

The effect of population growth

[Sociology](#), [Population](#)



Population is the largest increasing factor in our world. This factor is the cause of many events in our world. Poverty, hunger and war are just some of the immediate effects of increasing population. Among these extreme causes the less immediate events will be seen with air pollution, land degradation, which is the effect that'll have the longest term effect on the world. But how can these events be avoided? Is there any hope of stopping this from occurring any further? The largest, most identified reason for pollution could be man's technological advancements.

These advancements such as those in agriculture, and those for transportation took a huge leap during a period in man called the industrial revolution. This period of time began the infectious state the world is in today. Around the early 18th century man had begun the need for more things, which in this time was impossible with current methods of doing things. This began to change with the idea of mass production, this concluded in the establishment of large factories filled with hundreds of workers. These factories held the most advanced technology that increased time of production.

These factories would produce so much fumes that snow and rain came in black droppings. The water was beyond consumable, this kind of behavior only increased over the next century when several parts of the world began their way into industrialization. But besides the factories themselves the new form of work put rural areas out of business causing the need for migration to new urban areas better known as cities. These sites were far from sanitary the streets piled with garbage which couldn't be controlled without proper sanitation.

The questions on the impact that man has put on the earth are seen every day in various ways some unseen to the naked eye but can be physically recorded. One well known example of the human footprint would be the increasing threat air pollution. The known causes of air pollution would be the everyday events such as millions of cars releasing exhaust fumes into the air. Fumes from car exhaust contain dangerous gases such as carbon monoxide, oxides of nitrogen, hydrocarbons and particulates. Major causes of air pollution would be from the emissions from industries and manufacturing activities.

Waste incinerators, manufacturing industries and power plants emit high levels of carbon monoxide, organic compounds, and chemicals into the air. This happens almost everywhere that people live. Petroleum refineries also release lots of hydrocarbons into the air. The other well-known contributor to air pollution is the burning of fossil fuels, which aside from air pollution is a major concern for the amount of possible fossil fuels remaining. Now a not so well known addition to air pollution is the household and agricultural chemicals.

Crop dusting, fumigating homes, household cleaning products or painting supplies, over the counter insect/pest killers, fertilizer dust emit harmful chemicals into the air and cause pollution. In many cases, when we use these chemicals at home or offices with no or little ventilation, we may fall ill if we breathe them. Air pollution particles eventually fall back to Earth. Air pollution can directly contaminate the surface of bodies of water and soil. This can kill crops or reduce their yield. It can kill young trees and other plants.

Sulfur dioxide and nitrogen oxide particles in the air can create acid rain when they mix with water and oxygen in the atmosphere. These air pollutants come mostly from coal-fired power plants and motor vehicles. When acid rain falls to Earth, it damages plants by changing soil composition; degrades water quality in rivers, lakes and streams; damages crops; and can cause buildings and monuments to decay. The effects of human productivity, not only has an effect on our air but its damages the earth itself and the creature inhabiting it including humans.

Short-term effects, which are temporary, include illnesses such as pneumonia or bronchitis. They also include discomfort such as irritation to the nose, throat, eyes, or skin. Air pollution can also cause headaches, dizziness, and nausea. Long-term effects of air pollution can last for years or for an entire lifetime. They can even lead to a person's death. Long-term health effects from air pollution include heart disease, lung cancer, and respiratory diseases such as emphysema. Air pollution can also cause long-term damage to people's nerves, brain, kidneys, liver, and other organs.

Some scientists suspect air pollutants cause birth defects. Nearly 2.5 million people die worldwide each year from the effects of outdoor or indoor air pollution. People react differently to different types of air pollution. Young children and older adults, whose immune systems tend to be weaker, are often more sensitive to pollution. Conditions such as asthma, heart disease, and lung disease can be made worse by exposure to air pollution. Air pollutants called chlorofluorocarbons (or CFCs) have destroyed parts of the ozone layer.

The ozone layer, located in the stratosphere layer of Earth's atmosphere, shields our planet from the Sun's ultraviolet radiation. The areas of thin ozone are called ozone holes. Ultraviolet radiation causes skin cancer and damages plants and wildlife. Ozone molecules wind up near the Earth's surface as a part of air pollution. Ozone molecules near the ground damages lung tissues of animals and prevent plant respiration by blocking the openings in leaves where respiration occurs. Without respiration, a plant is not able to photosynthesize at a high rate and so it will not be able to grow.

Apart from the effects living organism face with air pollution the earth is becoming less stable for life, these effects are known as global warming which is destroying the very structure of earth that sustains life. Global warming is an environmental phenomenon caused by natural and anthropogenic air pollution. It refers to rising air and ocean temperatures around the world. This temperature rise is at least partially caused by an increase in the amount of greenhouse gases in the atmosphere. Greenhouse gases trap heat energy in the Earth's atmosphere.

Carbon dioxide is a greenhouse gas that has had the biggest effect on global warming. Other greenhouse gases emitted by natural and artificial sources also include methane, nitrous oxide, and fluorinated gases. Methane is a major emission from coal plants and agricultural processes. Nitrous oxide is a common emission from industrial factories, agriculture, and the burning of fossil fuels in cars. Fluorinated gases, such as hydrofluorocarbons, are emitted by industry. Fluorinated gases are often used instead of gases such as chlorofluorocarbons (CFCs). CFCs have been outlawed in many places because they deplete the ozone layer.

