

A Study of Growth of Automobile Industry and Its Impact on Air Pollution



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Introduction

- At present India is 6th largest country in Automobiles and expected to become 3rd largest by 2020
- Employs 19 million people.
- Created enormous pressure on environment that resulted in air pollution
- Among the 20 top polluted cities in the world, 13 are in India (WHO,2015)
- The Global Burden of Disease Study has claimed that air pollution is the 5th largest killer in the country. The report also claims that about 620,000 premature deaths occur in India as a result of diseases related to air pollution

Objective of the Study

- To study the growth of automobile industry in India
- To study the impact of automobiles on air pollution

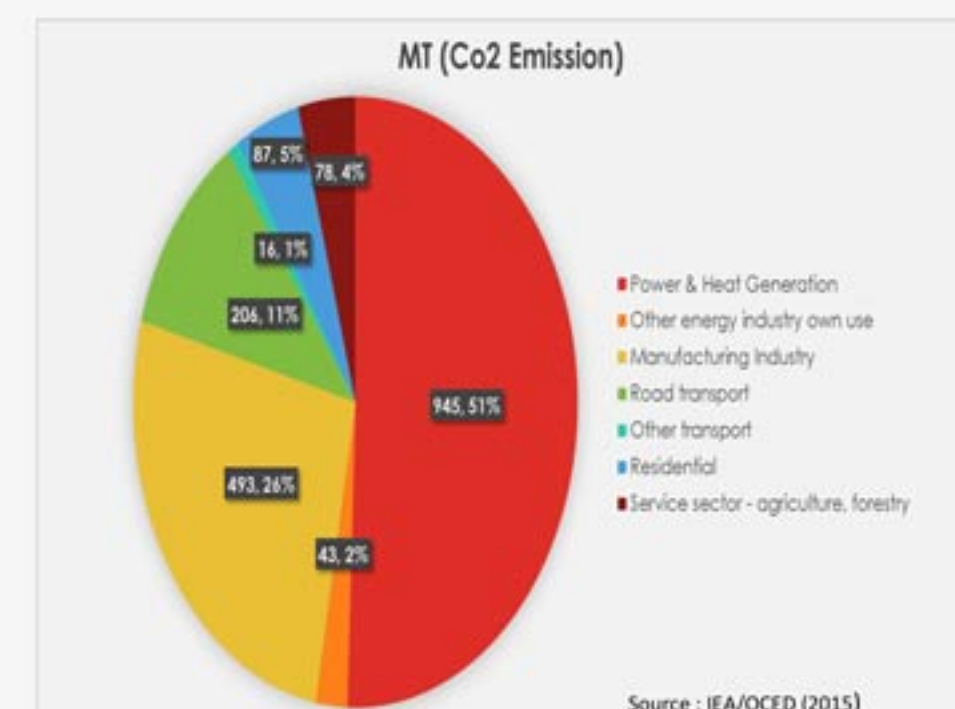
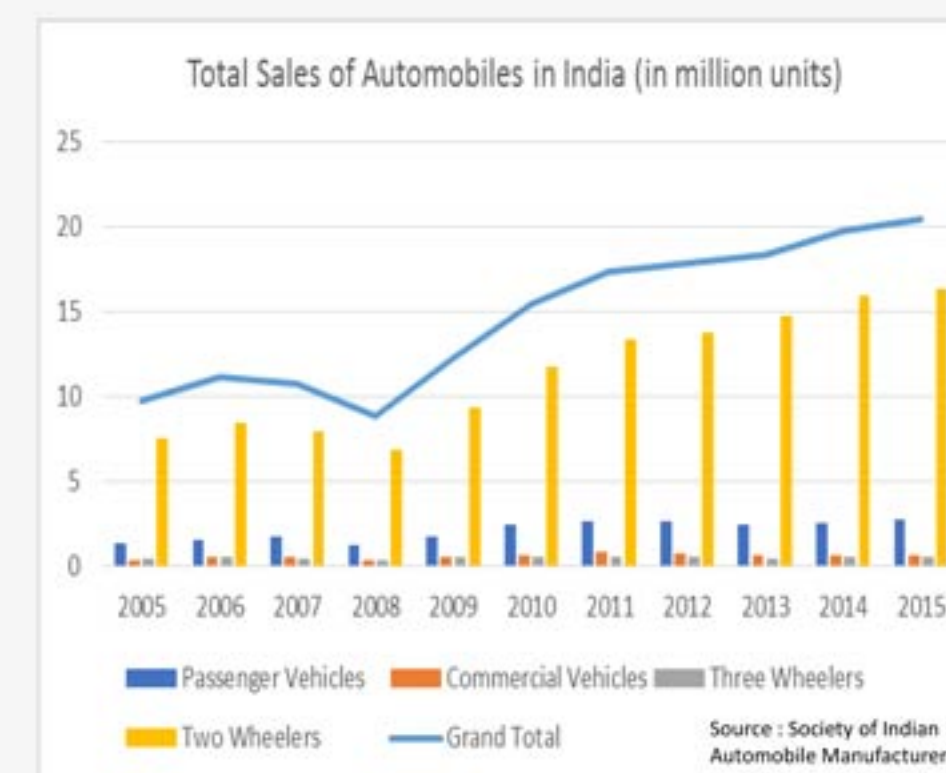
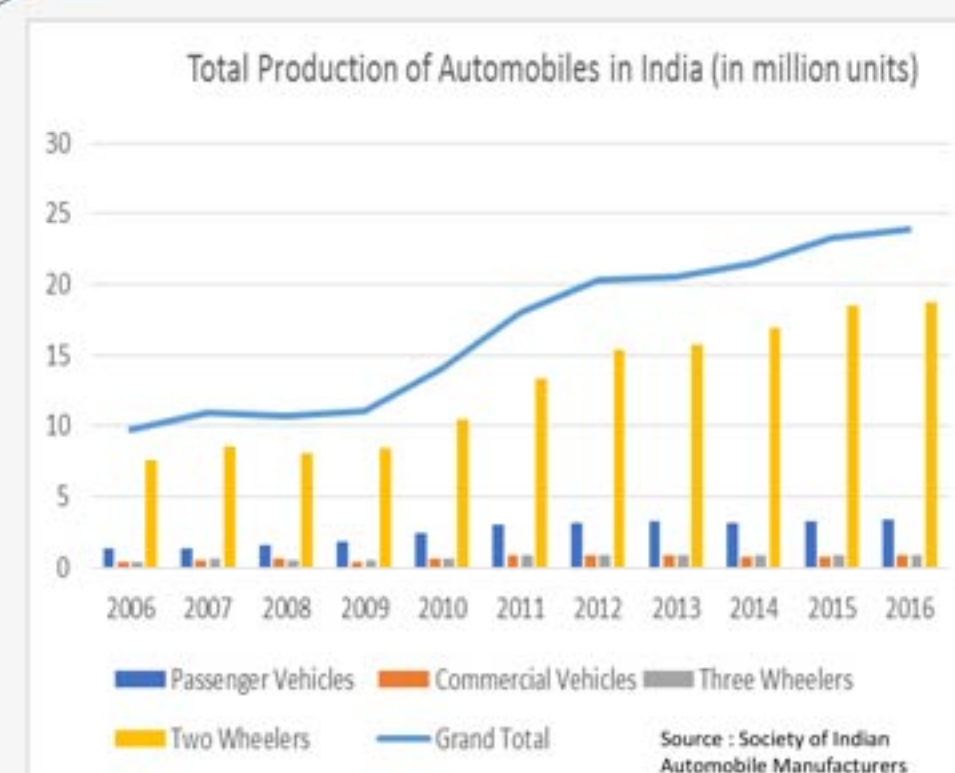
Research Methodology

- Literature Review
- Data Collection:
 - Secondary source – Society of Indian Automobile Manufacturers, Center for Pollution Control Board of India , World Health Organization

