



## Consequences occurring due to excess of human population

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### Abstract

Today, there are officially 8 billion people in the world. Growing from one billion to two billion took 125 years. Barely 70 years ago, in 1952, there have been 2.5 billion people living in the world. We've grown from 7 to 8 billion in the previous 12 years, so another billion won't be far behind. The globe's overpopulation poses serious difficulties for achieving sustainable growth, particularly in the areas of resource management including dealing with inequities as well as inequities. To put it simply, human overpopulation occurs when a certain area's human population grows beyond the capacity of its surroundings or available resources to support it. Commonly addressed in terms of global populations, the concept might even apply to specific countries, districts, or even municipalities. Current forecasts by the United Nations put the world population at 9.7 billion in 2050 or 10.4 billion in 2100 [assuming] a drop in population for regions whose big households are most common.

**Keywords:** earth, human, population, overpopulation, environment, problems, global

### Introduction

There are millions of different species living on Earth. There are millions of different species, but one of them, named humans, stands above them all. We are of the human race! As well as considering that we are the only ones that are responsible for damaging and ruining the environment, the fact that we are considered to be the superior species is sort of hilarious. Lately, we were able to witness the devastation of the ecosystem in the shape of the felling of trees to make room for the construction of a highway that was going to pass through that area. It is something that occurs daily, and that everybody of us is a witness to the destruction of the ecosystem in some form or the other, but we want to ignore it since it does not have an immediate impact on our lives. Since the beginning of the 19th century, the worldwide average temperature has increased by 1.1 degrees Celsius, as stated in The Global Climate Report of 2019, which was just issued by the National Oceanic and Atmospheric Administration (NOAA). It may not seem like a big deal, but the reality is that it will have a significant impact on both the ecosystem as well as our future. If the current rate of increase in ordinary temperature is maintained, sea levels will be continuing to rise as a direct consequence of the melting of ice. It will lead to the inundation as well as eventual submersion of a great number of additional global cities. One of the most likely, as well as significant contributors to the deterioration of the ecosystem, is the ever-increasing population, which is considered to be overpopulated at the present point. The present population of the planet is quite near 7.6 billion people. In the year 1800, there were only one billion people on the planet, therefore there was practically no danger to the natural world. There isn't just one cause of the deterioration of the ecosystem, but rather a multitude of causes that may be traced back to overpopulation. In the following paragraphs, we will go through a few of those contributing elements as well as make an effort to go into the specifics of the connection between overpopulation as well as the state of the ecosystem.

### Literature review

#### A. What Exactly Is Overpopulation?

When more people are living in a particular place than can survive there, there is an overpopulation issue. Overpopulation may result from an increase in the birth rate, a decrease in the death rate, migration to a new environmental community with fewer adversaries, or a quick loss of available resources. The word "overpopulation" is used to describe the situation that arises when a population in a particular ecosystem depletes its subsistence resources. In the middle of the eighteenth century, there were less than eight billion people on Earth. By 2050, the population is projected to exceed 10 billion, barely 250 years after passing the 7 billion level. (Istodor, 2018).

#### B. Statistics about people all over the world

The Earth is the residence of a variety of individuals or populations. Earth is home to people of many cultures, faiths, castes, creeds, as well as beliefs. It might come as no wonder that the globe's demographic is not evenly distributed, but rather is dispersed in varied quantities throughout varying nations. There are nations with higher population density including additional inhabitants per square kilometer. The higher the population density, the greater people per square kilometer.

India is the world's second-most populated nation, already after China. India has a massive demographic of 135 crore individuals. As per Global Meters, India's demographic density is 464 persons per square kilometer, which is about 12 times that of the United States. This might be no wonder that the top three biggest populous nations in the globe, namely China, India, as well as the United States, also comprise the leading three biggest contaminating nations in the globe.

#### A brief history of the population of the world

Since the beginning of the Holocene, approximately 10,000 BCE, human civilization, and the global population have grown at various rates. In general terms, the start of civilizations correlates with the start of the end of the

previous glacier epoch, when ice cover began to melt. Populaces in various regions of the globe, particularly Europe, the Americas, and especially China, continued to increase into the 1600s because of advances in agriculture despite periodic setbacks from pandemics or other disasters. The global population, which was believed to be 450 million in 1350, may have decreased to between 350 as well as 375 million by the time of the Black Death in 1400. (Livi-Bacci, 2017) [4].

