synthetic rubber consumption by tyre and tyre products declined by 1.7% in 2019, world synthetic rubber demand in tyre sector as estimated to decline by 11% in 2020. PCT sales in Deeper contraction (both OE and replacement market) over MHCVT- (-7.2%) explains the steeper fall in SR consumption over natural rubber (-9.5%) in the tyre manufacture section in 2020. Synthetic rubber demand is forecasted to grow by 2.6 mt during 2021-30, the synthetic rubber (SR) demand in tyre sector is forecasted to increase to 8.01 million tonne by 2030.

Research and Markets report, international tyre market is estimated to be selling more than 2000 million tyres by 2020. The global tyre market is estimated to grow to more than 2700 million tyres by 2026.

According to smithers new report, the forecasting of tyre producing to 2024 expects the world tyre industry capital spending at over \$ 15 billion in 2019 and an average annual growth of 3.3 in 2024. Development of tyre market quantity, the world consumption of key material by tyre industry in watching continued develop from 2017's about 45.2 billion tons and grow is around 3.8% annually, to 54.5 billion tons. In 2017 passenger cars expected for about one third of total tire demand. In 2018 the global demand for car and light commercial vehicle tyres are estimated to have reached 1.6 billion units and reprocessing manufacturer processed 100 million tyres per year.

**Domestic Tyre Market**

Tyre is one of the most important parts of an automotive. Tyres help the weight of the vehicle absorb shock from the road surface and change or maintain a direction. The steps of growing production by the government and the favourable government schemes are discussing the market growth. Indian government schemes such as Atmanirbhar Bharat Abhiyan-self Reliant India gives an economic and large amount of INR Rs. 51000 crores to encourage manufacturing of the automotive in India, again fuelling the tyre industry. Beside this, the make in India programme will attract investment in the manufacturing industry and spur higher industrial activity.

The requirement of tyres are catalyzed based on the end-use-OEM and replacement segment. At this time, the requirement by the OEM segment is driven by new automobile volume trends and the replacement segment is linked to the usage patterns and replacement cycles. At this time, replacement segment account for the large number of market share. At present passenger cars tyre segment has radialisation to the extent of 133% while only 60% truck and bus segment and 40% in LCV have radialised tyres during April-August 2021.

Tyre industry in India is reached to be worth more than USD 9 billion in financial year 2019 across 40 plus tyre players and 60 plus tyre producing units and employs 2 million employee directly and more than 1 million indirect employment through dealers, retreader etc.

10 Major players in the tyre industry in India hold 90-95% of the total market. Truck & Bus, passenger cars and two wheelers, top 3 and 4 players hold 70 to 80% market share. Top players are MRF, Apollo tyres and JK tyres in both domestic and international markets jointly 60 to 65% of the total market. The separately market share of players in each segment is quite close and no tyre player has a dominant position and pricing power. Hence, total competitive intensity is moderate.

### Production and Turnover

#### Production Quantity of tires in India Year 2011 to 2021 (in Million Units)

Year	Production volume (in million units)
2011	119.2
12	125.4
13	122.8
14	128.9
15	146.1
16	152
17	166.94
18	177.67
19	191.98
20	176.8
21	169.07

Source : CEIC, Nimal Bang institutional Equities research and statista 2022.

#### Production of Types in India: All categories (In Numbers)

Year	Quantity (lakh/pieces)
2017-18	1776.7
2018-19	1919.8
2019-20	1767.9

Source : ATMA

In 2021, the total tyre production in India is about 169 million units, this was a decline of 4% over the proceeding years.

This volume production consisted of tires made for two and three wheeler vehicles, trucks, passenger cars, buses, light commercial vehicles, tractions OTR tires. Sales was down by 5% to Rs. 60,000 crore in Financial year 2019-20 from Rs. 63,000 crore in 2018-19, first decline in more than a decade.

#### Technology

Tyres did not have a high rolling capacity in the past, nowadays tyres reach 50,000 km. measured to 35000 km. in the back. The weight reach an average of 8 kg/ tyre, nowadays measured to 11.6 kg previously types rolling safe guard reduced, falling down to 0.9 measured to 1.3. For the safety purpose, the stop working distance on dry surface reduced from 56 m to 36m, the stop working distance on wet surface reduced from 85m to 65m, highest allowable speed reached 300 km /H compared to 200 km / H as a result to particular site.

J.K. Tyres & industries ltd. has induced India's first puncture guard tyres for four wheelers. In this technology can self-healing the multiple puncture in the tread area, due to nails or other sharp purpose up to 6.0 mm diameter recently. JK tyres & industries ltd. also introduced smart tyres technology at the 2020 Atuo Expo.

