

CHAPTER 20

MOTOR VEHICLES

20.1 In India the first car ran on roads in 1897. Prior to independence in the 1940s India had no automobile industry to speak of. Cars were brought into the country in a knocked down condition from England. They were reassembled to serve the minuscule market provided by the British ruling class and some Indian elites. The presence of such vehicles led to the birth of an indigenous spare parts industry mostly concentrated in the south of the country. Road Transport in India grew rapidly after 1947 owing to rapid growth in urbanization and per capita income and to the vehicle production moving there.

20.2 Following economic liberalization in India in 1991, the Indian automotive industry has demonstrated sustained growth as a result of increased competitiveness and relaxed restrictions. Several Indian automobile manufacturers expanded their domestic and international operations. India's robust economy led to the further expansion of its domestic automobile market which attracted significant India-specific investment by multinational automobile manufacturers.

20.3 However motor vehicle penetration in India is low compared with developed countries. Although India and other developing countries lag behind in penetration rates (vehicles/1000 persons) in case of four wheelers like cars , they have much higher two wheelers penetration level compared to developed countries.

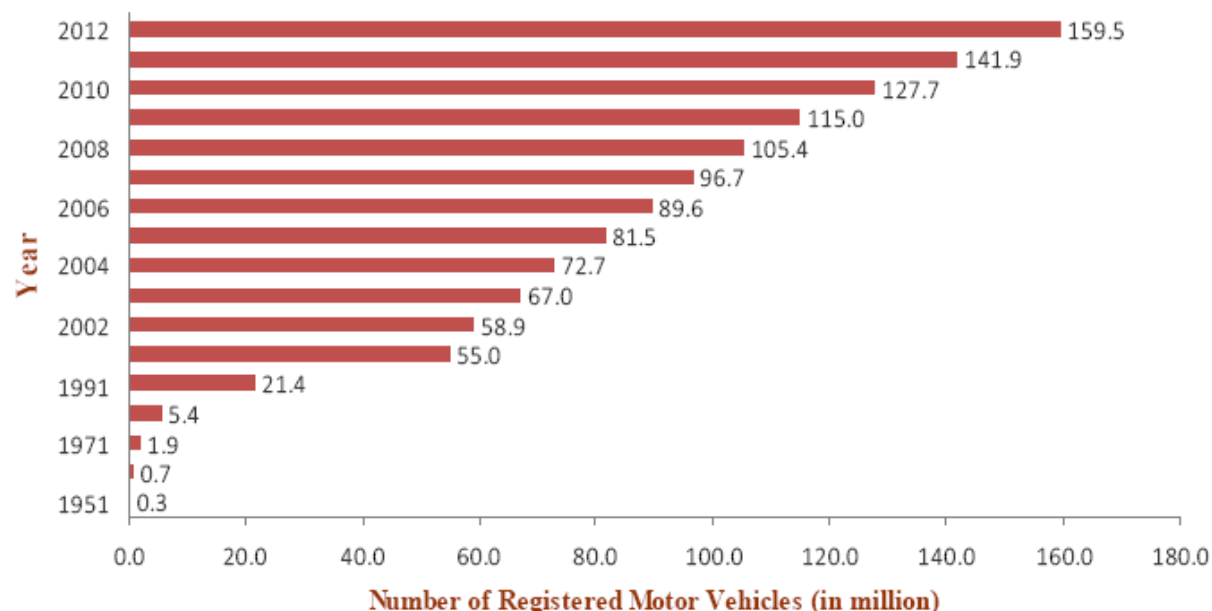
Vehicular Penetration in Select Developed & Developing Countries, 2010				
Country	GNI per capita (US \$)	Per 1000 person		
		Passenger Cars	Total Motor Vehicles	Two Wheelers
Developed				
U.S.A	47350	627	797	27
U.K	38140	457	519	20
Japan	42050	453	491	27
Germany	42970	517	572	47
Australia	46200	556	695	30
Developing				
Mexico	8930	191	275	10
Malaysia	7760	325	361	332
South Africa	6090	112	165	7
Brazil (2009)	9540	178	NA	75
China	4270	44	58	75
Korea ,Rep	19720	276	363	37
India (##)	1260	15	132	96

: Data in respect of passenger car, total motor vehicles and two wheelers relate to 2012.

