

A case study on Air pollution due to Automobile Exhaust in Bengaluru

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Abstract – It has been made to know the effects of automobile exhausts coming from different vehicles in Bengaluru.

The present day automobile exhausts crisis depends on changes in attitude, type of vehicles, models, year of manufactures and Bharath standards. Environment has adverse effect due automobiles throughout the globe. This has made to focus on automobile exhausts crisis. One of the main cause is increase in the vehicle ratio in the city and also data obtained from vehicle growth scenarios.

The travel time will directly effect on environment problems.

At present emission tests are conducted once in 6 months and it has to be conducted once in 3 month especially in metropolitan cities to get clear picture.

The vehicle failed for emission test at emission testing, the particular vehicle must be repaired immediately within 48 hours and same must reach RTO otherwise RTO or Police will issue notice to owner. This system has to be made to improve the existing situation

Keywords: Environment, exhausts, Scenario, vehicles

1.INTRODUCTION (Size 11 , cambria font)

At present due to rapid increase in vehicle sector and also population growth, increase in rapid growth of cities and migration to cities from countryside's and problem in energy security and global climate change. The adverse effects on environment as started by transport sector as it consuming major of the world's oil today. As far as urban areas concerned in Asia & African countries are contributing major automobile exhaust to air quality problems.

In addition to automobile exhaust industrial exhaust, power generation sector, traditional domestic cooking and heating, high dust level from unpaved roads, construction, demonization, sweeping, hotels and etc. contribute to the air quality in Bengaluru.

One more major reason is due to narrow roads, roads are not able to meet the volume of traffic, humps in the roads , sgnal at junction, lack of mass transport, Increase in economic status, prestige for owning motor car, globalization and software companies in Bengaluru ,all are added to Air pollution in this city.

2. Materials and Methods
At presen pollution problem has come in different ways like water,noise,land,air,ocean,river,etc.The only solution is to reuse & reduce the pollution.

One of the main control for air pollution is the elimination or reduction of fossil fuels and go for alternative fuels. Fossil fuel consumption is the main reason for air pollution problems in cities throughout the world.

A case study has made to know the emissions from the vehicles and their impact on the environment. In Bengaluru. Automobile exhaust pipe's are at ground level where we breathe.

1. The number of different types of vehicles in Bengaluru.

2. To identify the different types of pollutants coming from automobile exhaust Bengaluru city.

3. To forecast and suggestion for controlling automobile exhaust in Bengaluru city.

The Study Area:

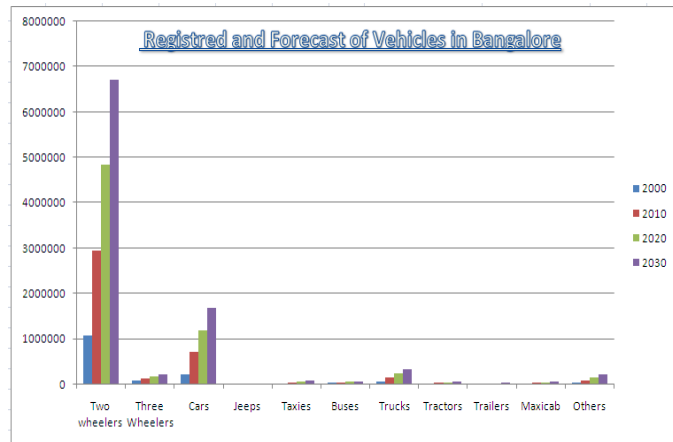
Bengaluru is one of the most rapidly developing city in demography, migration, transportation and industrial sector from more than two decades. The Bengaluru has the highest demography and only metropolitan city in Karnataka, having 9.0 million populations as per the 2011 census. This intensity has made urban, suburban movement with other cities have same intensity of increasing transportation problems in the city area; particularly in vehicle utility and development couldn't comply with the increasing demand.

The urban population mainly depends on city transportation systems on fossil fuels is very high.

