



OVERPOPULATION

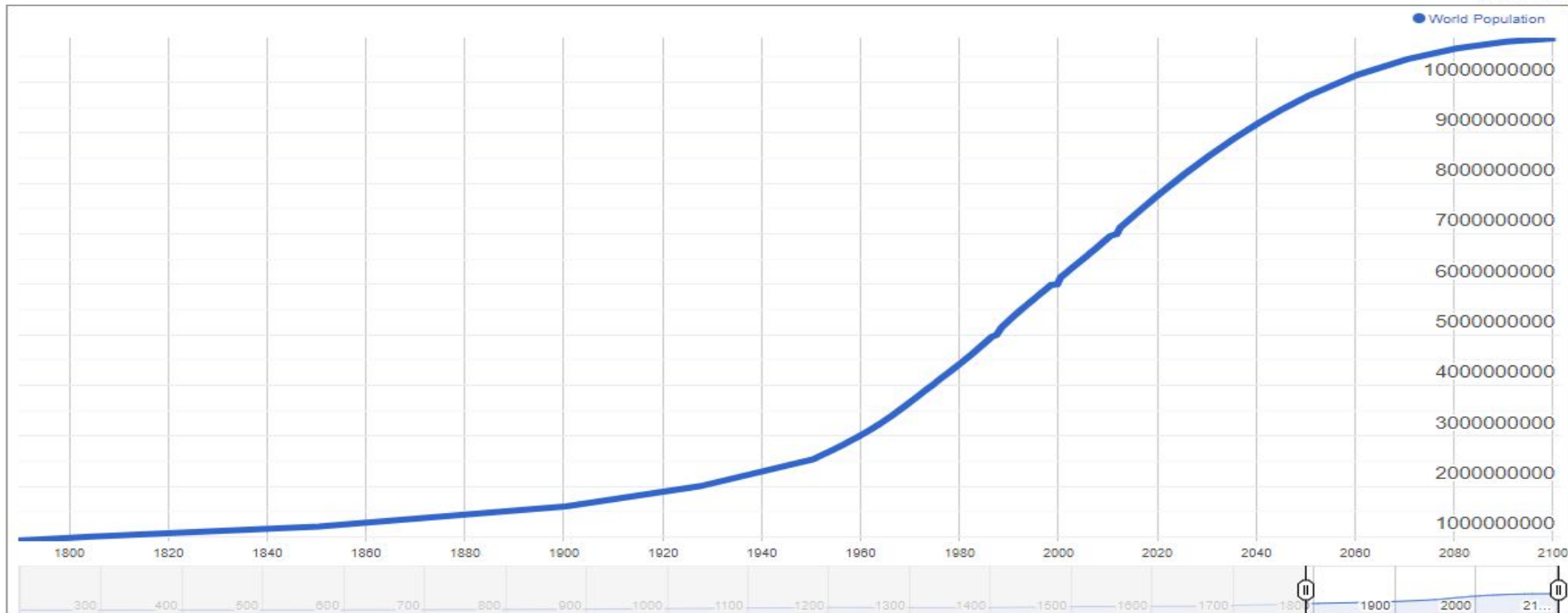
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The 20th Century

- A tremendous change occurred with the industrial revolution: it had taken all of human history for world population to reach one billion until 1800.
- The second billion was achieved in only 130 years (1930), the third billion in 30 years (1960) and the fourth billion in 15 years (1975) and the fifth billion in only 13 years (1988).
- During the 20th century, the world population increased from 1.65 billion to 6 billion.
- In 1970, there were roughly half as many people as there are now in the world.

At a glance...




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At a glance..

- Current world population is about 7.8 billion
- In 40 years, it is expected to increase to 10 billion
- China and India together contribute to about 36% of the world population
- An exponential increase in the world population from the mid twentieth century

TOP 20 LARGEST COUNTRIES BY POPULATION (LIVE)

1	 China	1,440,817,495	11	 Japan	126,373,421
2	 India	1,383,681,661	12	 Ethiopia	115,752,095
3	 U.S.A.	331,525,771	13	 Philippines	109,978,335
4	 Indonesia	274,308,359	14	 Egypt	102,864,301
5	 Pakistan	222,070,822	15	 Vietnam	97,575,672
6	 Brazil	212,967,359	16	 D.R. Congo	90,321,629
7	 Nigeria	207,554,337	17	 Turkey	84,585,361
8	 Bangladesh	165,134,165	18	 Germany	83,855,872
9	 Russia	145,951,197	19	 Iran	84,285,558
10	 Mexico	129,300,251	20	 Thailand	69,846,958

Causes of Overpopulation

POOR USAGE OF CONTRACEPTIVES

- Poor planning on both partners parts can result in unexpected pregnancies
- In UK, 76% of women, aged between 16 and 49 used at least one form of contraceptive, leaving a quarter open to unexpected pregnancies
- WHO showed that this usage dropped to 43% in poverty stricken areas of the world leading to higher birth rates
- Most people lack knowledge on the usage of contraceptives. Some even consider it as a taboo.