Sources: 1. World Road Statistics, 2012, International Road Federation, Geneva & Road Transport Year Book , M/o Road Transport & Highways, India .

Trend in Growth of Registered Vehicles in India :

20.4 The total number of registered motor vehicles increased from about 0.3 million as on 31st March, 1951 to 159.5 million as on 31st March, 2012. The total registered vehicles in the country grew at a Compound Annual Growth Rate (CAGR) of 10.5% between 2002 and 2012.



20.5 The CAGR of the total registered motor vehicles in India during the period 2002 to 2012 was 10.5% . Amongst the various categories of vehicles, the highest CAGR during the period 2002 to 2012 was recorded by cars, jeeps and taxis (11%), followed by two-wheelers (10.7%) and goods vehicles (9.9%). Between 2002 and 2012, the total vehicle population grew at a CAGR of 10.5 per cent vis-a-vis the CAGR of 3.6 per cent in the total road length.

Compound Annual Growth Rates (in %) in Vehicles and Road Length

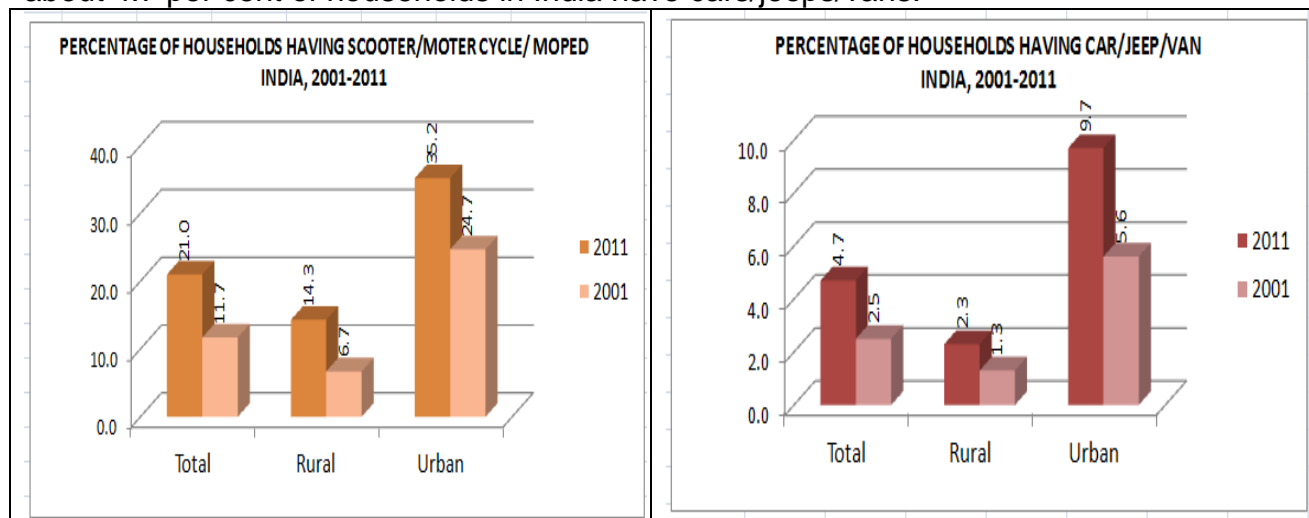
Period	Vehicles						Roads					
	Two - Wheelers	Cars, Jeeps & Taxis	Buses	Goods Vehicles	Others*	Total	NHs	SHs & PWD	Rural	Urban	Project	Total
1961/1951	12.5	6.9	5.3	7.4	26.5	8.1	1.9	4.0	-0.5	NA	NA	2.7
1971/1961	20.7	8.2	5.1	7.4	15.0	10.9	0.0	2.6	6.0	4.5	NA	5.7
1981/1971	16.3	5.4	5.6	4.9	18.1	11.2	2.9	4.5	5.9	5.5	3.5	5.0
1991/1981	18.4	9.8	7.4	9.4	10.9	14.8	0.6	2.1	7.2	4.3	1.2	4.6
2001/1991	10.5	9.1	6.7	8.1	8.6	9.9	5.5	3.1	4.6	3.0	0.6	3.8
2011/2001	10.2	10.5	6.9	9.1	8.0	9.9	2.1	3.0	4.4	5.0	2.6	3.4
2012/2002	10.7	11.0	9.6	9.9	8.0	10.5	2.8	3.6	3.3	6.4	2.9	3.6