Increases in the birth rate and death rate both started happening once the Manufacturing Revolution started in the 18th century. The global population was believed to be under 1 billion at the turn of the century. As the 20th century began, the global population reached around 1.6 billion people. This number had reached 2.3 billion by 1940. Increasing grain consumption as a consequence of the Green Revolution's industrialization of agriculture contributed to even faster development starting in 1950 (more than 1.8% annually). In 1964, human population development was at its fastest, at 2.1% annually. There have been rapid increases of a billion people in latest times: 33 years to reach 3 billion in 1960, 14 years for 4 billion in 1974, 13 years for five billion in 1987, 12 years for 6 billion in 1999, 11 years for 7 billion in 2010, as well as 12 years to achieve 8 billion to towards the end of 2022. (Beaujot, 2014) [5].

According to the latest United Nations demographic assessment from 2022, the world demographic is expected to grow dramatically over the next several years before leveling out in the middle of this century. United Nations medium variation forecasts for 2050 are 9.7 billion, and in population 2100, they are 10.4 billion. Current estimates are based on the assumption that education as well as access to contraception will continue to rise for women in poor countries. That leaves them at the mercy of national policy decisions. The United Nations has estimated that the world's population in 2100 would fall somewhere between 8.9 and 12.4 billion, with a 95% confidence interval of that size.

**Table 1**

Serial No	Year	Billion
1	1806	1.01
2	1850	1.28
3	1900	1.65
4	1940	2.33
5	1950	2.53
6	1960	3.03
7	1970	3.68
8	1980	4.43
9	1990	5.28
10	2000	6.11
11	2010	6.92
12	2020	7.76

**Asia is the largest populated continent on the planet**

Asia has around 61% of the world's population, making it the most populated area. India has contributed the bulk to our present world population of eight billion. It is anticipated that by 2023, India will overtake China to become the most populous country on earth. In addition, by 2050, the populations of the Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines, and Tanzania will account for more than fifty percent of the world's total population growth (James, 2022) [6].

A new study published in Scientific Announcements reveals that rising sea levels are one of the greatest hazards to overpopulated regions, along with climate change and overexploitation of natural resources. This study forecasts that by 2050, 300 million people living in coastal areas would be impacted by annual floods unless preventative measures are taken. This quantity is three times the previous estimates.

Asia is especially susceptible to climate-related floods due to its high population and low elevation. 237 million of the 300 million under risk reside in Bangladesh, India, China, Vietnam, Thailand, and Indonesia.

The population of Jakarta and its suburbs has topped 30 million, and it is estimated that the city would be completely drowned in water by 2050; thus, the Indonesian Parliament has authorized the relocation of the city's citizens to Borneo. However, this tragedy will be accelerated by the continued pumping of subterranean water.

**Overpopulation consequences**

Approximately Eight billion people live on Earth nowadays. Per the United Nations, the world's demographic will reach 10.4 billion by 2100, anticipating stable childbearing reductions in several regions. Surprisingly, if additional development is achieved in women 's reproduction self-determination because childbearing declines more rapidly than the UN estimates, the population in 2100 may be a comparatively lower Eight billion (Uniyal *et al.*, 2017) [7]. For the period being, the world's population keeps growing at a fast rate (every year, about 80 million people), although its non-renewable resource availability is depleting. There has recently been a population boom, although there are several explanations as well as explanations for this, a few of which are listed below-

**A. Lower mortality rate**

The primary (and arguably most visible) driver of population growth is a mismatch between births and mortality. According to the World Health Organization, the global neonatal death rate has decreased, with 4.1 million babies dying in 2017 compared to 8.8 million in 1990. (WHO). This is excellent information for general well-being.

On the reverse side, as time passes, individuals are enjoying longer lives all over the world. People like us will very probably outlast the bulk of our ancestors. Global total lifetime length approximately tripled around 1900 due to breakthroughs in medicine, technology, and general cleanliness. Falling mortality rates certainly cause concern, although increased longevity adds to the math of expanding population proportions. (Bell & Moore, 2020) [8].

**B. Poverty**

Poverty is among the primary explanations for a large number of individuals around the globe. While poverty might not always immediately cause a rise in population, in conjunction with low education, it may create a recipe for fast population growth. Some low-income, low-education couples may opt to have a child because they believe it will increase the number of individuals in the household who can work. Consequently, both the economy and the environment may suffer. This makes it more difficult for an increasingly overloaded economy and failing nature to meet everyone's requirements (Spicker, 2020) [9].

### C. Underused Birth Control

Based on the United Nations Demographic Bureau, Since 1950, the average number of children born to women throughout the globe has dropped from five to two and a half. Similarly, worldwide contraceptive usage has grown from 54 percent in 1990 to 57.4% in 2015. While there has been some progress, contraceptives remained mostly underused. The World Health Organization (WHO) reports, for instance, approximately 214 million women in developing countries who want to avoid pregnancy do not use modern contraceptives.

