

Editorial

Air Pollution in Dhaka City: A Burning Issue

Md. Saiful Islam

Lecturer, Department of Microbiology, Shaheed Suhrawardy Medical College, Sher-E-Bangla Nagar, Dhaka-1207, Bangladesh;
Email: saifulaa@yahoo.com; Cell no.: +8801971106875

Air pollution is one of a variety of manmade environmental problem. Air pollution may be defined as an atmospheric condition in which various substances are present at concentrations high enough above their normal ambient levels to produce a measurable effect on people, animals, vegetation or materials. 'Substances' refers to any natural or manmade chemical elements or compounds capable of being airborne. These may exist in the atmosphere as gases, liquid drops, or solid particles. It includes any substance whether noxious or benign; however, the term 'measurable effect' generally restricts attention to those substances that cause undesirable effects. Air quality has deteriorated both due to human activities, and natural phenomenon such as wind-blown dust particles etc. There are two major sources of air pollution in Bangladesh, vehicular emissions and industrial emissions. Recently, air pollution has received priority among environmental issues in Asia, as well as in other parts of the world. Dhaka is a major cultural and manufacturing center. The common types of industries in and around the periphery of Dhaka are ready-made garment manufacturing, jute, tanneries, textile, tea processing, fertilizer, cement, paper and pulp, chemicals and pesticides, food and sugar, pharmaceuticals, petroleum refinery, distillery, rubber, plastics, and brick manufacturing, assembling buses, trucks, and motorcycles, assembling radios and televisions. Air of Dhaka is being polluted day by day very badly. The other urban areas i.e. Chittagong, Khulna, Bogra and Rajshahi have much lesser health problem related to urban air pollution.

Contamination in the atmosphere caused by the discharge, accidental or deliberates of a wide range of toxic substances. Often the amount of the released substance is relatively high in a certain locality, so the harmful effects are more noticeable. The major sources of air pollution are transportation engines, power and heat generation, industrial processes and the burning of solid waste. A new source of air pollution is an increasing 'hole' in the ozone layer in the atmosphere above Antarctica, coupled with growing evidence of global ozone depletion. Air pollution has also long been known to have an adverse effect on human beings, plants, livestock and aquatic eco system through acid rain. Dhaka is fast turning into an inhabitable city. Dhaka city air reported to containing higher proportion of lead and carbon monooxoid (CO) must be considered very alarming. Air pollution has become a matter of great concern for us in recent years. Those who are living in cities in Asian countries including Dhaka have already realized how seriously air pollution has been poisoning life and degrading the environment. Faulty vehicles, especially diesel run vehicles, brick kilns, and dust from roads and construction sites and toxic fumes from industries contribute to air pollution. Industrialization and mechanized vehicles are two major sources of air pollution in our country. Those are unavoidable accompaniments of increased economic activity of any country. The number of automobiles has been increasing in Dhaka city at the rate of at least 10 to 20% annually, which has been contributing to air pollution on the one hand and traffic congestion on the other.

The International Atomic Energy Agency (IAEA) stated in its News Briefs that pollution levels of lead in Bangladesh are among the world's highest during dry season, according to Bangladesh Atomic Energy Commission (BAEC), with levels falling during periods of medium and heavy rainfall. The volume of poisonous particles in the city air has reached far beyond the permissible level for human body in recent years. The Dhaka city dwellers are always at a serious health risk due to the highly polluted air, warned health experts. The increasingly high concentration of toxic elements in the air is causing a foggy blanket in the city sky at present. The website reveals that the air quality of the city is lethal for human body especially during winter and post winter. According to the website, poisonous carbon monoxide, sulphur dioxide, nitrogen dioxide, suspended particulate matter (PM-10) and particulate matter (PM-2.5) exist in Dhaka's air beyond permissible level for human body. Due to increase of PM-10 and PM-2.5, people lose lung function and suffer from chronic respiratory and cardiovascular diseases while nitrogen dioxide increase

risks of bronchitis and pneumonia. Nitrogen dioxide causes respiratory infection. Carbon monoxide reduces delivery of oxygen into the human body, creates severe headache and decreases visual perception and manual dexterity. Around 75% of the ingested lead is deposited in bones and tissues causing irreversible brain and kidney damage. Growing nervous system of young children is particularly vulnerable.

Bangladesh has yet to be implemented a National Air Quality Standard, there are no detail air quality regulations based on which Environmental Impact Assessment could be done. Very few works have been done on air quality measurements and national air pollutants estimates in Bangladesh. Government should strengthen vehicle emission standards, regulations and enforcement. Measures to reduce fuel demand and improve traffic conditions are also critical to ensuring a net emission reduction and should be used as a complement to technical measures.

References

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