These continuing air problems are only small compared to problems that can be seen. Water already being a scarce resource in many countries is also affected by the pollution of mankind that has harsh outcomes for people, the environment and its wildlife. We rely on clean water to survive, yet right now we are heading towards a water crisis. Changing climate patterns are threatening lakes and rivers, and key sources that we tap for drinking water are being overdrawn or tainted with pollution. As technology improves, scientists are able to detect more pollutants, and at smaller concentrations, in Earth's freshwater bodies.

Containing traces of pollution ranging from birth control pills, sunscreen to pesticides and petroleum, our planet's lakes, rivers, streams, and groundwater chemical mixture. Beyond synthetic pollution, freshwater is also the end point for biological waste, in the form of human sewage, animal excrement, and rainwater runoff flavored by nutrient-rich fertilizers from yards and farms. These nutrients find their way through river systems into seas, sometimes creating coastal ocean zones void of oxygen—and therefore aquatic life—and making the connection between land and sea painfully obvious.

There have been countless reports of the effects water pollution has caused. An article published by Dawn Walls-Thumma talk about the water pollution. “Mississippi River, poisoning the water in the Gulf of Mexico and causing an 8,000-square-mile dead zone --- an area roughly the size of New Jersey --- in which aquatic life cannot survive. ” This is showing the connection between developed countries and developing ones are closely interacted when it comes to environmental health.

Drinking water comes from surface water, such as lakes and rivers, and from groundwater. Pollution in these sources affects the quality and safety of water available in your home and, if the problem is not detected, it can affect your health. Pollution of drinking water occurs because of contamination by human and animal waste, mining activities, fertilizer and pesticides from homes and farms, industrial wastes, hazardous wastes generated by dry cleaners and gas stations, landfills and improperly disposed-of household wastes. Pollution with sewage or manure runoff can cause microbial contamination of drinking water.

This results in gastrointestinal diseases that can be fatal in high risk individuals. Nitrates --- chemicals used in synthetic fertilizers --- can leach into groundwater or run off into surface waters. While most individuals suffer no adverse effects from high levels of nitrates, infants cannot convert them into a harmless substance; if they consume nitrates, they can die from blue baby syndrome, a disorder in which the blood cannot properly carry oxygen. Infants, young children, pregnant and nursing women and some elderly individuals are most at risk for nitrate poisoning.

Increased demand for agriculture commodities generates incentives to convert forests and grasslands to farm fields and pastures. The transition to agriculture from natural vegetation often cannot hold onto the soil and many of these plants, such as coffee, cotton, palm oil, soybean and wheat, can actually increase soil erosion beyond the soil's ability to maintain it. The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers, clogging these waterways and causing declines in fish and other species.

And degraded lands are also often less able to hold onto water, which can worsen flooding. Sustainable land use can help to reduce the impacts of agriculture and livestock, preventing soil degradation and erosion and the loss of valuable land to desertification. The conditions of human life causing pollution is putting an end to the earth's life, with increasing populations and developing cities the world will not be able to last past the next generation. The only way we can continue to enjoy our earth is by finding and following the solutions to these environmental problems.

To combat pollution in the United States, the Clean Air Act Amendments of 1970 gave the Environmental Protection Agency (EPA) the authority to establish and enforce air pollution standards and to set emission standards for new factories and extremely hazardous industrial pollutants. The states were required to meet "ambient air quality standards" by regulating the emissions of various pollutants from existing stationary sources, such as power plants and incinerators, in part by the installation of smokestack scrubbers, electrostatic precipitators, and other filters.

Auto manufacturers were mandated to install exhaust controls or develop less polluting engines. The Clean Air Act, as amended in 1977, authorized the EPA to impose stricter pollution standards and higher penalties for failure to comply with air quality standards. Another well needed policy revision is the Clean up of ocean-going vessels. Cruise ships, container ships and tankers emit staggering amounts of smog-forming nitrous oxides, sulfur dioxide, heat-trapping carbon dioxide and particulates, among them black carbon (soot). New evidence shows that pollution from these vessels reaches surprisingly far inland.

The U. S. government has requested that the International Maritime Organization (IMO) create an “ emissions-control area” in American waters, including off Alaska and Hawaii. Although the U. S. signed the International Convention for the Prevention of Pollution from Ships, it cannot enforce those requirements until the IMO grants the right to create the control areas along its coastlines. Water pollution solutions are something that everyone can do to help prevent further pollution. Do not keep the tap running when not in use. Also, you can reduce the amount of water you use in washing and bathing.

If we all do this, we can significantly prevent water shortages and reduces the amount of dirty water that needs treatment. Do not throw chemicals, oils, paints and medicines down the sink drain, or the toilet. In many cities, your local environment office can help with the disposal of medicines and chemicals. If you use chemicals and pesticides for your gardens and farms, be mindful not to overuse pesticides and fertilizers. This will reduce runoffs of the material into nearby water sources. With soil degradation the best way is to grow leguminous plants.

We should use natural manure instead of fertilizers. Legumes are notable in that most of them have symbiotic nitrogen-fixing bacteria in structures called root nodules. The world is a far off better place without the constant rising pollution and all it would take is a decrease in the living standards of people in developed countries. The use of less water and care products that's add to water pollution driving cars that run on fossil fuels worsening our air quality and the chemical ways of farming in addition to the draining of resources.