

Project Report Template

1 INTRODUCTION

1.1 Overview

The world's population is more than three times larger than it was in the mid-twentieth century. The global human population reached 8.0 billion in mid-November 2022 from an estimated 2.5 billion people in 1950, adding 1 billion people since 2010 and 2 billion since 1998. The world's population is expected to increase by nearly 2 billion persons in the next 30 years, from the current 8 billion to 9.7 billion in 2050 and could peak at nearly 10.4 billion in the mid-2080s.

This dramatic growth has been driven largely by increasing numbers of people surviving to reproductive age, the gradual increase in human lifespan, increasing urbanization, and accelerating migration. Major changes in fertility rate have accompanied this growth. These trends will have far-reaching implications for generations to come.

The current population of India is 1,417,940,817 as of Saturday, April 22, 2023, based on Worldometer elaboration of the latest United Nations data.

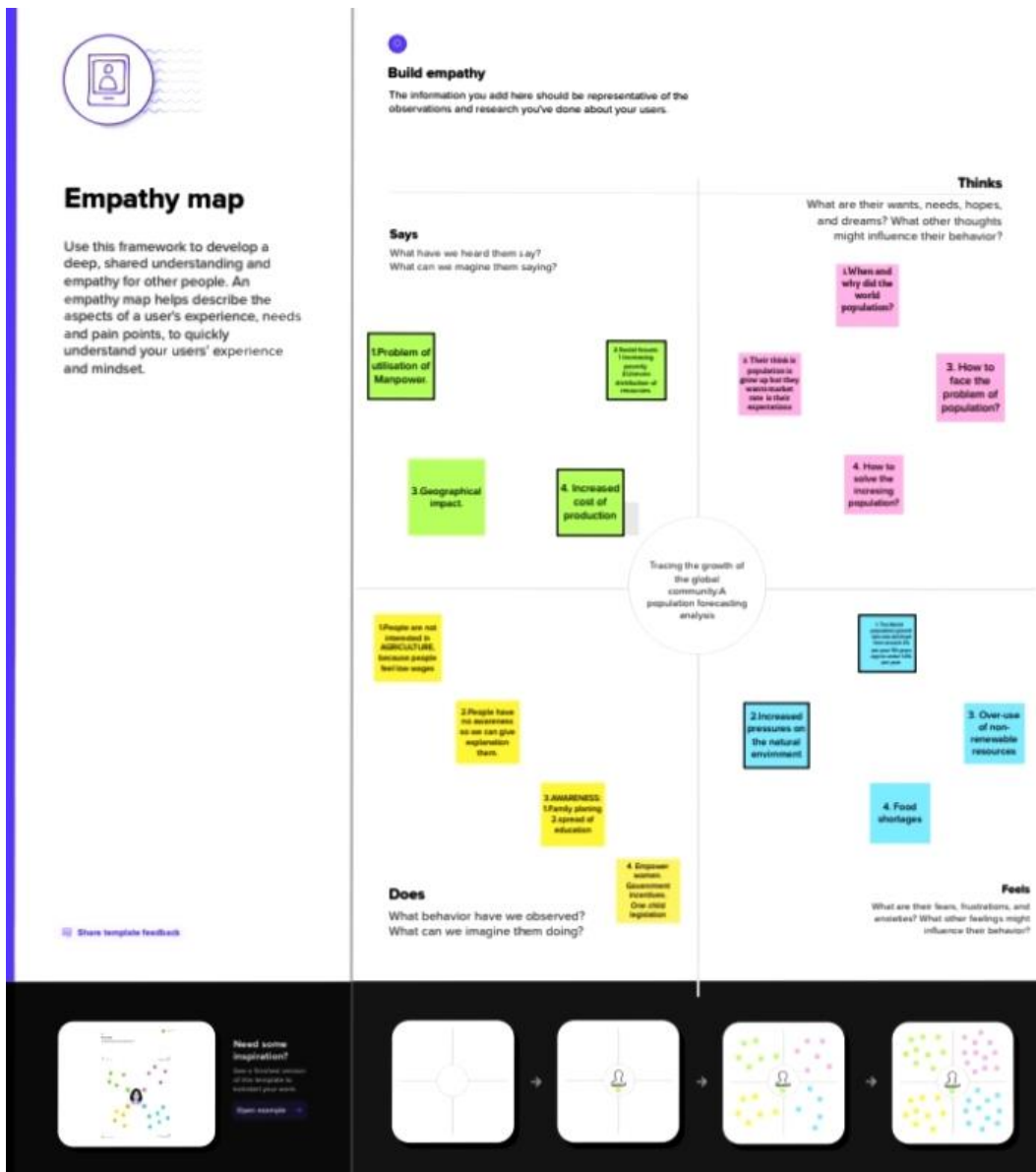
1.2 Purpose

The population is increasing according to every year census. This is causing population crisis economically and because of the land area. Our aim is how to fix it. Through this project we will learn about the population situation and how to fix it. We want to publish some lesson in the school text book about population and the population crisis in the future world. We should raise the age of marriage. Our aim is

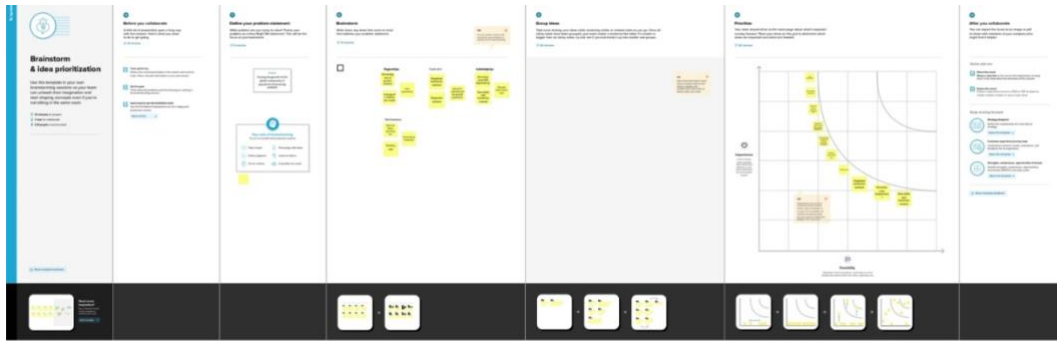
to keep the population in moderation through some of these methods.

2 Problem Definition & Design Thinking

2.1 Empathy Map



2.2 Ideation & Brainstorming Map



3.Result

<file:///C:/Users/ELCOT/Desktop/Tracing%20the%20growth%20of%20global%20community%20%20A%20population%20forecasting%20analysis/dash1.html>

3 ADVANTAGES & DISADVANTAGES

Advantages of population growth