Note: NHs: National Highways; SHs: State Highways; PWD: Other Public Works Department roads

* Others include tractors, trailers, three-wheelers (passenger vehicles/LMVs) and other miscellaneous vehicles

Sources: 1. Offices of State Transport Commissioners/UT Administrations/ Basic Road Statistics of India, 2012.

20.6 As per **Census 2011**, about 21 per cent households have two wheelers whereas about 4.7 per cent of households in India have cars/jeeps/vans.



20.7 Total number of vehicles registered in India as on 31st March, 2012 was 159.5 million. Two-wheelers accounted for the largest share of 72.4%, followed by cars, jeeps and taxis (13.5%), other vehicles (8.3%), goods vehicles (4.8%) and buses including omni buses (1%).

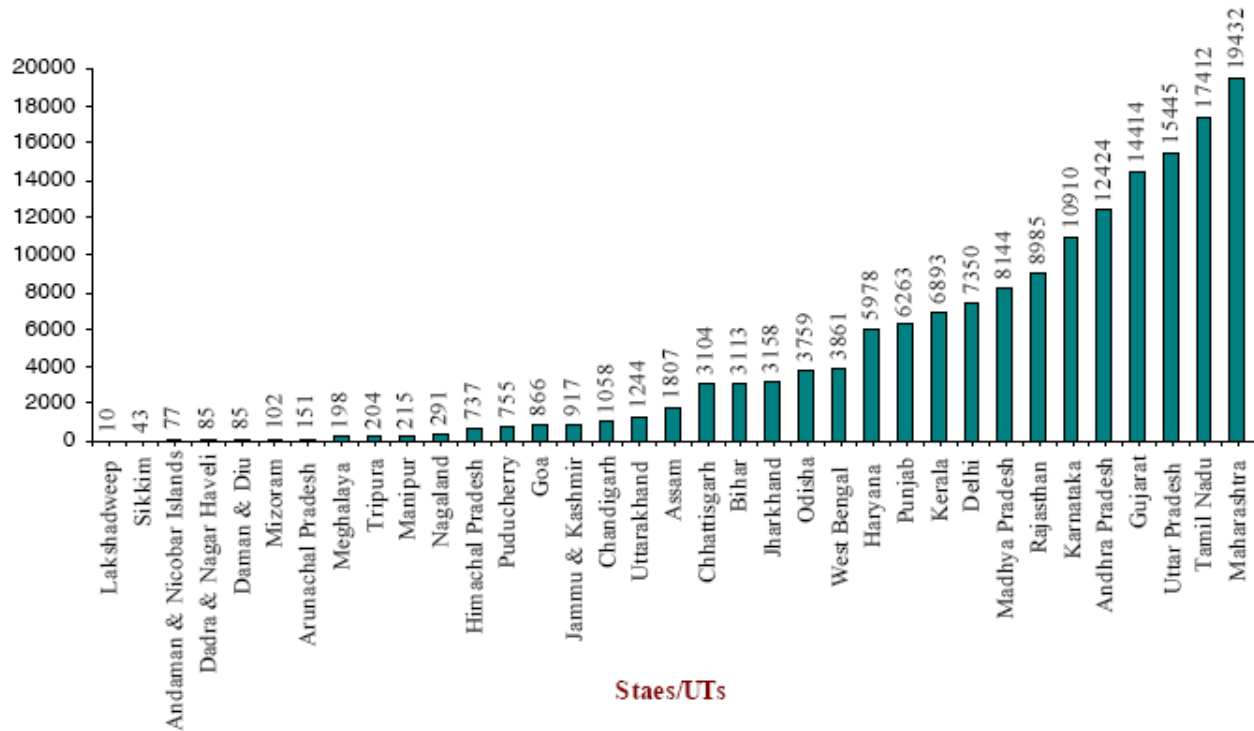
Composition of Registered Motor Vehicles (as % of Total Registered Motor Vehicles)



