

How Does Urbanization Contribute To pollution?

It's Ironic that urbanization is a noble phenomenon and still correlates with the catastrophe that pollution is the world over. It's created when masses of people migrate to better-established locations with the expectation for more social-economic benefits.

The process causes population explosion in the convergent areas and overwhelms the available resources and amenities. Some urban dwellers cause serious pollution by adulterating the environment through poor waste disposal. Below are some types of pollutions associated with urbanization and how they occur;

1. Water Pollution:

Chemically, radiologically and biologically, water pollution majorly occurs through adverse human intervention. Population explosion in urban areas usually overwhelms installed social amenities like water and sanitation facilities. Often sections of the population live in [slum household](#) settlements within the urban areas owing to low income. Careless usage of open flowing water in such locations is common which causes contamination downstream too. Disposal of raw human and other wastes into the nearby water bodies has become common causing water pollution.

The influx of processing plants takes shape as occasioned by increased demand for commodities in urban areas. This piles pressure on disposal installations and some waste end up flowing in the open into water bodies. By accident or design, some processing plants do release unprocessed wastes into the nearby water bodies causing pollution.

2. Air Pollution

Natural clean air balance consists of nitrogen and oxygen on the ratio of 78% and 21% respectively. Other gaseous substances take up the remaining percentage. Compromise of quality occurs when hazardous gases and solid particles are introduced to the air causing pollution. Often, this takes place through poorly managed human activities. Elevated transport demand in urban areas has a direct influence on the increase of vehicles on the roads. This has increased the amount of Carbon dioxide and other harmful substance emissions into the air, causing pollution.

Commodity demand by the growing population in urban areas keeps thick black smoke billowing from factories' chimneys. Carbon monoxide, sulfur dioxide and other hazardous gases emitted from processing plants continuously cause air pollution. Accidental leakage of chemical substances used in processing at the factories is a reality that compromises quality air.

Another form of air pollution is silent but poses lots of danger including depletion of the [ozone layer](#). Emissions from cooling installations like refrigerators and air-conditioners manifest to chlorine atoms which react with the ozone layer and destroy it. That erodes a gaseous shield in the stratosphere and exposes the earth to dangerous ultraviolet rays from the sun.

3. Soil Pollution

Waste materials consisting of biodegradable trash, hazardous substances and e-waste increasingly get disposed of on land. This's largely anthropogenic and occasioned with poorly managed supervision on the disposal procedure resulting in soil pollution. It's a challenge that lots of countries face and the greatest casualty is public health. Tonnes of uncleared waste has become a common feature in many urban settlements of the world.

Increased food demand in urban areas piles pressure on farm production resulting in overuse of production chemicals. Accumulation of toxic substances from the chemicals sip into the soil and cause pollution. Occasionally, spillage of hazardous substances from processing plants sip out into the soil and cause pollution.

Solid matter sent to the refill sites after sewerage treatment accumulates over time and forms a cover on the soil. The buildup of chemical traces found in such dumps sips into the soil compromising its quality.

4. Noise Pollution

Excessive high levels of sound interfering with nature's balance result in noise pollution. It's synonymous with human activities in urban areas like blaring horns of vehicles and loud music at commercial centres. Sound over 85 [decibels](#) is considered detrimental and harmful. Noise pollution affects the health and wellbeing of humans and wildlife in numerous ways. Motor powered vessels execute manoeuvres during water leisure games interfering with the peaceful ecological life of marine animals.

5. Radioactive pollution

Urban dwellers' energy needs have necessitated research and the introduction of improved ways of energy production. Nuclear energy is one of the most effective of such but has dire consequences on poor handling. It's occasioned with the breakdown of uranium and thorium resulting in the emission of ionizing radiation. Leakages have occurred through some weak containment measures, causing serious aftermath. Toxic elements produced pollute water sources, air and soil.

6. Light Pollution

Also known as photo pollution, it's a result of excessive, intrusive and often human-made light. Generation of such lighting involves combustion and use of energy which correlates it to air pollution. It's less taken seriously but inversely has devastating effects. Long exposure to excessive light causes sight impairment and ecological interference in the lives of migratory birds.

7. Plastic Pollution

Accumulation of synthetic plastic materials adversely affects the environment in several ways. This includes blockage of drainages causing flooding, and animals to eat such carelessly disposed of materials. In addition, these materials stay a while unweathered and are an eyesore for a while wherever dumped.

8. Thermal Pollution

Occurs for instance while servicing energy needs for a growing population in urban areas. It's occasioned by disposal of degraded water after use for cooling tasks at nuclear energy production plants. Upon disposal to the environment after use, the adulterated water slips into other water bodies compromising oxygen quality. This adversely affects the lives of fish and marine wildlife living there.

9. Litter Pollution

A most common form of pollution easily occurs anywhere and heaps of waste can be sighted around urban areas. Usually ignored because of the perception that it's harmless as it's "everyday's simple rubbish." Accumulation of litter in whatever form contaminates air, soil and water directly or through substances emitted from it while in the current form or while decaying.

Conclusion

Urbanization is fueled by a desire for improved social-economic status across demographics. It comes with challenges that immensely contribute to environmental pollution posing a global nightmare and trajectory points to an escalation. It's not been "a walk in the park" implementing remedial measures as the infrastructure needed is expensive. Supervision is key to the success of environmental protection treaties like the [Kyoto Protocol](#) which the global community signed.