The absence of contraceptive use among these women may be attributed to several factors, such as societal as well as religious conventions that inhibit birth control, false perceptions about risks associated with contraception, as well as a lack of autonomy for women in matters of sexuality or population management. Between 2010 and 2014, an approximated 44 percent of pregnancies occurred outside of a couple's plans. Family preparation techniques may do a lot to reduce the demographic growth rate if many women had access to them or the freedom to use them.

### D. Educating the Uneducated

The majority of the time, overpopulation is a greater problem in countries that haven't established as much as in countries that have. There is a sharp emergence in the globe's demographic, particularly in lesser developed countries, but since many people there don't know how to have children or how to keep them from having children. This happens frequently because people in these countries don't know enough about reproduction but rather how to inhibit it.

Most individuals in underdeveloped nations don't know what they can do to avoid getting pregnant. Because of this, there may be family members with so many children that they feed themselves. It also brings about a drop in the quality of life. Often, it is the administration that doesn't do enough to raise consciousness as well as teach people about overpopulation as well as how to stop it. If people knew more about the effects of having too many people, they could perhaps begin taking steps to stop it. (Farquhar & Fitzsimons, 2018)<sup>[10]</sup>.

### Overpopulation's Environmental Consequences

It appears to reason that because the world's population expands, so will the demand for commodities. A higher population means more consumption of food, water, clothing, power, medicine, and transportation, among other necessities. Overpopulation has a wide range of environmental consequences. Several of these are mentioned below:

#### A. Depleted Natural Resources

The primary impact of having too many people is that resources are used in an unfair as well as uncontrolled way. The Planet can only make so many unprocessed components, as well as every year the natural resources shortfall, which is what happens when more resources are used than the Planet can make, happens previously. In trying to develop nations, where there are too many people, this makes it hard to regulate the resources. Regional fights over water supplies are often caused by frictions in geopolitics and therefore can lead to war. (Blomfield, 2019)<sup>[11]</sup>.

### B. Climatic Modification & Global Warming

Overpopulation has also caused climate change & global warming. Scientists worry about just the altering global meteorological pattern including rising worldwide temperatures. Various nations have joined various climate change or global warming accords. Top polluters ratified the Paris Climate Agreement in 2016. Following the pact, member nations must restrict their carbon emissions to restrict worldwide warming to 1.5 degrees Celsius. We'll see whether these accords help with expanding populations & human needs (Chophel, 2022)<sup>[12]</sup>.

### C. Species Extinction

Climate change, global warming, as well as overpopulation threaten wildlife. Frightening to the point of extinction. The last 5 extinctions in 450 million years were caused by volcanoes or meteorites. Researchers fear climate change will spark the 6th extinction.

### D. Disasters as well as pandemics are more likely to happen.

Several of the new pathogens that are currently killing people around the world, like COVID-19, Zika, Ebola, as well as West Nile, were first found in living creatures or insects as well as afterward spread to people. One of the reasons why the globe is inhabiting "a time frame of further outbreaks" is that people are ruining wildlife's natural habitat as well as bringing into much more frequent interaction with wild living creatures. During an outbreak, it's easy to see how challenging it is to maintain personal and professional distance on a planet with over Eight billion people.

### Freshwater Depletion

There is less fresh water inside the rivers as well as oceans now because we have too many people as well as always want things made in factories. All of the squandering from factories go into rivers as well as lakes, which means that freshwater is lost. Pollution in body parts of water does not just come from industrial trash. Smog as well as the damage of surface water in water bodies are also caused in part by the fact that there are too many people living in one area.

### E. Overpopulation Remedies

Overpopulation is an issue that did not originate overnight, therefore it can't be solved in a short session. Overpopulation prevention is a long-term approach that necessitates careful preparation. The authorities of one's nation have a significant influence in reducing overpopulation (Conly, 2022)<sup>[14]</sup>. It is the government's role to raise public understanding & strive forward into:

- Family preparation.
- Empowerment of women.
- Inform individuals regarding birth control options.
- Elimination of poverty.

People must also employ sensible family management approaches to help solve the overpopulation problem. They ought to be informed that raising additional children does not benefit the planet in any manner. Humans must take responsibility & consider the problem of overpopulation as well as its harmful consequences carefully.

## Conclusion

Overpopulation as well as a deteriorating environment raise numerous concerns, including the issue of our very survival. Another question that must startle us is whether or not we are ready for the 6th catastrophe. Are we doing enough to protect the environment? Are we giving back to the environment and what do we get from it? All of these questions for both of us consequently subsequent civilizations remained unresolved. As equal human beings living on Earth, it is our job to solve the problem of overpopulation while also exercising utmost care to avoid increasing depletion of the environment. Our seemingly little activities may have a tremendous influence on the environment. As a more powerful species, it is our purpose and responsibility to restore the damage we have caused.

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