Case Study

Covid-19, Climate and Cities

On December 19, 2022, three years passed since the first case of Covid-19 was reported. The discussion on the ill effects continues, and the trauma of the catastrophic burst of the pandemic still haunts the human race, and no one wants to take a trip down memory lane. Millions of jobs and lives were lost; the global economy and health management system collapsed. Covid-19 impacted lives our lives in cities in many ways.

Economic Impact

The COVID-19 lockdown led to millions of job losses, halted all economic activities, and forced people to stay home. Looking at the World Bank's Global Gross Domestic Production Index, the Global GDP fell 2.9 per cent in 2020 compared to 2019; interestingly, the total fall of GDP during the 2008 recession compared to the previous financial year was 6.3 per cent.

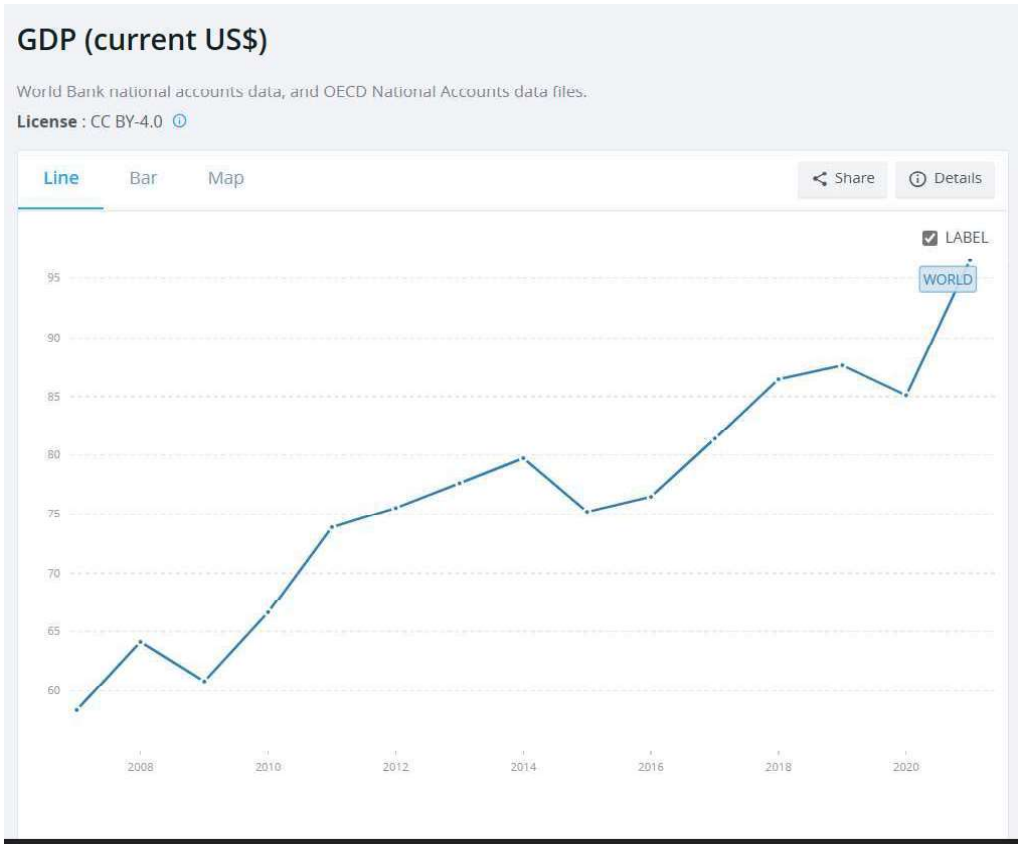

Figure 1 World GDP Index 2008 to 2020 (www.data.worldbank.org)

Human life loss

About 6.6 million people lost their lives after getting infected by the Covid-19 virus as of December 23, 2022. The loss is massive and is equivalent to the population of Madrid city. The statistics are indeed frightening. Another data from the WHO tells us that almost 7 million people die yearly from exposure to fine particles in populated air. In India, 12.5 per cent of all deaths are caused due to air pollution, as per the State of India Environment Report 2019. So, nations and cities need to look at major health problems too.

However, there is something unique and unusual about Covid-19 that one cannot observe or see in daily bustling social and economic lives. The impact that cities and nature have observed the healing effect on the earth due to restrictions on human activities during the lockdown. This is the only positive effect of the pandemic. Before 2020, no one could have imagined seeing marine lives claiming back their clean natural habitat, great blue sky with fresh unpolluted air, and crystal clear canals and rivers. Indeed, the world do not need a Pandemic to clean its actions. Nations and cities need to improve how they manage urban operations to make the Earth sustainable and healthier for the coming generations.

The flip side of Covid-19:

Air Quality:

The below image is not from a sci-fi movie but shows Delhi's sky during August 2020.

Delhi NCR region is considered one of the world's most polluted capital. The average PM2.5 pollution levels are worse than in any other global city. But the Covid-19 lockdown has altered the situation, and AQI was measured as low as 20 on average for a long time during the lockdown. The explosion of the virus was global, so it had a positive impact on nature temporarily. Due to limited and restricted economic activities, the healing effect was seen in many countries, especially in China, Italy and India's large financial centres and manufacturing cities. India, the second largest populated country in the world, contributes a considerable amount of GHG emissions in South Asia to meet its financial and energy demands. But India's GHG emission is still much lower than China, the most populated country and the USA, the biggest economy in the world.

