

## Highways, Pollution and Plantation



Source: [www.dowagro.com](http://www.dowagro.com)

Roads are the lifeline arteries which carry the life blood of economy relating to trade and commerce to every nook and the corner of the country. These also play a pivotal role in national integration by way of communication amongst the various religions and shades. According to the Ministry of Surface Transport and Highways, we are having a long stretch of around 4.50 million kms of roads length. And the overall benefits accruing therefrom ripple out vast, varied ramification for the progress and prosperity of the country as a whole.

Now, with the ever exploding population which we all know has crossed 1.25 billion next to china and the trafficways have correspondingly increased manifold face to face with urbanisation and industrialisation. And these in togetherness are Tanta mounting to ever-escalating pollution, temperature, dust and a combination of noxious gases namely carbon Monoxide (CO) Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O) and emission of Chloro-Fluro-Carbons (CFCs) apart from the most hazardous halocarbons.



These halocarbons originate from refrigeration and other cooling compound pollutants and are long persisting over hundreds and thousands of years when once get released into the atmosphere. The expansion of roads width on either side of highways has ruthlessly massacred over lacks of erstwhile plantations which way these have diminished the pristine well-established glory and grandeur of the highways which now are devoid of lush green vibrant tree cover across the country. Now, while travelling on these highways, we oftenly feel as something of our very vital missing so much so that no shade insight where once a while we can aspire to have a short stop over. Doesn't it jitter us when we are in travel-spree with family or friends? It is, therefore, most pertinent to realise the changed scenario over a couple of years. And this is evidently very well before our eyes. And imagine the scenario elsewhere away from our sight, the overall forest cover (green gold) which is frizzling by the turn of the day.

### FILLED WITH FUMES

|   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>▶ Vehicles are registered under 21 categories, including two-wheeler (bikes), four-wheeler (cars), taxi, autorickshaw, storage carrier, school bus, delivery van, truck, tanker, tractors and trailer</li> </ul> | <ul style="list-style-type: none"> <li>▶ Among the 29.83 lakh vehicles registered in the city as of October 2015, as many as 22.5 are two-wheelers, while 5.26 lakh are cars. There are about 45,400 autorickshaws and 67,000 delivery vans</li> </ul> | <ul style="list-style-type: none"> <li>▶ Sale and registration of vehicles in Pune is restricted to only those that meet the Bharat Stage (BS)-IV emission norms, the highest in the country so far</li> </ul> |
| 2 lakh vehicles are added to the city's roads every year  | 70% of car buyers in Pune prefer the petrol variant  | 70% Two-wheelers constitute  |

### DIFFERENCE MAKER

▶ Euro VI EU regulations set different standards. For diesel cars, they drop the permitted level of NOx emitted to a maximum of 80mg/km compared to the 180mg/km level that was required for cars to meet the previous Euro V standards

▶ The limit for NOx from petrol cars remains at 60mg/km, the same as for the Euro V standard

| MORE THAN DOUBLE IN A DECADE  |                     | LATEST AIR QUALITY                   |             |        |              | *MAXIMUM PERMISSIBLE LIMIT FOR PM 2.5 IS 60 $\mu\text{g}/\text{m}^3$ . FOR PM 10 IS 100 $\mu\text{g}/\text{m}^3$ |
|---|---------------------|--------------------------------------|-------------|--------|--------------|--|
| YEAR  | REGISTERED VEHICLES | Pollutant                            | Sunday      | Monday | After 2 days | GOOD<br>MODERATE<br>POOR<br>VERY POOR  |
| <p style="font-size: x-small; margin: 5px 0;">NOTE: ALL FIGURES AS OF MARCH, IN RUPEES LAKHS<br/>SOURCE: PUNE RTO</p> |                     | PUNE                                 |             |        |              | <p style="font-size: x-small; margin: 5px 0;">*DATA BY ITM SAFAR</p>   |
|   |                     | ▶ PM10 ( $\mu\text{g}/\text{m}^3$ )  | 124.6       | 105.9  | 106.16       |  |
|   |                     | ▶ PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | 66.3        | 59.5   | 59.1         |  |
|   |                     | DELHI                                |             |        |              |  |
|   |                     | ▶ PM10 ( $\mu\text{g}/\text{m}^3$ )  | 359.4       | 356.9  | 357.19       |  |
|   |                     | ▶ PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | 225.8       | 223.4  | 216.6        |  |
| ANNUAL ADDITION   |                     | MUMBAI                               |             |        |              |  |
|   |                     | ▶ PM10 ( $\mu\text{g}/\text{m}^3$ )  | 149.3       | 147.7  | 147.57       |  |
|   |                     | ▶ PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | 110.5       | 110.2  | 108.1        |  |
|   |                     | CONTRAST                             |             |        |              |  |
| YEAR  | BIKES               | CARS                                 | Sector      | PM10   | PM 2.5       | Black carbon   |
| ▶ 2015  | 21.52               | 5.00                                 | ▶ Industry  | 3.29   | 6.34         | 10.87  |
| ▶ 2014  | 19.99               | 4.66                                 | ▶ Transport | 35.71  | 35.63        | 34   |
| ▶ 2013  | 18.50               | 4.20                                 | ▶ Biofuel   | 1.47   | 2.66         | 199  |
|   |                     |                                      | ▶ Others    | 5.66   | 4.03         | Nil  |

“I drove an electric car to Parliament and have decided that whenever I am in the capital, I will only use an EV”

**Anant Geete** | MINISTER OF HEAVY INDUSTRIES

Source: <http://timesofindia.indiatimes.com/photo/50449290.cms>

This is fundamentally Tanta mounting to environmental degradation resultantly giving birth to multihued off shoots of problem. Under this pernicious scenario, our highways demand top most attention for rejuvenation so that these become lively for beautification and glorification. It is as such becomes our moral and bounden duty to carry out mass campaign for gigantic plantation These plantations are also carried out alongside railway tracks, canals apart from urban metropolis where this has an independent department. The predominant objective being to cloth such areas with green cover ensuring greenery, beautification and slowing down the temperature and averting pollution in its multitudinal manifestation. The concept of such plantations is no

new as over the years the earlier rulers were very much enthusiastic and compassionate with this concept of plantations when we unfold the history. During Ashoka's regime, this concept was very much in vogue, as he carried out extensive/intensive afforestation's alongside all avenue, other denuded areas. Our late Prime Ministers J.L Nehru, L.B Shastri apart from other prominent leaders, naturalist, environmentalists namely GB Pant, Dr. Rajinder Prasad, K.M Munshi a footed large scale planting campaign. It was too recently on the first day of July this year, when Nitin Gadkari, the Union Minister for transport and highways convened a two-day meeting at Vishakhapatnam and consequently, a mega mission for greening highways was promulgated and this mission was nomenclaturised as National Green Highways Mission (NGHM). Under the mission the minister kick started first ever massive national highways plantation campaign with a targeted budget of 300 cores to cover around 1,500 kms of the first leg of 1,00,000 kms of highways.

**Some plants list for roadside plantation:**



1



2



3



4



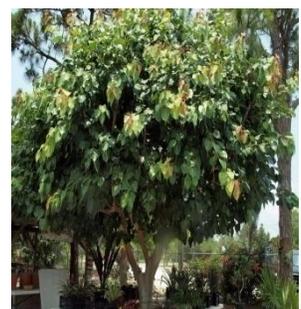
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7



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*Anthocephalus indicus, Cassia fistula, Shorea robusta, , Delonix regia , Butea monosperma kuntze, Saraca asoca, Azadirachta indica, Ficus religiosa*

Source: <http://news.statetimes.greening-highways>