State-wise Distribution of Registered Motor Vehicle Population in India:

20.8 Out of total 1,594.9 lakh registered motor vehicles in India, the State of Maharashtra accounted for the largest share (12.2%) of the total registered motor vehicles in the country followed by Tamil Nadu (11.0%), Uttar Pradesh (9.7%), Gujarat (9.0%) and Andhra Pradesh (7.8%). These five States together accounted for about half (49.7%) of the total vehicles registered upto 31st March, 2012.

Registered Motor Vehicles in Thousands as on 31st March, 2012.

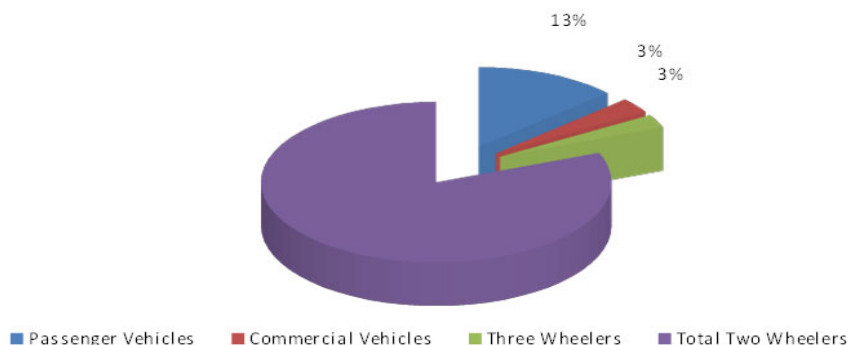


20.9 City wise distribution of vehicle population : Amongst the 44 reported million-plus cities, with vehicles population of 73.5 lakhs, Delhi had the largest number of registered motor vehicles during 2011-12, followed by Bengaluru (41.6 lakhs), Chennai (37.7 lakhs), Hyderabad (33.9 lakh), Pune (22.7 lakh) and Greater Mumbai (20.3 lakhs) (Chart 5). These six cities accounted for 43% of the total registered vehicles of the reported million plus cities. Srinagar reported the lowest number of registered motor vehicles amongst reporting million plus cities in India. Amongst the top six cities in terms of the number of registered motor vehicles, the highest CAGR of 13.2 % was recorded by Pune during 2002-2012 followed by Chennai (10.8%), Hyderabad (10.6%), Bengaluru (9.5%), Delhi (7.1%) and Greater Mumbai (6.6%) respectively. Other million plus cities like Kochi, Coimbatore, Madurai, Kanpur, Jaipur & Nagpur recorded more than 10% CAGR during 2002-12.

Market Share

20.10 As per **Society of Indian Automobile Manufacturers (SIAM)**, during 2014-15, compared to the previous year, two wheelers continued to hold lions share (81%) in domestic automobile market, increasing their market share by 1 percent. During the same period, market share of passenger vehicle was 13 percent, a decrease of 1 percent, whereas the share of commercial vehicles and three wheelers, each at 3 percent, remained unchanged.

