‘Micro-pollution ravaging China, South Asia’: Lahore second most polluted megacity

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February 26, 2020

PARIS: Nearly 90 per cent of the 200 cities beset by the world’s highest levels of deadly micro-pollution are in China and India, with most of the rest in Pakistan and Indonesia, researchers reported on Tuesday.

Taking population into account, Bangladesh emerged as the country with the worst so-called PM2.5 pollution, followed by Pakistan, Mongolia, Afghanistan and India, according to the 2019 World Air Quality Report, jointly released by IQAir Group and Greenpeace. China ranks 11th.

Particulate matter of 2.5 microns or less in diameter — roughly 1/30 the width of a human hair — is the most dangerous type of airborne pollution.

Microscopic flecks are small enough to enter the bloodstream via the respiratory system, leading to asthma, lung cancer and heart disease.

Among the world’s megacities of 10 million or more people, the most PM2.5-toxic in 2019 was the Indian capital New Delhi, followed by Lahore in Pakistan, Dhaka in Bangladesh, Kolkata in India, Linyi and Tianjin in China, and Jakarta, Indonesia.

Next on the list were Wuhan — epicentre of the new coronavirus outbreak — along with Chengdu and Beijing.

> New Delhi on top, Dhaka third, says IQAir and Greenpeace study for 2019

The IQAir report is based on data from nearly 5,000 cities worldwide.

Most of the seven million premature deaths attributed by the World Health Organization (WHO) to air pollution are caused by PM2.5 particles, which originate in sandstorms, agriculture, industry, wildfires and especially the burning of fossil fuels.

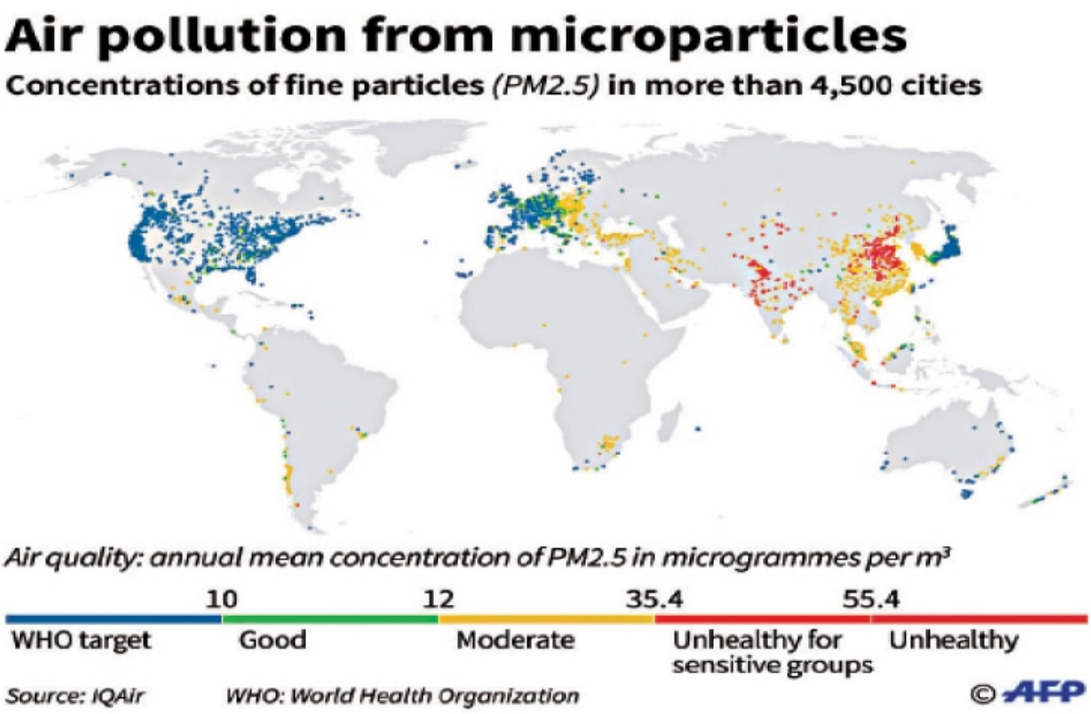
“Air pollution is the world’s leading environmental health threat,” said IQAir CEO Frank Hammes. “Ninety percent of the global population is breathing unsafe air.” China’s average urban PM2.5 concentration dropped 20 per cent in 2018 and 2019, but last year it still counted 117 of the 200 most polluted cities in the world.

All but two per cent of China’s cities exceeded WHO guidelines for PM2.5 levels, while 53 percent exceeded less stringent national safety limits.

Less data from Africa: The UN says PM2.5 density should not top 25 microgrammes per cubic metre (25 mcg/m3) of air in any 24-hour period. China has set the bar at 35 mcg/m3.

More than a million premature deaths in China each year are caused by air pollution, according to the WHO. Recent calculations put the toll at up to twice that figure.

Across a large swathe of northern India and north-central China, meeting WHO standards year-round for PM2.5 pollution would increase life expectancy up to six or seven years, according to the Air Quality Life Index, developed by researchers at the Energy Policy Institute of Chicago.



In India, small particle pollution exceeds WHO limits by 500 per cent, even if air pollution in general declined significantly last year, with 98 per cent of cities monitored showing improvements.

Among the club of 36 rich OECD nations, South Korea was the most polluted for PM2.5, counting 105 of the worst 1,000 cities on the index. In Europe, Poland and Italy count 39 and 31 cities, respectively, in this tranche.

Other parts of the world such as Africa and the Middle East lacked data.

“What cannot be measured cannot be managed,” Hammes said. “Africa, a continent of 1.3 billion people, currently has less than 100 monitoring stations that make PM2.5 data available to the public in realtime.” As of 2018, China alone had more than 1,000 such stations in 200 cities.

Climate change has begun to amplify the health risk of PM2.5 pollution, especially through more intense forest fires and sandstorms made worse by spreading desertification, the report found.

Global warming and PM2.5 also have the same primary driver: the burning of coal, oil and gas.

While the link with lung cancer was well established, a recent study showed that most excess deaths from air pollution are caused by heart attacks, strokes and other types of cardiovascular disease.

Small and larger particulate matter, nitrogen dioxide (NO2), sulphur dioxide (SO2) and ozone (O3) have likewise been linked to drops in cognitive performance, labour productivity and educational outcomes.

Of cities with more than one million people, the least affected by PM2.5 are Adelaide, Helsinki, Stockholm, and San Jose in central California, followed by Perth and Melbourne in Australia, and Calgary in Canada, and New York.

Published in Dawn, February 26th, 2020