

Friday 4 November 2011







Bangalore's carbon footprint shoots up

Subhash Chandra N S Bangalore, June 4, DHNS:

Bangalore's carbon footprint has shot up to be the third highest in the country, triggered by a deadly mix of poor governance, unbridled vehicular growth and mushrooming high-rise buildings.

This scary picture of carbon emission is contained in a study conducted by Dr T V Ramachandra, coordinator of the Energy and Wetland Research Centre and the Centre for Ecological Sciences attached to the Indian Institute of Science.

Increasing use of electricity by high-rise buildings in Bangalore that rely on wrong architecture, lack of a proper public transport system, depleting green cover and mismanagement of the City's waste — both solid and liquid — have been factors risky enough to push Karnataka's capital city to the edge.

Bangalore's trend of high-rise buildings with glass facades has led to the increase in electricity consumption, observes the study, conducted with the help of researchers Bharath H Aithal, SalviTakur and Shwetmala.

"This kind of architecture tends to conserve the heat (suitable for colder, temperate climate). Hence, the usage of air conditioners and fans have increased shooting up electricity consumption and leading to consequent carbon emission," explains Dr Ramachandra.

Energy consumption contributes 6,871.75 and 23.37 Gg/km2 of carbon dioxide (CO2) and carbon monoxide (CO). Out of the total emission from energy sector in the city, high-rises contribute 59 per cent of both CO2 and CO.

The study states that different parts of the city have different per capita consumption of energy that range from 500 kWh to 7,000 kWh per hour. Places with low-rise building have lesser consumption of power and those with high-rise buildings have more consumption.

Lack of adequate public transport facilities and increasing number of private vehicles have pushed up the carbon emission levels to a greater extent in the city. Urban centres with high density of vehicular population consume more fuel and contribute to environmental pollution and carbon emission.

The Indian Institute of Science study, which mapped the carbon emission from transport sector (road) shows higher mobility in the city centre.

Dr Ramachandra says the lack of land use planning has led to the problem of this magnitude.

"This is mainly because traffic and transport are not integrated in the planning. For instance, if a road width is 60 feet, there should be a policy to decide the size of the building. A recent example is that of Mantri Mall at Malleshwaram, which triggered traffic chaos," he explains.

Bangalore generates around 3,000-3500 tonnes of waste everyday (t/d) of which 72-75 is organic waste.

The existing solid waste treatment system being ineffective, the total municipal solid waste has increased from 650 t/d (1988) to 1,450 t/d (2000) and today it has become 3,500 t/d.

"Open dumping has contributed to the release of green house gases (species of carbon) like methane 21 times more than GHG potential of CO2," he says. Mismanagement of the city's liquid waste (sewage from residential sector and effluent from industries) and decrease in land cover are two other reasons for increase in carbon foot print in the city.

Decrease in vegetation has also led to the increase in carbon emission as the city's vegetation has declined to 12 per cent (in 2010) from 71 per cent (in 1973).

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By: Indiatimes

on: 05 Jun 2011 12:13 pm

Villages are neglected and city is growing high for the vested interests of the politicians and buerocrats. The capitalists are looking only for their profit and their pocket -- who cares the carbon print -- poor public should now stats to protest -- all lost resmponce power and becoame greedy chakkas and greed money growing up with younger generations and girls dont mind escourting money. poor India faloling for western M-TV culture also...

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Bv: Raghavendra on: 05 Jun 2011 11:18 am

Bangalore is the only developed and developing city in entire Karnataka; where as the other cities are completely neglected. Erstwhile CM of Karnataka should have taught of this problem, before giving permission to big entrepreneurs to establish their shops here and it is said that the land is given at thrown after price to IT parks and high rise buildings. If this continues then, no doubt Bangalore will be reaching the first place within few months in carbon footprint. According to undisclosed survey done, Bangalore is the unplanned city with IT companies is spread (scattered) like a garbage through out the city. Each and every thing (Big Companies, Small companies and many more) has established here itself.

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By: Indian

on: 05 Jun 2011 10:16 am

Indiscriminately allowing illegal high rises, allowing more and more companies to setup base only in B'lore (ignoring other parts of Karnataka), cutting down old tree in name of road widening, the successive Govt have reduced every major city in Indian to be a BIG Garbage island. One can see clean and green around houses of politicians, Bureaucrats. Rest of the city are is pure dust bin.