

## **CARBON EMISSION :IMPACT OF CO2**



Rising levels of carbon dioxide (CO2), in addition to trapping more heat, promote plant pollen production soil bacteria and fungi, and alter species composition by favoring opportunistic weeds (like ragweed and poison ivy). Other emissions from burning fossil fuels in cars, trucks and buses form photochemical smog that causes and exacerbates asthma, while diesel particulates help deliver pollen and molds deep into lung sacs. The combination of air pollutants, aeroallergens, heat waves and unhealthy air masses, increasingly associated with a changing climate, causes damage to the respiratory systems, particularly for growing children, and these impacts disproportionately affect poor and minority groups in the inner cities.

The estimated cost in the U.S. of treating asthma in those younger than 18 years of age is \$3.2 billion per year. The health impacts of a changing climate include asthma and other respiratory illnesses, infectious diseases, heat stress, and preventative heart disease. Meanwhile the preventative strategies include measures that could simultaneously improve air quality and enhance the livability of urban communities. Combustion of fossil fuels (oil, coal and natural gas) is responsible for air pollution and climate change, and air quality is a particular problem for urban centers worldwide. Traffic patterns and automotive exhaust, power plants, airports and industrial emissions are the primary sources, while wind patterns can bring in pollution and unhealthy air masses originating n other regions. Allergens (molds and pollen) originating in rural areas can reach high levels in highly populated cities.

The impacts of air pollution can be compounded by extreme weather events, whose intensity and frequency is increasing as climate changes. These events include more heat waves, drought-driven fires, and floods. The impacts of warming are exacerbated by "the heat island effect" generated in cement cities with inadequate green space.

Today, atmospheric concentrations of CO2 are 379 parts per million. The earth has not experienced levels of CO2 above 280 ppm for at least 420,000 years. This report examines the direct impacts of CO2, as well as climate change, focusing on urban centers; examining synergies between air pollution and climate change and connections between climate change and emerging infectious diseases – in particular, West Nile virus, a disease carried by urban-dwelling mosquitoes that presents new problems for public health and mosquito control authorities.

## Global Warming, Climate, Air Pollution

Today, for every one of the more than 5.8 billion people on Earth nearly six tons of carbon dioxide are spewed into the air annually. As a result of our activities, the atmospheric concentration of this heat-trapping gas has risen by more than 30 percent Bottom of Form In India, 150 million in the upper-income groups emit more than 2.5 tonnes of CO2 per annum. A Greenpeace report states that India's rich are hiding their carbon footprint behind legions of poor. Climate change is the largest threat to humanity and has focused on the linkages between development and environmental sustainability. The carbon footprint of a small wealthy class (1% of the population) is camouflaged by the 823 million poor population who keep the overall per capita emissions below 2 tonnes per year. In India if the upper and middle classes do not manage to check their CO2 emissions, they will deny hundreds of millions of poor Indians access to development. Increase in global temperatures will have detrimental effects.

Changing rainfall patterns will result in flooding and droughts, melting glaciers will aggravate the problem of freshwater shortage. The intensity and frequency of storms will increase, vectorborne diseases will spread and rising sea-levels will drown coastal low-lying mega cities like Mumbai and Kolkata. Countries like India will find their development jeopardized if global temperatures rise above 2 degrees Centigrade.