Domestic Market Share for 2014-15



Source : SIAM

Automobile Production

20.11 As per SIAM, the industry produced a total of 23,366,246 vehicles including passenger vehicles, commercial vehicles, three wheelers and two wheelers in April 2014-March 2015 as against 21,500,165 in April 2013-March 2014, registering a growth of 8.68 percent over the same period last year. During 2014-15, the production increased across all categories of vehicles. During 2013-14, the increase in overall production was on account of increase in production of two wheelers only, whereas the production of passenger vehicles, commercial vehicles and three wheelers had actually decreased, compared to the previous year.

Automobile Production Trends (Number of Vehicles)						
Category	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Passenger Vehicles	23,57,411	29,82,772	31,46,069	32,31,058	30,87,973	32,20,172
Commercial Vehicles	5,67,556	7,60,735	9,29,136	8,32,649	6,99,035	6,97,083
Three Wheelers	6,19,194	7,99,553	8,79,289	8,39,748	8,30,108	9,49,021
Two Wheelers	1,05,12,903	1,33,49,349	1,54,27,532	1,57,44,156	1,68,83,049	1,84,99,970
Grand Total	1,40,57,064	1,78,92,409	2,03,82,026	2,06,47,611	2,15,00,165	2,33,66,246

Domestic Sales:

20.12 As per SIAM, the sales of Passenger Vehicles grew by 3.90 percent in April-March 2015 over the same period last year. Within the Passenger Vehicles segment, Passenger Cars and Utility Vehicles grew by 4.99 percent and 5.30 percent respectively, while Vans declined by (-) 10.19 percent in April-March 2015 over the same period last year. The overall Commercial Vehicles segment registered a de-growth of (-) 2.83 percent in April-March 2015 as compared to same period last year. Medium & Heavy Commercial Vehicles (M&HCVs) grew by 16.02 percent and Light Commercial Vehicles declined by (-) 11.57 percent. Three Wheelers sales grew by 10.80 percent in April-March 2015 over the same period last year. Passenger Carriers and Goods Carriers grew by 12.16 percent and 5.27 percent respectively in April-March 2015 over April-March 2014. Two Wheelers sales registered growth of 8.09 percent in April-March 2015 over April-March 2014. Within the Two Wheelers segment, Scooters, Motorcycles and Mopeds grew by 25.06 percent, 2.50 percent and 4.51 percent respectively in April-March 2015 over April-March 2014.

Automobile Domestic Sales Trends (Number of Vehicles)

Category	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Passenger Vehicles	19,51,333	25,01,542	26,29,839	26,65,015	25,03,509	26,01,111
Commercial Vehicles	5,32,721	6,84,905	8,09,499	7,93,211	6,32,851	6,14,961
Three Wheelers	4,40,392	5,26,024	5,13,281	5,38,290	4,80,085	5,31,927
Two Wheelers	93,70,951	1,17,68,910	1,34,09,150	1,37,97,185	1,48,06,778	1,60,04,581
Grand Total	1,22,95,397	1,54,81,381	1,73,61,769	1,77,93,701	1,84,23,223	1,97,52,580

Exports

20.13 As per SIAM, in April-March 2015, overall automobile exports grew by 14.89 percent over the same period last year. Passenger Vehicles, Commercial Vehicles, Three Wheelers and Two Wheelers grew by 4.42 percent, 11.33 percent, 15.44 percent and 17.93 percent respectively during April-March 2015 over the same period last year.

