

1 INTRODUCTION

1.1 Overview

Visual representation of population analysis:

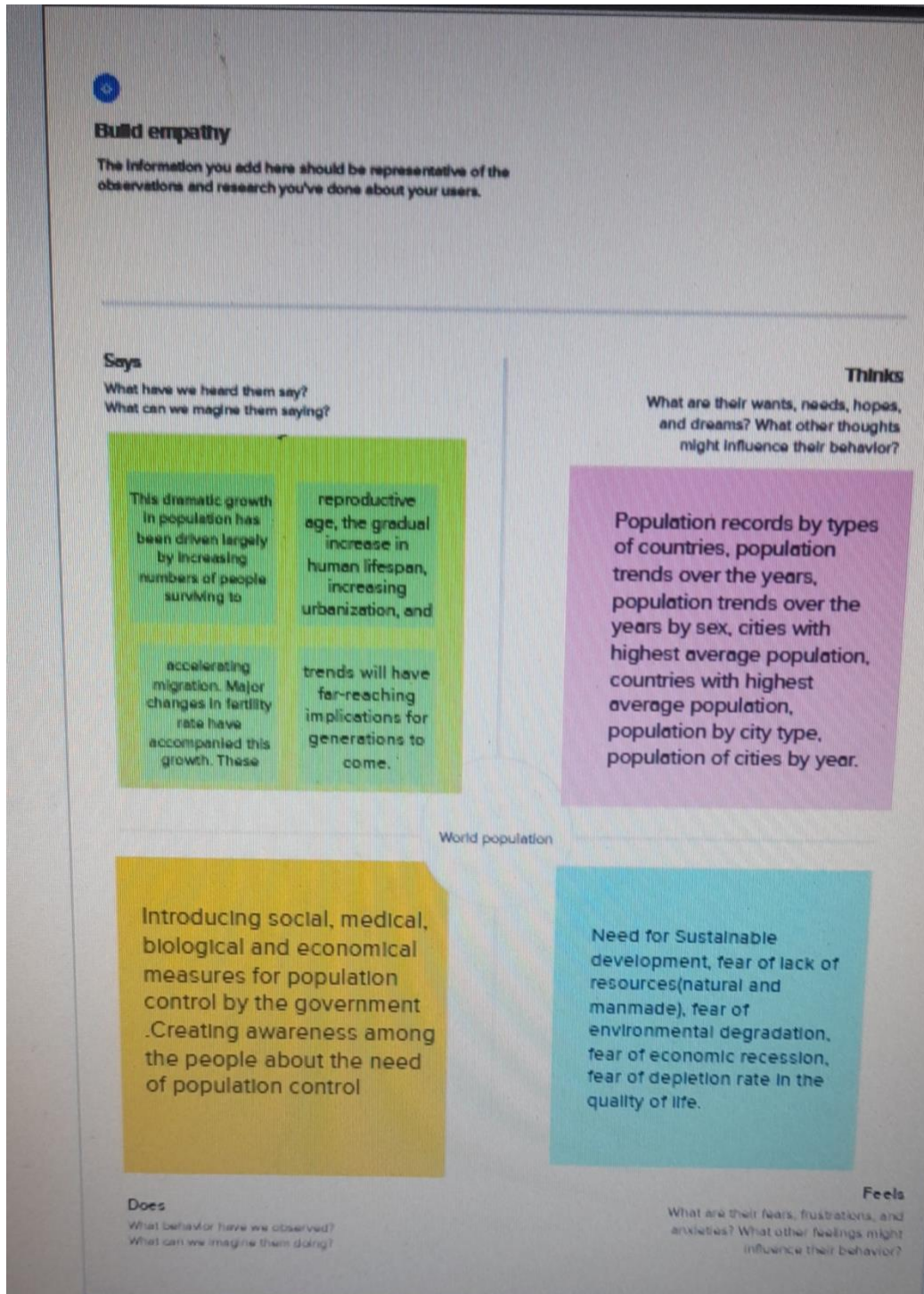
- Population records by types of countries
- Population trends over the years
- Population trends over the years by sex
- Cities with highest average population
- Countries with highest average population
- Population by city type
- Population of cities by year.

1.2 Purpose

In this project we have analyzed the various aspects of population trends throughout the world in different categories. The outcome can be used to improve population control according to geographical regions, according to time period, sex ratio and urbanization.

2 PROBLEM DEFINITION AND DESIGN THINKING

2.1 Empathy Map



2.2 Ideation and brainstorming map

1 Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

Problem: Lack of Sustainable development, lack of resources(natural and manmade), environmental degradation, economic recession, depletion rate in the quality of life due to drastic population growth.

Key rules of brainstorming

To run a smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

2 Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP
You can select a sticky note and in the pencil (push to sketch) icon to start drawing

Person 1

Empowering young girls and women in matters concerning them, such as marriage and childbirth, is a major step in curbing population growth.