1. More people leads to greater human capital. If there are more people, the probability of finding a genius like Einstein, Marie Curie, Beethoven increase. These exceptional people can lead to technological and cultural masterpieces which enrich our lives. The past 200 years have shown exponential growth in technical development and innovation. There are many factors behind this, but the world's growing population means we have a bigger pool of human capital and the possibility of these cutting edge discoveries increase.

2. Higher economic growth. Population growth will lead to economic growth with more people able to produce more goods. It will lead to higher tax revenues which can be spent on public goods, such as health care and environmental projects.

- The obvious evaluation is to say, the crucial thing is not GDP, but **GDP per capita**. If economic growth is at the same rate as population growth, average living standards will not increase. However, it is possible population growth can also improve per capita incomes. As the population increases, the economy can benefit from a bigger talent pool, economies of scale and greater specialisation. All this can enable higher per capita income, which we have seen in major developed economies.

3. Economies of scale. Farming and industry have been able to benefit from economies of scale, which means as the population grows, food output and manufacturing output have been able to grow even faster than population growth. For example, at the

turn of the nineteenth century, Thomas Malthus predicted population growth would lead to famine as we would be unable to feed the growing population. However, his dire predictions failed to materialise because he failed to understand, that the productivity of land, labour and capital could all increase more than proportionately. 300 years ago, most of the population worked on the land. Technological innovation and [economies of scale](#), mean productivity of land has vastly increased as farmers make use of mechanisation and economies of scale for increased food production.

