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## Editorial

# Let us save our environment

Surya Kant <sup>1,2,\*</sup>

<sup>1</sup>Dept. of Respiratory Medicine, King George's Medical University, Lucknow, Uttar Pradesh, India

<sup>2</sup>National Vice Chairman, IMA -Academy of Medical Specialties



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**There are billions of galaxies in the universe, there are billions of planets in our galaxy, but there is “only one Earth, where we live, let’s take care of that.”** Message from the United Nations Environment Program (UNEP) for “World Environment Day”, 5th June 2022.<sup>1</sup>

On June 5-16, 1972, the world’s first environmental conference was organized by the United Nations in Stockholm, Sweden, in which 119 countries participated, where the foundation for celebrating Environment Day was laid. The slogan “Only One Earth” was given for this conference and thus “World Environment Day” was established.<sup>1</sup> Fifty years later in 2022, Sweden hosted World Environment Day with the same theme "Only One Earth".<sup>1</sup> This means that we have only one earth to survive, time is running out very fast to save it. Hence, it is necessary that we protect the environment. Pollution free and green environment is necessary for our life as well as health.

According to the United Nations (UN) website, earth is currently facing three types of planetary emergencies: a) the climate is warming too fast for people and nature to adapt; b) habitat loss and other pressures mean an estimated 1 million species are at risk of extinction; c) pollution is dissolving poison in our air, land and water.

## Air pollution

Air pollution is now considered the world’s biggest environmental health threat, causing 7 million deaths worldwide each year. Not only this, it is estimated that the deaths of 40,000 children under the age of five in 2021 were directly related to PM<sub>2.5</sub> air pollution.<sup>2</sup> causes and exacerbates many diseases ranging from asthma to cancer, other lung diseases and heart diseases. The estimated daily economic cost due to air pollution is estimated at \$8 billion (USD), or 3 to 4% of Gross World Product. Five major causes of air pollution are-Traffic pollution, construction, industrial pollution, smoking (active and passive smoking and environmental tobacco smoke) and biomass fuel.

The World Air Quality Report is prepared by a Swiss firm- IQAir. This report, which gives the status of air quality globally in 2021, is based on data related to the presence of PM<sub>2.5</sub> fine particles in the air of 6,475 cities in 117 countries. PM<sub>2.5</sub>, particulate matter consisting of fine aerosol particles with a diameter of 2.5 μm or smaller, is one of six regularly measured air pollutants and is generally recognized as the most accurate measure of human health due to its prevalence and wide range in the environment. According to IQAir, Delhi was the world’s most polluted capital for the fourth consecutive year in the year 2021 and pollution increased by 15% compared to last year.<sup>2</sup> According to the report, PM<sub>2.5</sub> increased from 84 micrograms per cubic meter in 2020 to 96.4 micrograms

\* Corresponding author.

E-mail address: [skantpulmed@gmail.com](mailto:skantpulmed@gmail.com) (S. Kant).

per cubic meter in 2021, thus registering an increase of 14.6 percent. India has 35 of the world's 50 cities with the worst air quality in 2021 (and 63 out of 100 cities). Annual average level of PM<sub>2.5</sub> in the country in 2021 was 58.1 micrograms per cubic meter. In the year 2021, no city in India could meet the air quality standard (PM<sub>2.5</sub> concentration of five micrograms per cubic meter) set by the World Health Organization (WHO). In addition, 48 percent of the country's cities had levels of PM<sub>2.5</sub> particles in excess of 50 micrograms per cubic meter in 2021, which is ten times the standard set by the WHO.<sup>3</sup> Not only this, about 97% of the cities of the world could not even reach this standard.

