

## Urban Land use Planning and Air Pollution in Hyderabad

**ABSTRACT** The movements of people into urban areas together with the increase in consumption patterns and unplanned urban and industrial development have led to the problem of air pollution. In urban planning projects, air pollution control is considered but only as a minor component of urban sanitation. Air pollution control technologies and urban planning strategies available to reduce air pollution; however, worldwide costs of addressing air pollution control are high. Enforced air pollution control standards have reduced the presence of some pollutants (source: <http://www.byboh.com/technology/air-pollution-control.html>). Hyderabad is one of the most air-polluted cities in India today. (<http://www.hyderabadair.com>) The focus of this paper is on air pollution in the megacities Hyderabad, Andhra Pradesh in context with urban land use planning,

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Air is the ocean we breathe. Air supplies us with *oxygen* which is essential for our bodies to live. Air is 99.9% nitrogen, oxygen, water vapor and inert gases. Human activities can release substances into the air, some of which can cause problems for humans, plants, and animals. Each of these problems has serious implications for our health and well-being as well as for the whole environment.<sup>3</sup>

Air pollution is the contamination of air by the discharge of harmful substances. Air pollution can cause health problems including burning eyes and nose, itchy irritated throat, and breathing problems. Some chemicals found in polluted air can cause cancer, birth defects, brain and nerve damage, and long-term injury to the lungs and breathing passages in certain circumstances. Above certain concentrations and durations, certain air pollutants are extremely dangerous and can cause severe injury or death.<sup>4</sup> Air pollution plays a statistically significant role as a predictor of inter-country and inter-temporal differences in subjective well-being. The effect of air pollution on well-being translates into a considerable monetary value of improved air quality.<sup>5</sup> Local exposure to traffic on a freeway has adverse effects on children's lung development, which are independent of regional air quality, and which could result in important deficits in attained lung function in later life.<sup>6</sup> The mortality rate advancement attributable to traffic pollution was similar to that associated with chronic respiratory and

pulmonary diseases and diabetes. This suggests that decreasing pollutant exposures may have a substantial public health impact.<sup>7</sup>

Humans may be heavily exposed to airborne pollutants resulting from industrial processes, residential heating, and motor vehicle exhausts. The relation between DNA adducts and B(a)P was found to be linear at low doses and sub linear at high doses, indicating that DNA adduct formation tends to reach some kind of saturation point at higher levels of exposure to the chemical mixtures present in fumes. When the authors examined the efficiency of DNA adduct production associated with increasing air pollution exposures, the production of DNA adducts per unit of exposure was significantly decreased at higher B(a)P exposure levels. These findings suggest that linear downward extrapolations based on DNA adduct levels associated with B(a)P concentrations of  $\geq 20$  ng/m<sup>3</sup> might be affected by underestimation bias.

Air pollution is the effect of unsustainable economic activities of production and Consumption. Burning of fossil and bio-fuels, industrial process and vehicles in the Transport sector- all contribute heavily to air pollution.<sup>1</sup> Air pollution is aggravated because of four developments: increasing traffic, growing cities, rapid economic development, and industrialization. The Industrial Revolution in Europe in the 19th century saw the beginning of air pollution as we know it today, which has gradually become a global problem.<sup>2</sup> Most forms of air pollution have some damaging effect on human health and on natural or economic processes. This has resulted in a number of mega cities in India becoming among the worst polluted cities in the World.

The movements of people into urban areas together with the increase in consumption patterns and unplanned urban and industrial development have led to the problem of air pollution. In urban planning projects, air pollution control is considered but only as a minor component of urban sanitation. **Air pollution control** technologies and urban planning strategies available to reduce air pollution; however, worldwide costs of addressing **air pollution control** are high. Enforced **air pollution control** standards have reduced the presence of some pollutants (source: <http://www.byboh.com/technology/air-pollution-control.html> ).Hyderabad is one of the most air-polluted cities in India today. (<http://www.hyderabadair.com> ) The focus of this paper is on air pollution in the megacities Hyderabad , Andhra Pradesh. One of the key indicators of the quality of life is a clean environment, which can be further

disaggregated in terms of water quality, noise and air quality. Unfortunately, air in most Indian cities has become highly polluted and the concentration of certain pollutants exceeds World Health Organization's (WHO) safety limits by large margins.

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