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DIESEL POLLUTION IN DELHI



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ABSTRACT:

In recent years, traffic density for greatly increased in., Bombay. Delhi, Pune, Bangalore and Hyderabad city area. Diesel is used in locomotives, truck, business, car and two wheeler. Most of the Indian people prefer diesel engine over petrol one. In India, Delhi has 10 time more vehicle density. Over the last decade the number of vehicles in Delhi has jumped by 97%. The emission of carbon monoxide, oxides of nitrogen suspended particulate (spm) is more in diesel than petrol, Delhi government accept odd-even number formula and ban on old diesel vehicles. The National quality

Index (NAQI) data maintained by central pollution control. Board (CPCB) declared is out of 17 cities were detailed to maintain quality standard.

KEY WORDS: Diesel Pollution, monoxide, oxides

INTRODUCTION:

In recent years, traffic density has greatly increased in city area. Transport is the main source of pollution in towns. Transport is the main source of pollution in towns and metropolitan cities. High level of dioxide.Carbon monoxide, oxides of



nitrogen, suspended particulate matter (SPM) hydro carbons and metallic traces pollute the air.

Diesel is used in locomotives, truck, buses, cars and heavy equipment. All trucks, buses and go per cent cars have been running on diesel. India is one of the biggest market for diesel vehicles. Most of the people prefer diesel engine over petrol ones in this country.

The diesel engine (also known as a compress ignition or 'cl' engine) is an internal combustion engine in which ignition of the fuel that has been injected by the high temperature which a gas achieves when greatly compressed. Diesel engines are manufactured in two strokes and four- stroke version

since the 1910s they have used for sub margins and ships. In the 1930 they slowly began to be used in a few automobiles.

A petrol engine (known as a gasoline in America) is an internal combustion engine with sparkignition. The first petrol engine was built in 1876 in Germany by Nikolaus Augustotto.

Methodology:

I have selected 120 diesel car owners and 25 petrol car owners, 10 old car owners where cars are more than 10 years old. Secondary data collected from Google and books on environment and newspapers.

Objectives of Study

- 1) To study the consumers preference to diesel vehicles.
- 2) To study the air pollution of diesel car and other diesel vehicles.
- 3) To study the trend of air pollution in cities.
- 4) To suggest measures to reduce air pollution of metropolitan cities.

Importance of diesel Engine

- 1) Diesel engine have been largely using for commercial vehicles like, buses, trucks, locomotives and cars. The calorific value of diesel is more than petrol and hence the energy output per unit volume of diesel is better than petrol.
- 2) As a fuel, diesel is chapter than petrol in India diesel price was Rs.46.09 and Rs.59.98 per liter for petrol in Delhi on June 2014. Diesel prices were lower than petrol prices by 24 per cent in India. Even in other countries, prices of diesel are significantly chapter than petrol's price due to these car consumers prefers diesel cars.
- 3) Diesel is also better lubricant than petrol in recent time than petrol, with the result diesel engine runs with less friction, thereby generating better efficiently.
- 4) The combination of cheaperfuel, good mileage and long life. As a consequence of the diesel engine, those who have long distance commuting on daily basis, diesel engines make every day driving cheaper than easy expenses.
- 5) A petrol engine is one of the first engines to be used in automobiles, fundamentally, not much has changed since its inception. Honda city car consume one liter petrol for 13 k.m. and diesel car consume one liter for 22 km. Tata Motors, Honda, Mahindra, are manufactures of both diesel and petrol cars.

Petrol Cars:

Petrol make the car run of higher speed and it much quicker but the over-all fuel efficiency remains quite low. Petrol cars are good for those who has short distance communizing on daily basis or non-daily basis. Some specific consumers such as, doctor, advocates, professors, prefers, petrol cars.

The Emissions of Petrol Vs. diesel:

Both petrol and diesel are derived from crude oil, mixture of hundreds of hydrocarbons compounds containing mostly carbon and hydrogen, and some other elements like nitrogen and sulphur. Petrol and diesel are hydrocarbons too, petrol being lighter. Petrol has only carbon and hydrogen, and very few nitrogen atoms. It typically has chains of in carbon atoms; diesel mostly comprises chains of 14 carbon atoms. Longer the carbon chain, higher the probability of finding other elements like sulphur and nitrogen attach to it. Petrol is more uniform carbon compound than diesel.

Crucially, diesel has higher sulphur content. Diesel engines emit seven times more nitrogen oxides (Nox) particulates as compared to petrol engine Co2 is a greenhouse gas, and contribute to global warming. Nox and particulate matter curvy major health risks.

Trend of Automobile Production in India:

Home –grown car manufactures such as Mahindra and Mahindra and Tata Motors, alongside Toyota India, have most of the sur/Muv with 2000 cc or higher engine capacity category- Luxury car makes such as Mercedes Benz, BMW and Volkswagen owned Ando too have most of their offering in the over-2000 cc engine capacity range, with a majority of the models made by these manufactures using diesel or fuel. Most of the carssold in Delhi and other cities following table shows the number of vehicles in Delhi

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Year	Number (in Lakh)	Population (per/1000)
2004-05	44.67	299
2005-06	44.30	317
2006-07	52.32	337
2007-08	56.27	356
2008-09	60.27	374
2009-10	64.67	393
2010-11	69.48	415
2011-12	70.53	436
2012-13	72.01	439
2013-14	74.20	440
2014-15	74.53	442

Table 1 - The Number of vehicles on Road in Delhi between 2004-05 to 2011-12

Source – 1) Government of Delhi 2) www.business-standard.com

During 2004-05 to 2014-15 numbering vehicles increased from 48.67 to 74.53 (166.94 per cent). While per/1000 population vehicle increased from 299 to 442 (145.89 per cent)

Delhi has the most number of cars in the country at 7.35 million, followed by Bangalore in 2014. Delhi in India has 10 times more the vehicle density in India. Delhi, city fast becoming the new pollution capital of the world, adds 1400 cars to its round every day. Over the last decade, the number of vehicles in Delhi has jumped by a phenomenal 97 per cent.

Effect of Pollution

- 1) Lung censer Even for non-smoker ,damage to lungs 10% of all years of life lost from vehicle emissions around the world occur in India. For time more death in Urban area.
- 2) Exacerbated allergies, asthma, eye irritation and nausea.
- 3) Stress responses in brain.

Measure to control Diesel Pollution:

Five countrieshave taken action against Diesel pollution. Diesel cars not allowed due to policy to keep taxes low on diesel. Beijing has not allowed diesel cars since 2003 in China, Shrilanka indirectly bondedand it imposed a heavy duty on diesel cars in comparison to petrol cars in order to discourage

the sale of diesel cars. Denmark and Germany imposed high taxes on diesel cars including a higher annual tax. Diesel cars not allowed at Pairs in France.

In India, since June, the specific excise duty on diesel has been hiked from Rs.3.56 to Rs.11.83 per litter and from Rs 9.48 to Rs.19.36 per liter for petrol. Delhi government has given more preference to CNG and PNG vehicles to run on road.

Measures to control diesel pollution

- 1) Do not mix the kerosene in diesel
- 2) CNG and PNG vehicles should be preferred.
- 3) Accept odd-even formula to all metro Politian cities.
- 4) Road should be kept without dust.
- 5) Use of less sulphur contain diesel, lead free petrol, banning 15 years old vehicles and converting them to CNG & LPG.

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