Automobile Exports Trends (Number of Vehicles)

Category	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Passenger Vehicles	4,46,145	4,44,326	5,08,783	5,59,414	5,96,142	6,22,470
Commercial Vehicles	45,009	74,043	92,258	80,027	77,050	85,782
Three Wheelers	1,73,214	2,69,968	3,61,753	3,03,088	3,53,392	4,07,957
Two Wheelers	11,40,058	15,31,619	19,75,111	19,56,378	20,84,000	24,57,597
Grand Total	18,04,426	23,19,956	29,37,905	28,98,907	31,10,584	35,73,806

20.14 Fleet of State Transport Undertakings : The fleet strength of the reporting SRTUs increased by 1.56% to 1,40,064 during 2013-14. The average age of the fleet of the reporting SRTUs ranged from 3.1 years to 11.8 years. The total staff strength of the reporting SRTUs increased by 1.8% during 2013-14 and stood at 7,62,049 as on 31st March 2014. The staff productivity declined to 55.9 kms/staff/day as on 31st March 2014 from 58.6 kms/staff/day as on 31st March 2013. The revenue earning kilometres during 2013-14 decreased by 2.8% to 1,55,472 lakh kilometres. The average vehicle productivity registered a decline at 304.1 kms/bus/day during 2013-14 from 317.8 during the corresponding period 2012-13. The total number of passengers carried by the reporting SRTUs during 2013-14 was 2,51,111 lakh passengers which was 1.6% lower than the number of passengers carried during 2012-13. The number of both total accidents and fatal accidents reduced from 19,896 and 3,891 in 2012-13 to 19,658 and 3,793 respectively in 2013-14. The reporting SRTUs earned a total revenue of Rs. 45,21,539 lakhs and incurred a total cost of Rs. 54,94,750 lakhs which resulted in a net loss of Rs. 9,73,211 lakhs during the year ending 31st March 2014. Net loss increased by 27% during 2013-14, over the last year i.e. 2012-13. Staff Cost recorded the highest share of 39 % in the total cost during 2013-14.

Acts & Rules Related to Motor Vehicles:

20.15 The Ministry of Road Transport and High Ways is responsible for the formulation of broad policies relating to regulation of road transport in the country, besides making / monitoring arrangements for vehicular traffic to and from the neighboring countries. The following Acts / Rules, which embody the policy relating to motor vehicles and State Road Transport Corporations (SRTC's), are being administered in the Road Transport Division of the Department:

- **Motor Vehicles Act, 1988**

- **Central Motor Vehicles Rules, 1989**
- **Road Transport Corporations Act, 1950**
- **Carriers Act, 1865 (to be replaced by the new Carriage by Road Act, 2007)**

20.16 For smooth compliance of the provisions of the Carriage by Road Act, 2011 viz. registration of common carriers, the manner of reporting data on carriage of goods, quantum of liability of the common carrier, format for various forms relevant for administration of Act/Rules, Carriage by Road Rules, 2011 were notified vide G.S.R. 176 (E), dated 28.02.2011 and widely published for information of the general public.

20.17 The Central Motor Vehicles Act 1988 empowers the Central Government to frame rules under provisions of the Act. Road Transport in India is primarily the responsibility of the State Government and U.T. Administrations. The State Govt. and Union Territory Administrations regulate road transport under the provisions of the relevant Motor Vehicle Act/rules in the respective states.

20.18 **Source of Data:**

- Data collected from different source agencies is compiled and published by the **Transport Research Wing of Ministry of Road Transport and High Ways.**
- Information on working of State transport undertakings including average fleet held & operated is maintained by **Central Institute of Road Transport, Pune.**
- Office of **Registrar General of India** also collects information on number of households having two wheelers and four wheelers during decennial **Census.**
- **Society of Indian Automobile Manufacturers (SIAM)** maintains information on automobile production & sales in various categories.
- **National Sample Survey Office** also collects information on ownership of vehicles by households including expenditure for new acquisition and maintenance expenses thereafter through consumer expenditure surveys.

References:

- Road Transport Year Book 2012, Ministry of Road Transport & Highways.
- Census 2011 results on ownership of assets by households.
- Website of Society of Indian Automobile Manufacturers (SIAM).
- Review of the Performance of State Road Transport Undertakings (SRTUs) (Passenger Services for April, 2013 – March, 2014), Ministry of Road Transport & Highways.