TRACING THE GROWTH OF GLOBAL COMMUNITY :A FORECASTING POPULATION ANALYSIS

INTRODUCTION

1.1 OVERVIEW:

Population growth is the increase in the number of humans on Earth. For most of human history our population size was relatively stable. But with innovation and industrialization, energy, food, water, and medical care became more available and reliable.

From 1960 to 2021 the population of India increased from 450.55 million to 1.41 billion people. This is a growth of 212.4 percent in 61 years. The highest increase in India was recorded in 1974 with 2.36 percent. The smallest increase in 2021 with 0.80 percentage. Population growth alongside increased consumption is a driver of environmental concerns, such as biodiversity loss and climate change, due to overexploitation of natural resources for human development.

International policy focused on mitigating the impact of human population growth is concentrated in the Sustainable Development Goals which seek to improve the standard of living globally while reducing the impact of society on the environment while advancing human well being.

1.2 PURPOSE:

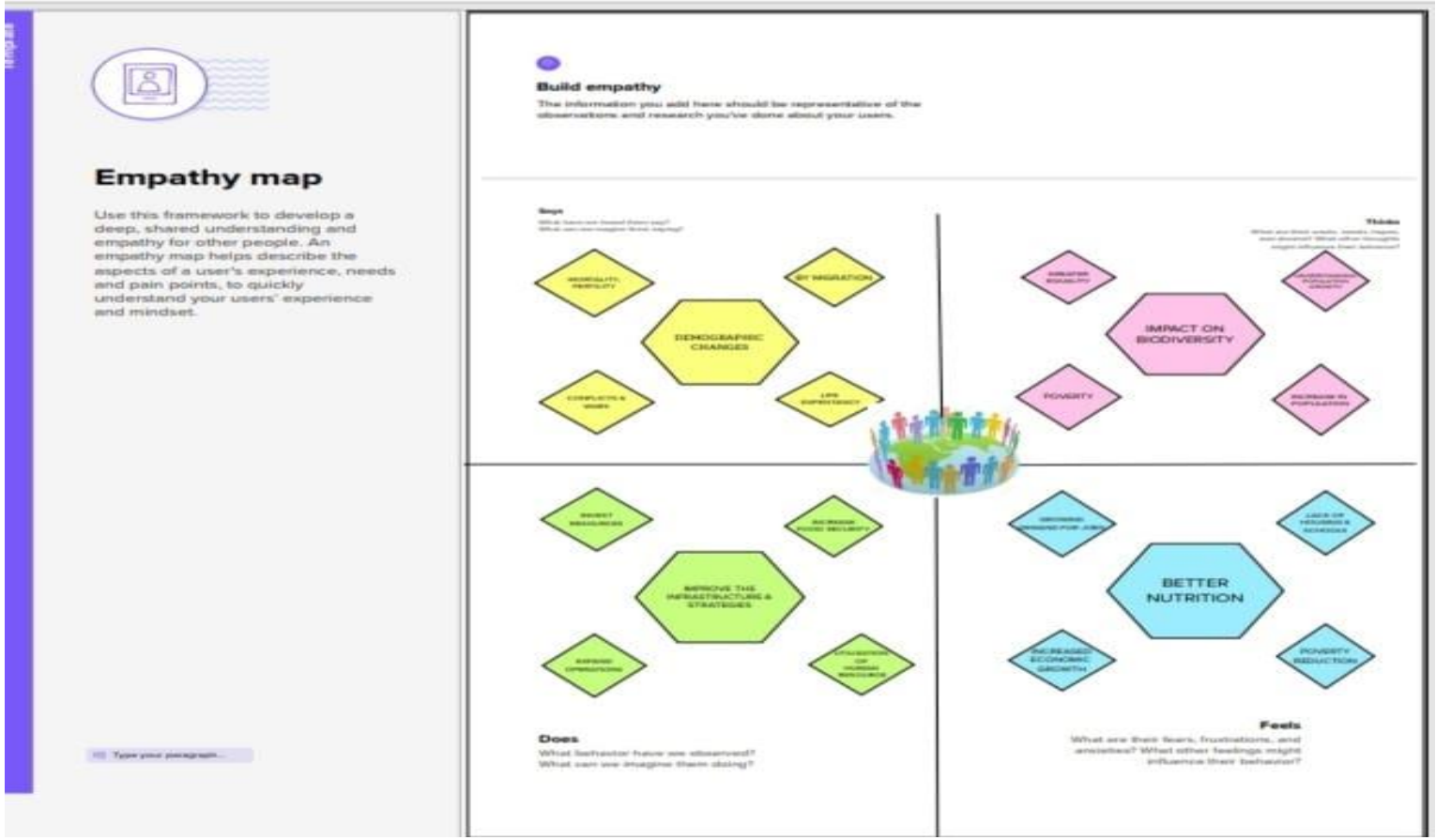
A youthful population presents an opportunity for accelerated economic growth on a per capita basis, if countries where the population is growing rapidly achieve a substantial and sustained decline in the fertility level, leading to an increased concentration of the population in the working-age range.