Literature Review

Author(s)	Year	Publication	Work
Jatinder Sign	2014	Journal of Applied Economics and Business Research	India's Automobile industry : Growth and export potential
M Krishnaven , R Vidya	2015	Internal Journal of Current Research and Academic Review	Growth of Indian automobile industry – exports and SWOT analysis
Jimmy Corton Gaddam	2013	Global Journal of commerce & management perspective	Production and sales trend of Automobile Industry in India
Shrivastava R. K., Saxena Neeta	2013	Journal of Environmental Research And Development	Air Pollution Due To Road Transportation In India: A Review On Assessment And Reduction Strategies
Dr. Alpana Ray	2014	IOSR Journal Of Humanities And Social Science	The Impact of Vehicular Explosion on Annual Means Temperature in the Urban Environment (Kolkata)
Dr. Alpana Ray	2016	Indian Journal of Spatial Science	The Impact of Vehicular Explosion on Annual Means Temperature in the Urban Environment (Delhi)

Data

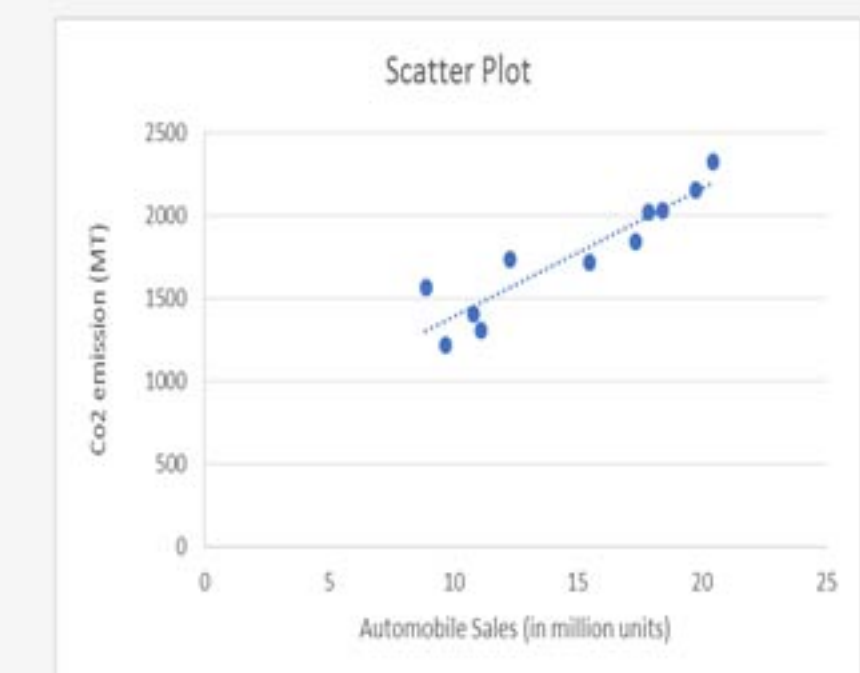


Year	Sales (in million units)	Co2 emission (MT)
2005	9.71	1222
2006	11.12	1303
2007	10.8	1407
2008	8.9	1568
2009	12.26	1738
2010	15.48	1719
2011	17.35	1846
2012	17.83	2018
2013	18.41	2034
2014	19.75	2156
2015	20.44	2320

Source : World Bank

Findings & Discussion

- A linear correlation between Automobile sales (independent variable) and annual average Co2 emission of India (dependent variable) is done
- The Pearson correlation value is 0.9229, this show there is a positive correlation.



Results and Conclusion

- The automobile industry has an average growth of 3-4% year on year and it contributes to 7% of India's GDP
- Its contributes to about 30% of manufacturing sector
- The growth in automobile industry has also increased the vehicular emission and results in air pollution

Scope for Further Study

- In detail analysis can be considering the region-wise forest cover, changes in emission norms and the advancement of the automotive and fuel technology.