Causes of Overpopulation

CHILD LABOR

- Child Labor is still extensively used in many parts of the world
- UNICEF estimates that approximately 150 million children are working primarily in countries that have fewer child labor laws
- Children considered as a source of income by many impoverished families
- Lose on various educational opportunities
- Oblivious of birth control and contraception



Causes of Overpopulation

MIGRATION/IMMIGRATION/REFUGEE

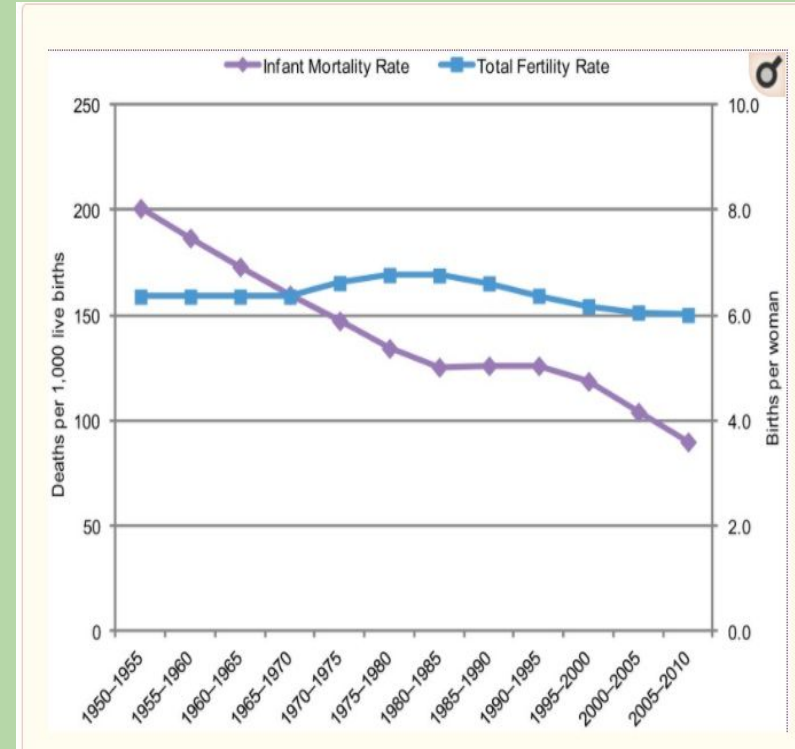
- Forced or unchecked migration can increase population to a point where resources are exhausted
- Immigrants may be escaping overpopulation in their own countries
- Only to contribute to the same issue in the countries they move to
- Migrations may be forced as in the case of many Black people in 1970s
- Urbanisation is growing; people moving to cities for a better quality of life



Causes of Overpopulation

REDUCED MORTALITY RATES

- Improvement in medical technology has led to lower mortality rates for serious diseases
- Particularly dangerous viruses and ailments such as measles, smallpox, and polio have been eradicated by such techniques
- People are living longer than ever before
- Birth rates have outnumbered death rates by the ratio of 2:1
- Recent COVID-19 outbreak may disrupt the statistics



Causes of Overpopulation

FERTILITY TREATMENT

- Improved fertility treatments have made it possible for more people to have children
- Number of women using various fertility treatments have been on a rise in recent times
- New sophisticated techniques such as *In Vitro Fertilization* (IVF) and surrogacy has made it possible for non-conceiving couples to have children



Effects of Overpopulation

WATER SCARCITY

- Overpopulation creates great demand for freshwater supplies
- Roughly only 1% of earth's water fresh and accessible, a major issue to ponder
- Estimates state that by 2025 human demand for freshwater will stand at approximately 70% of what is available on planet by that time
- Greater risk for those living in impoverished areas



Effects of Overpopulation

UNEMPLOYMENT

- Both overpopulation and unemployment rate are positively correlated
- The increase in population in a country decreases the available employment market
- More people need to work while the vacancies are limited
- Moreover, as more people get hired the standard wage for an average worker decreases
- Poverty is a direct consequence of such a situation if it ceases to exist



Effects of Overpopulation

WILDLIFE EXTINCTION

- Overpopulation has an adverse effect on wildlife
- As demand for land grows, the destruction of natural habitats too, such as forests
- Scientists warn that if present trends continues than 50% of world's wildlife species will be at risk of extinction
- Harvard biologist E.O. Wilson estimates that 30,000 species are being extinct each year



Effects of Overpopulation

RESOURCE CONSUMPTION

- Overpopulation also increases the amount of resources needed to keep people alive
- Food, water, and fossil fuels are all being consumed at greater rates, thus placing greater demands on producers and planet itself
- A study has shown that the world's ecosystem changed more rapidly in the later half of previous century than at any other point in history because of increased use of these resources