Bridgeston recently has introduced new quiet technology, which combines original rubber add with a new tread design. Bridgestone also launched enlighten technology, ecological Utopia technology and Drive guard technology. According to the official website, michelin the latest technologies and innovations are following as Radial technology, uptis technology and vision technology. In 2020, year good year has launched sound comport technology, seal, technology and in same year Pirelli has also launched seal inside technology Noise cancelling technology, pzero, scorpion zero and cinturato technologies.

Currently, every tyre company suggests and to endeavouring to woo as many customers as believable and the technology for the every tyre company was depended on a few concept as : noise cancelling, run-on-flat, reducing fuel and environmentally designs.

### **Barrier of Indian Tyre Industry**

The main raw material of tyre industry is natural rubber. Raw material cost is 72% of the total production cost of tyre. India produces more than 75000 tons of natural rubber and tyre manufacturer consumes about two third of the natural rubber. India is a major importer of rubber because the production of NR is mostly lower than demand. Insufficient availability of natural rubber is adversely disrupting the production processes at tyre manufacturing plants.

Natural rubber cost for a tyre and any disruption in supply chain or fluctuation in NR prices can affect margins. So, the bargaining power of distributors is high.

Inverted duty is main issued for the Indian tyre industry. Inverted duty structure is where raw material (NR) attracts huge customs duty than its finished tyres. So natural rubber attracts more custom duty than the finished tyres.

Other issue in India, the corporate Income tax in India is more than many other countries, which low competitiveness in the Indian tyre player.

Foreign trade agreement and regional trade agreement of India will adversely affect the Indian tyre player. Free trade agreement affect the domestic tyre manufacturer by discount on customs duty on complete tyres.

Tyre industry is a large capital in-depth industry and margins are also very little. Therefore, it is very hard for the new manufacturer to support in this opposition industry.

Road development and build of large speed corridor for freight is a requirement for increased radicalization in India. It is highlights of the government in vehicle technology and emission controls and the obtainability of standard fuel.

The government and Indian Automotive industry has started automotive mission plan 2016-26 AMP 2026." AMP 2026 goals to make the Indian automotive Industry to be the "Engine of the make in India programme." AMP 2026 also purposes to grow Domestic executed design, research, engineering and producing in all automotive vehicles and parts. Vision of AMP 2026 is, the Indian automotive industry will be top three of the global in engineering, manufacturer and export of vehicles and parts and increasing in value to over 12% of the country's GDP and giving 65 million new jobs. Indian Automotive industry is estimated to reach about Rs. 16,16,000 to 18,88,500 crore in the next 10 years.

### **Missions of Indian Government to make India Atmanirbhar**

**Atmanirbhar Bharat** or self reliance mission was declared by PM Narandra Modi address to the country. India's Atmanirbhar Bharat mission will be based on five pillars: Economy, infrastructure technology driven system, demand and demography. The economy is the main pillar of Atmanirbhar Bharat due to an overall slow economic movement task, the Indian tyre industry seem to be losing its grip in recent time.

According to report CEIC and ICRA, the MHCV segment is the highest in terms of tannage with 48% share of the pie followed by PVs at 18%, LCVs at 7%. Financial year 2020, auto industry production volume reduced by 19% and tyre industry production volume was down 12% as replacement demand remained good. The India tyre industry export volume grew at 0.3% over 10 years, value of imports grew at compound annual growth rate of 5.3% over last 10 years and value of imports from China grew 5.2% over 2006 to 2020.

### **Conclusion**

Due to democratisation of the economy, the Indian tyre player in making an efforts its well to improve the tyre affordability in global market. Tyre players are making an efforts to adopt changeable global technologies to fit into the opposition. Currently Indian tyres industry have not only production and financial issues, but they fight with the strong wave of new oppositions from China. The major issues for the Indian tyre industry is to develop affordable, methodical and long lasting tyres at low price. The Indian tyre industry manufacturers the all range of tyres demanded by the Indian automotive industry besides of aero tyres and technical tyres.

Research and development (R&D) start of advanced and environment friendly collaboration the market growth for Indian tyres. R & D main aims has remained to develop tyres for consumers driving in northern conditions, safety and durability. In the international fields research is going on to produce tyres with better performance. Rebellious changes in tyres manufacturing material process and development of new type of tyres construction are taking place in the world tyres to goon this trend the Indian tyre companies would have to continue to depend upon technical knowhow of international tyre companies.

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