

Impact of Industrialization on the Environment

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SUMMARY

The planet is rapidly deteriorating due to the rapid development of industries and the pollution caused by various factors. Human activity is causing natural and man-made disasters, causing land degradation, water pollution, deforestation, and contributing to global warming. This has a negative impact on everyone, making us more susceptible to diseases and health issues. However, we cannot refuse the products produced by industries, as they are essential for sustaining a normal way of life. Understanding the factors contributing to environmental pollution can help devise effective solutions and preventive measures.

INTRODUCTION

The Industrial Revolution transformed our world, transforming production, education, and technology. Industrialization involves mass manufacturing of goods and services using machines, cutting-edge technology, and assembly lines, promoting economic growth and benefiting society. The Industrial Revolution began in the 18th century in European nations, including North America. This led to the industrialization of rural labor and technological and creative improvements in the working environment. Different nations throughout the world gradually embraced industrialization and changed their economies to industrial economies. When nations like Brazil, Russia, India, China, and South Africa were in the process of industrialization, the industrial revolution occurred in East Asian countries between the middle of the 19th century and the 20th century. Industrial pollution, caused by increased industrial advancements, has significantly impacted rivers, ground, and ecosystems. It contributes to animal extinction and global warming, and even non-industrialized regions have been affected. Contaminants have been found in ice samples from the Arctic and Antarctic, demonstrating the distances pollutants can travel.

So, what causes industrial pollution? Consider the following reasons:

- Lack of controlling policies.
- Unpredicted industrial increase.
- Use of wrong technologies.
- Too many small industries.
- Insufficiency of waste disposal.
- Refusing natural resources

Pros of Industrialization

Industrialization brought us the current import-export market: Industrialization enables businesses to increase supply of goods and services, leading to multinational corporations and a shift in trade balance, increasing wealth and tax revenue.

It allows us to become more productive: Industrialization introduced new items, tools, and productivity, leading to improved communication, transportation, and roads. It also improved communication processes, enabling the development of telephones, fiberoptic cables, and machines like the loom.

Industrialization makes goods and services more affordable: Labor is the most expensive component in manufacturing, but industrialization reduced labor costs by assisting humans with machines, leading to faster production. This benefit also applies to services, as equipment made job completion easier, leading to higher income levels for everyone.

It improves the quality of life for each person and household: Industrialization transformed access to goods and services, enabling the poor and middle class to save money while meeting their basic needs. Mass production

led to lower costs and greater accessibility, allowing individuals to own property without farming or royal status. Companies even constructed towns for families to provide housing in exchange for labor.

Industrialization improved our medical care: The technical advancements that lead to our current approach to medicine were made possible by industrialization. Without this progress, we would not have the diagnostic tools we currently take for granted, such as CAT and MRI scans. More individuals were able to pursue careers as physicians, nurses, and carers because of factories, which made it easier to produce anything from scalpels to brand-new laboratory equipment.

It allows a worker to focus on specialization. The only experts in the pre-industrialization economy were monoculture farmers and individuals with specialised knowledge. Families could start preparing for higher-paying careers if societies started concentrating on manufacturing. Anyone with enough perseverance may change their fate, rather than needing a lengthy apprenticeship or being born into the "right" family.

Industrialization created more jobs for the global economy: Industrialization created job opportunities, increased wages, and improved living conditions for the global economy. It allowed workers with higher wages to invest in new ventures, transferring wealth from aristocracy to the average household.

It shifted our perspective of wants vs. Needs: Prior to industrialisation, each object had to have a distinct function because of the labor-intensive nature of its production. We created things out of need, which constrained our capacity for innovation. Clothing might be produced more quickly in factories while also extending its lifespan. It enabled people to attempt new things and break away from the family company. A stronger free market economy where those who innovate the most are rewarded for their efforts will eventually result from industrialization.

Cons of Industrialization

The working conditions declined during industrialization: Industrialization increased access to goods and services but also increased risk. Employees worked long shifts, often 12-hour days, with limited vacations. Unrestricted work ethics and lack of safety features led to accidents like missing fingers or limbs.

Child labour was an essential component of industrialization: Child labor laws emerged during early industrialization, where factories hired children for hazardous conditions, limiting their education opportunities, and causing families to lose multiple children. Children were expected to work the same 12-hour days as adults, limiting their opportunities for education. In these early factories, it was not uncommon for families to lose multiple children.

Living conditions around the new factories were not always better: Factory towns provided workers with adequate housing and resources, but overcrowding led to poor living conditions. Cities formed large slums, with entire families living in studio apartments. Unsanitary living conditions and limited medical care led to disease spread and family losses.

Industrialization created more income inequality for the top 0.1%: When we consider names like Jeff Bezos, Elon Musk, and Bill Gates and their estimated \$400 billion combined worth, we frequently marvel how a small number of people can have so much money. During the early stages of industrialisation, individuals like John Rockefeller and Andrew Carnegie owned that much money on their own. The three richest persons in the world at the beginning of the 20th century had a combined net worth of more than \$1 trillion after accounting for inflation. In the US, Rockefeller was in charge of over 2%. Each year, the GDP increases. That much of the economy had never before been governed by anybody outside of a monarchy.

It created the foundation for global warming and climate change: There were fewer than 300 parts per million of carbon in the atmosphere before the nineteenth century. After industrialisation, CO2 levels rose to 400 parts per million. The oceans' pH is more acidic. Microplastic contamination is a widespread problem, and because animals eat these tiny pieces, it has reached the human food chain. Our soil's makeup, the water we drink, and the quality of the air we breathe have all changed as a result of this drawback. Our economy is expanding, yet biodiversity is decreasing. If we don't do something about this problem, we'll hit a breaking point where a recovery might not be feasible.

Industrialization altered the political landscape of the planet: Industrialization continues to impact global politics, with less than 40 countries undergoing modern economic revolutions. These countries offer more opportunities and require advanced education, but also cause natural resource exhaustion and pollution issues due to short-term gains.

Agricultural production methods are different because of industrialization: Industrialization has led to fewer farmers pursuing agriculture, only enabling large-scale farming rather than homesteading, as well as arising concerns about food quality and safety due to GMO crops, herbicides, and pesticides.

It causes us to use more fossil fuels: Whaling developed into an industry because humans used the oil from these creatures to run our lights and create consumer products. Even margarine back in the early days of civilization was made from whale oil. Fossil fuels are currently used in our factories to create the commodities and services we need. This keeps animal populations from being drastically reduced to suit human fuel demands, but it still does not liberate us from the limitations of a limited supply. If oil and natural gas run out, what will happen to today's industrialisation efforts?

Industrialization changed our concept of work: Industrialization has led to a shift in productivity, with automation replacing repetitive processes. People now work in cubicles, prioritizing convenience over wellness, resulting in sedentary productivity.

What is the Impact of Industrialization on the Environment?

Economic growth, driven by industrial and technological revolutions, has led to pollution-producing industries like transportation and manufacturing, depleting Earth's resources and straining the ecological system. The productivity of industries depends on the availability of natural resources. Industrialization's environmental impact includes water, air, and soil pollution, causing global warming and greenhouse effects. This degradation can lead to human losses, employee health issues, and high costs for governments, manufacturing, and society. The rapid growth of industries exacerbates water and soil degradation, further highlighting the serious environmental issues caused by industrial growth.

CONCLUSION

Industrialization has significantly impacted our world, providing access to products and fostering innovation. The wealthy built modern societies, creating a Middle Class and reinforcing aristocracy power. However, it is crucial to clean up pollution and approach the environment with the same approach as our economies. Failure to do so may threaten our planet's survival.

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