WE ARE CURRENTLY USING UP THE RENEWABLE RESOURCES OF 1.7 EARTHS — UNLESS THINGS CHANGE, WE'LL NEED THREE BY 2050



Source: Global Footprint Network

Effects of Overpopulation

ENVIRONMENTAL DEGRADATION

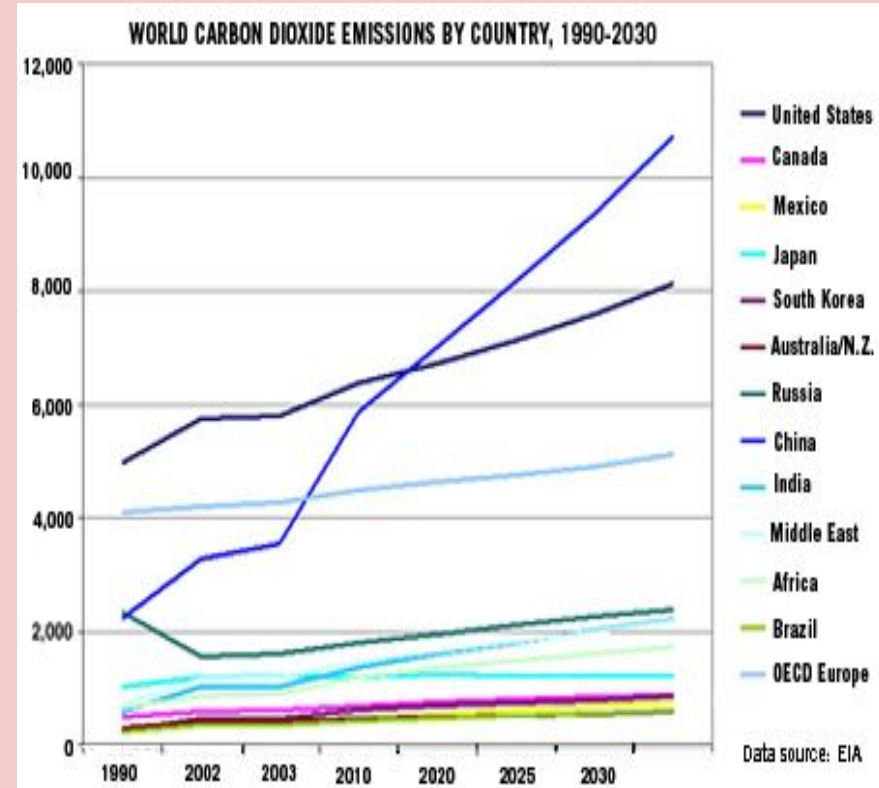
- Depletion of natural resources at a faster rate
- Negative environmental and economic outcomes
- Outcomes include deforestation, water pollution, global warming etc.
- Unequal population distribution
- Increased demand in resources (fuel and food)



Effects of Overpopulation

INCREASING CLIMATE CHANGE

- Overpopulation directly correlates to climate change as larger and populated nations like China and India continue to develop their industrial capacities
- Industrialization has increased the risk of global warming
- Greenhouse effect: Carbon emissions from industries and even the people (Carbon dioxide excretion) have promoted the 'carbon legacy'
- Air conditioners and aerosol sprays increase the rate of CFC (chlorofluorocarbons) that contribute to the ozone depletion



Combating Overpopulation

SEX EDUCATION AWARENESS

- United Nations Population Fund (UNFPA) has urged the need to promote sex education in poorer areas of the world
- Sex education will help people understand the consequences of unprotected and protected sex
- High school students in US and other western countries often deal with unexpected pregnancies
- Promoting the idea of contraception and usage of condoms
- Vasectomy and sterilization may be helpful in the worst case



Combating Overpopulation

FAMILY PLANNING AND CONTRACEPTION

- Many governments introduced family planning programs to control the population growth
- Educating men and women about contraception can have a big impact
- Iran introduced the national family planning program in 1989. Consequently, fertility rate fell from 5.6 births per woman to 2.6 in a decade
- Contraceptives should be made available and all the taboos regarding it should be rejected



Combating Overpopulation

WOMEN EMPOWERMENT

- Women should be encouraged to break free of the 'glass ceiling' that hinders their careers and goals
- Early marriages or child marriages should be abolished
- Government policies on promoting vocational training programs for women
- Women are equally likely to do jobs that were once considered to be only reserved for men e.g Kalpana Chawla, Benazir Bhutto
- WHO states that 225 million women living in developing countries would prefer to postpone giving birth but are not using any form of contraception



Combating Overpopulation

ONE-CHILD POLICY

- China implemented a one-child policy program in the middle of the 20th century
- The fertility rate fell from six births per woman in the 1960s to 1.5 in 2014
- However, the policy also resulted in many forced abortions and sterilizations
- Amnesty International states that the one-child policy disrupted traditional support structures for the elderly and led to a gender imbalance



Combating Overpopulation

TECHNOLOGICAL INNOVATION

- Recent advancements in food production technologies (GM foods and genetic engineering)
- Water purification techniques (Desalination plants can convert saltwater into distilled water suitable for human consumption or irrigation)
- Renewable power sources can be used instead of fossil fuels
- Clean Energy reduces the negative effects of climate change
- Solar and Wind power



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