Person 2

Educated men and women acknowledge the hardships of having a large family and understand the consequences of the growing population.

Person 3

Government incentives are an efficient policy measure in fighting issues arising from population growth. Providing the working class with financial, educational, or even medical incentives can go a long way in controlling the birth rates.

Person 4

Apart from these, improving employment opportunities, and advancements in medical facilities, particularly in reproductive healthcare, can also help reduce the rate of population and solve the problem of population explosion in the country and beyond.

Person 5

Person 6

Person 7

Person 8

Different countries have implemented various policies to manage population, which can be divided into two categories: pro-natalist and anti-natalist. Pro-natalist policies are implemented in countries with a low population that is insufficient to utilise available resources. These policies aim to increase the birth rate for various reasons, such as strengthening the army, increasing economic production, and enhancing national pride. Under these policies, childbirth is encouraged and abortions are discouraged. Parents or women who give birth may also receive additional social security benefits. Currently, Germany, Italy, Japan, Sweden, France, Singapore, the UK, and Hungary are following pro-natalist policies.

Anti-natalist policies, on the other hand, are implemented in countries with high populations and limited resources. These policies aim to reduce the birth rate through various means. They have taken both direct and indirect methods to control the population. Direct methods include the promotion of the use of contraceptives and abortions. Indirect methods include measures of women empowerment and promoting women employment so that they become more career-oriented and avoid giving birth to children. Countries that have adopted anti-natalist policies in the past include China and India.

TIP
Ask participants to try to think outside the box to find, unusual, original, and imaginative important ideas as they brainstorm.

20 minutes

TIP
Participants can use their sketch to push or refuse ideas. Notes should go on the grid. The facilitator can confirm the idea by using the laser pointer, holding the 30-second timer, and using the 30-second timer.

Minimum age of marriage	Raising the status of women	Spread of Education
Adoption	Social Security	More employment opportunities
Providing Incentives	Medical Facilities	Legislative Actions
	Spreading awareness	

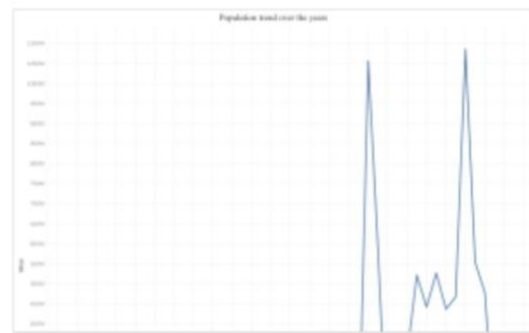
3 RESULT

- Population growth has been drastic in the African, European and Asian countries
- Population has started to increase exponentially in the 21st century
- Female population has increased more than the male one
- Urban cities have more population than rural areas due to immigration
- China and India have the highest population among the world
- Overall population has increased over the years



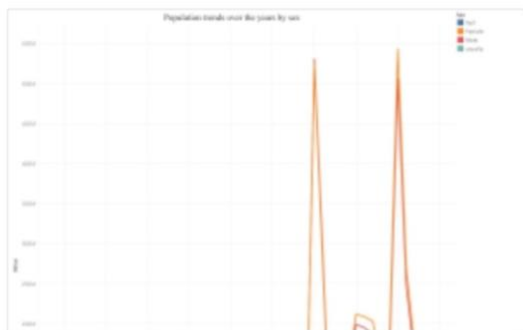
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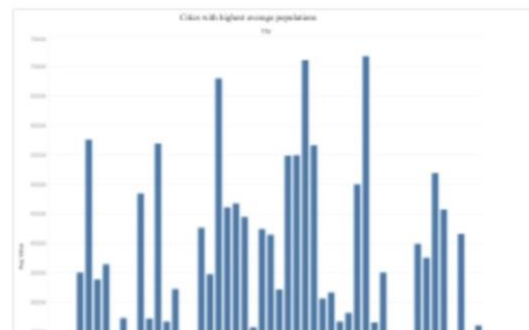
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Sheet 3