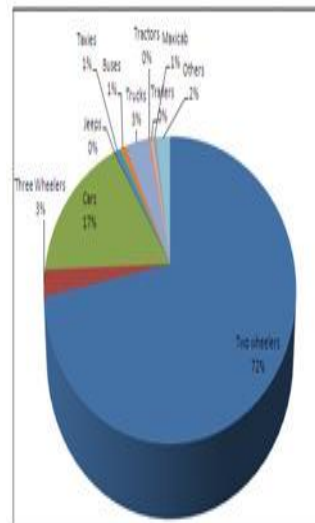
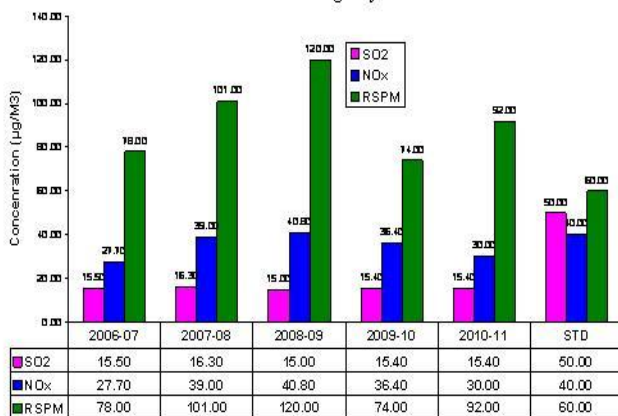
Present Bengaluru is having 75 lacks registered vehicles in RTO apart from other vehicles of from neighboring towns. The old and unmaintained vehicle add to bad quality continues to grow in multiple ratios. This has to be address on top most priority regarding air pollution from this type of vehicles.

The narrow road, potholes in the roads, humps ,slow moving of vehicles and traffic congestion from transportation are main cause for Air pollution in city. Nearly 70% of ambient-air quality degradation in past few years.

3. Result



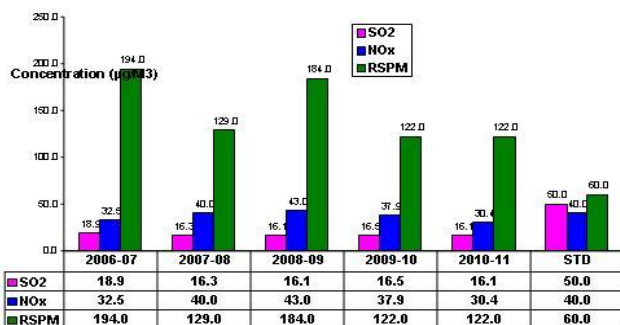
Annual average values of air pollutants at Peenya Indl Area, as per revised standards during the years 2006-11



Type of Vehicles	Year-2010
Two Wheelers	2951520
Three Wheelers	115401
Cars	697745
Jeeps	9104
Taxis	32818
Buses	35723
Trucks	139573
Tractors	20555
Trailers	12487
Maxi cab	23153
Others	84018
Total	4122097

Source: Praja website

Annual average values of air pollutants at Graphite India , White Field Road, as per the revised standards as per the years 2006-11



DATA OF REGISTERED VEHICLES FROM RTO'S, AND DISTRICT CENSUS HAND BOOK. BANGALORE

REGISTERED VEHICLES AND THEIR FORECAST

3. DISCUSSIONS AND CONCLUSIONS

1. Remote sensing technology can be used to measure the pollutant level from vehicle's exhaust while vehicle are in motion.
2. Modification engine: As per Motor Vehicle Act all vehicle manufacturers have to conform latest Bharath standards.
3. Avoiding unnecessary driving to reduce vehicle emissions
4. No Vehicle day
5. Celebration of Bus Day:
6. Car Pooling:

7. Emission test by RTO:

8. Ban of vehicles more than 15 years of age:

The rapid growth of population and motor vehicles in multiple ratios is the main concern.

City has manifold its effects from last 20 years on all types of pollution,

Bengaluru is degradation and enormous pressure on the environment. Today city is considered as one of the most polluted city in the country.

Government as taken to reduce pollution by introducing Metro, Flyovers, underpass, By-pass roads, leavey on fuel, increase of taxes on new vehicles.

Education at school level for the awareness. students to know about how and why we need to save our environment.

For Our Future, we must work together in reducing global warming and reducing vehicle use across all transport sectors.

BIOGRAPHIES



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