This graph clearly shows the role of Covid-19 in controlling the GHG emission in India.

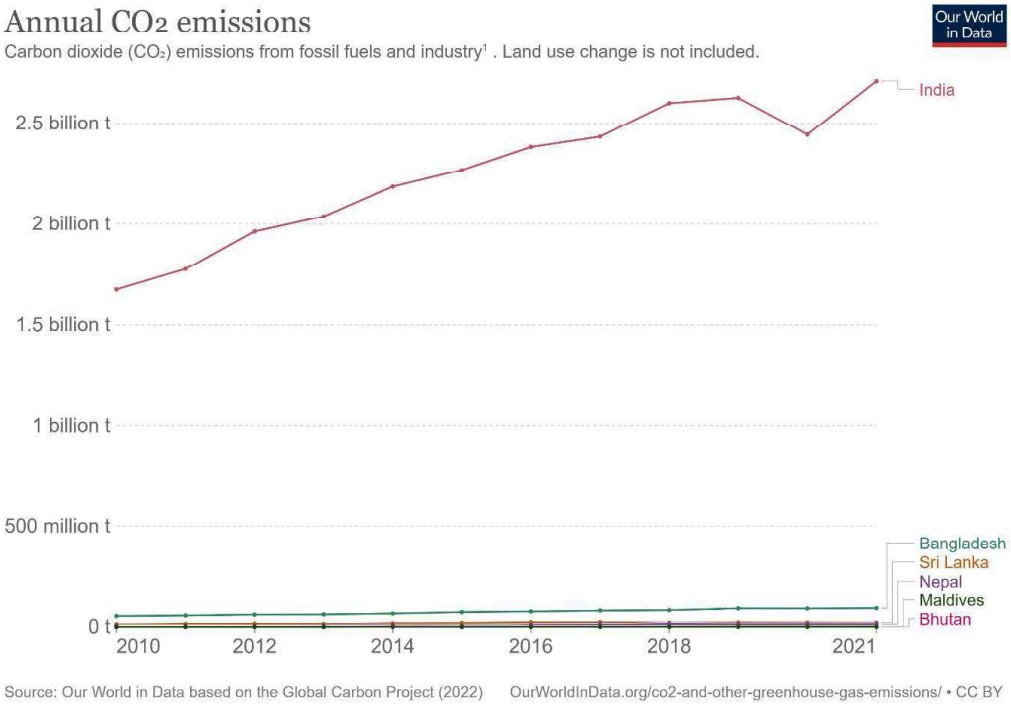

Figure 3 GHG emissions in South Asia from 2010 to 2021 (Source: www.ourworldindata.org)

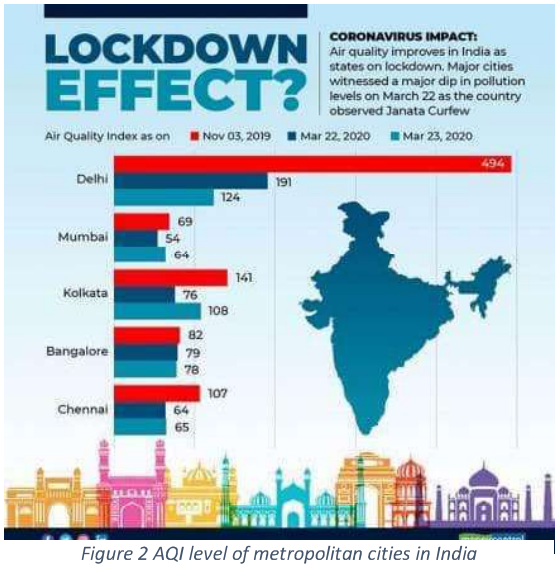

Figure 2 AQI level of metropolitan cities in India

The restriction on construction, manufacturing, aviation and transportation activities has significantly decreased GHG emission levels and improved the environment. The Covid-19 restriction allowed major cities like Delhi, Mumbai, Kolkata, Bangalore and Chennai to improve their air quality. However, these positive changes didn't last for too long, and the pollution levels returned to the same harmful state as nation and cities resumed our activities.

Covid-19 has made us realise that the Earth can be healed if nations can jointly make efforts to limit emissions and learn to use resources in a sustainable manner. It taught a lesson that cities can improve their urban ecosystem with right interventions. Many cities learned their lessons well and transformed the way they are going to plan their cities in the future. Indeed, Covid-19 exposed urban fault lines. It can also

be a reference point to make cities climate resilient, future-ready, pandemic-safe, and most importantly, inclusive for all.

Covid-19 pandemic has given us some great lessons. Cities like Paris are making efforts to transform these learnings into actions. Paris plans to become the greenest city in Europe by 2030. City officials are aiming to plant 170,000 by 2026 and to bring 50 per cent of the city area under green cover by 2030. Famous city monuments and roads are redesigned to restrict the traffic movements and promote pedestrian and bi-cycle movement. Paris is planning to spend 250 million Euros to transform its most famous street, the Champs-Élysées into a lavish green garden to improve the air quality along the 1.9 km long venue. Accessibility to the basic facilities was a major challenge faced by us during the pandemic. Paris is moving one step ahead to provide solution for this with a 15-minute city concept. This model will allow easy access to basic services like public transportation, shops and schools within the 15 minutes' timeframe from their residence.

Similar practices can be observed in other parts of the world where the cities have come forward to turn the pandemic challenges into opportunities. We need to work collectively to resolve this issue and implement the best learnings to make our cities more liveable and suitable for our future generation.