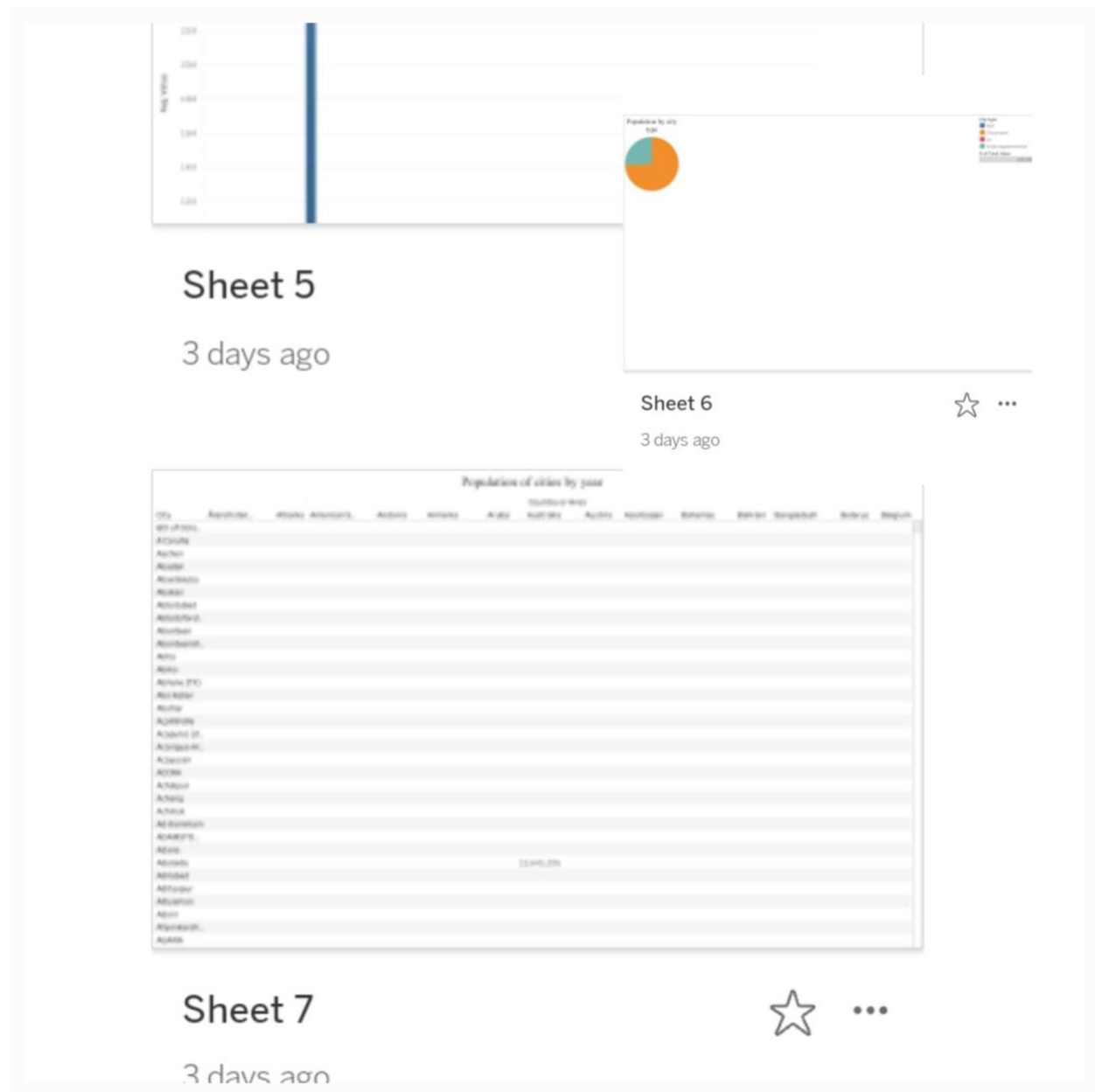
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4 ADVANTAGES AND DISADVANTAGES

4.1 Advantages

- Avoid overpopulation
- Ensure sustainability on our planet
- Mitigation of the resource depletion issue
- Reduction in pollution levels

- Protection of natural habitats
- Reduction in global warming
- Reduction in poverty
- Mitigation of illegal actions
- Fewer unwanted children
- Better treatment of children
- Changes in the traditional role of women

4.2 Disadvantages

- Ethical concerns
- Religious concerns
- Interference with freedom and human rights
- Only effective if there is a global agreement
- Differences in countries' population structures
- Reduction in genetic diversity
- Introduction implies large financial burden for one generation
- Migration

5 APPLICATIONS

Demographic analysis is needed in all stages of the planning process for both new and revised plans. Population analysis is needed to identify problems and community needs, establish goals and objectives, assess alternative courses of action, allocate resources for plan implementation, and evaluate the ability of the plan to achieve goals and objectives.

6 CONCLUSION

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.

7 FUTURE SCOPE

- Rapid population increase can exacerbate the challenge of ensuring that future development is sustainable and inclusive. Achieving the Sustainable Development Goals, particularly those related to health, education and gender equality, can contribute to slowing global population growth.
- In countries with relatively high levels of fertility today, investments in education and health can significantly increase the positive but temporary economic impact of a favourable age distribution created by a sustained decline in fertility.
- More affluent countries bear the greatest responsibility for moving rapidly to achieve net-zero emissions of greenhouse gases and for implementing strategies to decouple human economic activity from environmental degradation.
- Wealthy countries and the international community can support low-income and lower-middle-income countries by providing the necessary technical and financial assistance so that their economies can grow rapidly using technologies that will minimize future greenhouse