4. The efficiency of higher population density. In terms of per capita carbon footprint, areas with a high population density are significantly more efficient than rural areas and places with a low population. When people live in densely populated areas, they are more likely to use public transport, live in apartment buildings which are easier to heat. In big cities, transport and the delivery of goods is much more efficient, whereas for low population densities, the average cost and environmental footprint are much higher. Therefore, population growth which leads to growth in city conurbations (which is a feature of global growth in past) is not as environmentally damaging as we may think. In [Green Metropolis](#), by David Owen he argues living in closer proximity in cities is a key aspect of sustainability

- Urban areas account for only 3% of the world's land surface. But, more than 50% of the population. By 2050, the [United Nations](#) predict this will rise to 70%. Therefore, population growth doesn't have to lead to an equivalent fall in natural habitats.

5. The improved demographic structure of society. Many western economies are now experiencing a falling population, with the result that their population demographic is being skewed to old, retired people. This is imposing costs on society as

we struggle to pay for health care and pensions. Moderate population growth helps to rebalance the population with a higher share of young, working people.

6. Critical mass. Higher populations can enable a critical mass of people to enable a sicker, more vibrant society. With low populations, there is less scope for diversity. But, when the population grows, it can enable the support of a broader cultural range of activities.

Disadvantages of population growth

1. Cost to the environment. Population growth exacerbates many of the existing environmental problems

- Trying to reduce carbon and methane emissions to reduce global warming is relatively more difficult as the population.
- There will be greater threat on natural habitats as a greater population has greater demand for housing and farmland. This will increase pressure to cut down forests to make way for farming and housing.
- Higher population will lead to a greater consumption of non-renewable resources, leading to a faster depletion of natural resources.
- Higher population will lead to greater pollution levels in air, water and land. Higher pollution is associated with a range of health issues, such as cancer and asthma. The pollution also harms animals and plants.
- Soil degradation. To feed a growing planet, we have seen serious degrading of farmland (according to UN estimates) about 12 million hectares of farmland every year. This is due to factors, such as overgrazing, use of chemicals, climate change and use of chemicals.

2. Congestion. Too many people in a small space will lead to various types of congestion. Road congestion is a major problem across the world. One study suggested [congestion](#) cost the EU €111bn (1% of GDP) in 2012. With population growth, the costs of congestion will only increase leading to time lost, more pollution and lost output.

3. Water shortages. Already up to 40% of the world's population face water scarcity and the risk of drought. According to the [UN](#) water shortages could lead to 700 million people at the risk of displacement. A growing population will put pressure on scarce water supplies and this is a factor behind many minor and major conflicts with countries having to find ways around the shortage of water.

4. Generating unsustainable waste. We are currently generating non-biodegradable rubbish that we are struggling to process. It tends to end in landfill, causing methane emissions and other toxic problems.

4 APPLICATIONS

Patterns of population distribution and density help us to understand the demographic characteristics of any area. The term population distribution refers to the way over the Earth's surface. Broadly 90 percentage of the world population lives in about 10 percent of its land area.

The 10 most populous countries of the world contribute about 60 percent of the world's population. of these six countries of Asia.

5 CONCLUSION

[India will soon overtake China to become the most populous country in the world](#)

China has been the world's most populous country for a long time: back in 1750, it had a population of 225 million, around 28% of the world population.⁷

By 2016, China had a population larger than 1.4 billion.

But China is soon to be overtaken by India. In the chart here we see historic and projected population by country, spanning from 10,000 BCE through to 2100. The projections – made by the UN's Population Division – suggest that by 2024, India will surpass China to become the world's most populous country.

Projections are always associated with a degree of uncertainty and this means the crossing point could be a few years earlier or later. But even within this degree of uncertainty, it's expected that India will become the most populous country within the next decade.

Rapidly declining fertility rates – from an average of just under 6 children down to around 2 children per woman – in India means its population growth has fallen significantly over the last few decades. This means that while it will be the most populous country for the rest of the century, it's expected to reach 'peak population' in the early to mid 2060s at around 1.7 billion before slowly falling in the second half of the centuries.

6 FUTURE SCOPE

Population projections show that the yearly number of births will remain at around 130 to 140 million per year over the coming decades. It is expected to decline slowly in the second half of the century. As the world population ages, the annual number of deaths is expected to continue to increase in the coming decades until it reaches a similar annual number as global births towards the end of the century.

As the number of births is expected to fall slowly and the number of deaths to rise, the global population growth rate will continue to fall. This is when the world population will stop increasing in the future.

7 APPENDIX

A. Source Code