### Air quality life index (AQLI)

The AQLI<sup>4</sup> is an important index available for the effect of air pollution on life expectancy as stated by Michael Greenstone, the University of Chicago's Milton Friedman, distinguished Service Professor in Economics, and his team at the Energy Policy Institute developed the model (EPIC). The AQLI is based on new research that quantifies the link between long-term human exposure to air pollution and life expectancy. According to AQLI report, Air pollution reduces average Indian life expectancy by five years compared to what it would be if WHO recommendations were followed (5 µg/m).<sup>5</sup> According to the study, particulate air pollution reduces global life expectancy by 2.2 years, or a total of 17 billion life years, when compared to a world that meets the WHO guideline. The effect of air pollution on life expectancy as comparable to that of smoking is more than three times that of alcohol consumption and unsafe drinking water and six times that of HIV/AIDS, and 89 times that of conflict and terrorism. India is the second most polluted country of the world. The 10 most polluted states in India are- Delhi NCR, Uttar Pradesh, Bihar, Haryana, Tripura, Punjab, West Bengal, Jharkhand, Chhattisgarh, and Rajasthan. India has accounted for 44 percent of the global increase in pollution since 2013.

### Loss of biodiversity

Ecosystem degradation affects the lives of an estimated 3.2 billion people, who make up 40 percent of the world's population. Our diet is responsible for about 80 percent of the loss of biodiversity.<sup>6</sup>

### Climate change

Nowadays, methane (green house gas) is responsible for more than 25 percent of the heat we are facing at this time. Climate change is a change in weather events that kills thousands of people and result six trillions of dollar in economic losses. According to statistics, to limit global warming to 1.5 °C by the end of this century, we must reduce annual greenhouse gas emissions by 50 percent or

half by 2030.<sup>7</sup> On the other hand, there is a 50 percent chance that global warming will exceed 1.5 °C in the next two decades.

### Plastic

Plastics have evolved from naturally modified natural materials such as natural rubber, nitrocellulose, collagen, gallite, etc. Since the plastic bag is very light and it can carry a load many times more than its own weight, it is of great use. It continues to release toxic gases and substances until it is not decomposed. Due to which the land becomes barren and even if a crop is produced, it is harmful to human health due to the presence of toxic substances in it. Currently, annual plastic waste entering aquatic ecosystems is expected to be 23–37 million tonnes by 2040.<sup>8</sup> An estimated 9.2 billion tonnes of plastics were produced from 1950 to 2017, of which 7 billion tonnes was wasted.<sup>8</sup>

### Tobacco and its impact on our health and environment

During the reign of Akbar in the 16th century, the Portuguese introduced tobacco in India. During the reign of Jahangir, heavy taxes were imposed on it to control its consumption, but as centuries passed, trade and consumption of the tobacco could not be curbed. Tobacco smoke releases 7000 harmful chemicals, the main ones being nicotine and tar. About 150 elements are found in its smoke, which are carcinogenic. Due to which 40 types of cancer can be caused. Apart from cancer, 25 types of other diseases can also be caused by tobacco and its products. The smoke of bidi or cigarette reaches 30% in the lungs of the user and 70% remains in the surrounding environment. Due to which family members and their neighbors are affected, who are called as passive-smokers. Tobacco and smoking are responsible for 50% of all deaths. globally. This year "World No Tobacco Day" was celebrated on 31st May 2022, the theme of this year was "Tobacco: Threat to the Environment". More than 100 Crore people smoke all over the world. According to the data, 60 Crore trees are cut every year for making tobacco and cigarettes, as well as 2200 Crore liters of water is wasted (while the thirst of about 2 Crores be quenched with this water).<sup>9</sup> Apart from this, 84 million tonnes of carbon dioxide is released from smoking, due to which global warming is increasing.<sup>9</sup> The most frightening thing is that till now about 150 Crore hectares of forest have been destroyed due to tobacco.<sup>9</sup> Hence, it is requested to complete ban on tobacco cultivation, its production, purchase and sale. Author is requesting to government for banning tobacco completely since 2018.

### LiFE -Lifestyle for the Environment Movement

LiFE (Life For Environment) movement<sup>10</sup> was launched by Prime Minister Shri Narendra Modi on 5<sup>th</sup> June 2022.<sup>10</sup>

He said that LiFE's vision is to live a lifestyle that is in tune with our planet and does not harm it. Those who lead such a life are known as "Pro-Planet People." Mission LiFE borrows from the past, operates in the present, and looks forward. Our lives are woven with the concepts of reduce, reuse, and recycle. Our planet is one but our efforts have to be many – One earth, many efforts. India stands ready to support any effort for a better environment and to further global wellness.

### Environmental Corporate Social Responsibility (ECSR)

ECSR is a way for companies to take care of the environment while still running their businesses and dealing with their stakeholders.<sup>11</sup> This is done without hurting economic performance. Companies would strive to incorporate environmental considerations into their operations and activities. These include promoting the benefits of eco-friendly products, promoting ecotourism, and fostering environmentally conscious behavior through workplace culture, among others.

### Practical Approaches for Prevention

Here, I am discussing practical and useful approaches towards protecting our environment in our day-to-day life. We have to focus on 3 Es Energy, Ecology, and Environment. It is necessary for everyone to think about two main aspects: first, the environment should not be harmed by me, and secondly, what can be my contribution to saving the environment. Under this thinking, we offer saplings instead of flower bouquets in the program and use an electric lamp to light the lamp. If it is a birthday, anniversary, or any other auspicious event, do plantation of saplings. As per estimates, a person needs 350 to 500 liters of oxygen a day. According to this, at the age of 65 years, we consume oxygen costing about five crore rupees from trees and plants, so we should be thankful to those trees and plants and do a plantation. For travelling purposes, we should walk and use bicycle, public transport, electric car and share the car.

Therefore, we have to move towards environmental protection at the grassroots and community level to bring about a positive change by making better choices,

individually. Government must exercise control over policies that do not harm our biosphere, that are inclusive to society, fair and friendly to nature. We should move from harming the environment to fixing it. Mother Earth is a major basis for the existence of our life, nourishes us. We only have one earth, let's take care of it. Inculcating the spirit of 'the land is our mother, and we are its sons', let us promise that from today onwards we will always preserve and enrich the earth and the earth-given resources in our lifestyle.

### Conflict of Interest

None.

### References

1. Available from: <https://www.un.org/en/observances/environment-day>.
2. Empowering the World to Breathe Cleaner Air | IQAir.
3. Air Quality Index (AQI) and India Air Pollution | IQAir.
4. Available from: <https://aqli.epic.uchicago.edu/the-index/>.
5. Kant S, Singh A, Verma N, Verma AK, Tripathi A. Non-pharmacological modalities for tobacco cessation: an overview. *Int J Adv Res*. 2022;10(5):176–86.
6. Land Degradation | GEF (thegef.org).
7. UN climate report: It's 'now or never' to limit global warming to 1.5 degrees | UN News.
8. Plastic pollution in aquatic systems may triple by 2040: UNEP (downtoearth.org.in).
9. WHO raises alarm on tobacco industry environmental impact. Available from: <https://www.who.int/news/item/31-05-2022-who-raises-alarm-on-tobacco-industry-environmental-impact#:~:text=Roughly%204.5%20trillion%20cigarette%20filters>.
10. PM launches global initiative "Lifestyle for the Environment- LiFE Movement"; [https://www.pmindia.gov.in/en/news\\_updates/pm-launches-global-initiative-lifestyle-for-the-environment-life-movement/](https://www.pmindia.gov.in/en/news_updates/pm-launches-global-initiative-lifestyle-for-the-environment-life-movement/).
11. Rashid NR, Khalid SA, Rahman NI. Environmental corporate social responsibility (ECSR): Exploring its influence on customer loyalty. *Procedia Econ Finance*. 2015;31:705–13. doi:10.1016/S2212-5671(15)01159-4.

### Author biography

Surya Kant, Professor and Head  <https://orcid.org/0000-0001-7520-5404>

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