The increased share of population in the working ages can support an accelerated rise in income per capita, a phenomenon referred to as the “demographic dividend”. Investments in education and health and the promotion of full and productive employment for all, including for women, can greatly expand the positive economic impact of a favourable age structure created by a sustained decline in fertility.

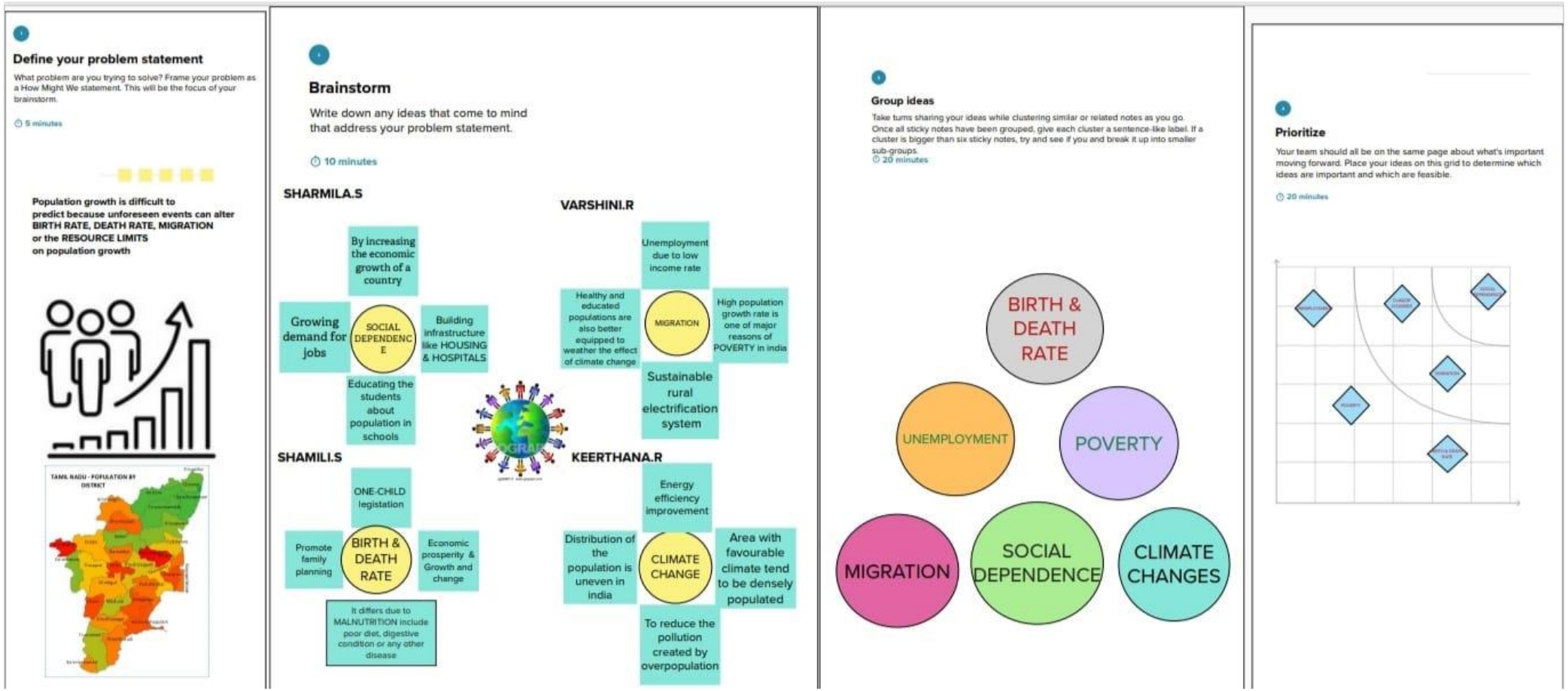
However, many countries that are ready demographically to benefit from the dividend lag in these critical investments From a demographic perspective, a youthful age structure ensures that the global population will continue to grow even if average fertility drops immediately to the “replacement level”, at which each generation bears the exact number of children needed to replace itself. Indeed, fully two thirds of the anticipated increase in global population between 2020 and 2050 will be driven by the momentum of growth embedded in the relatively youthful age distribution of the world’s population in 2020

PROBLEM DEFINITION AND DESIGN THINKING:

2.1 EMPATHY MAP:

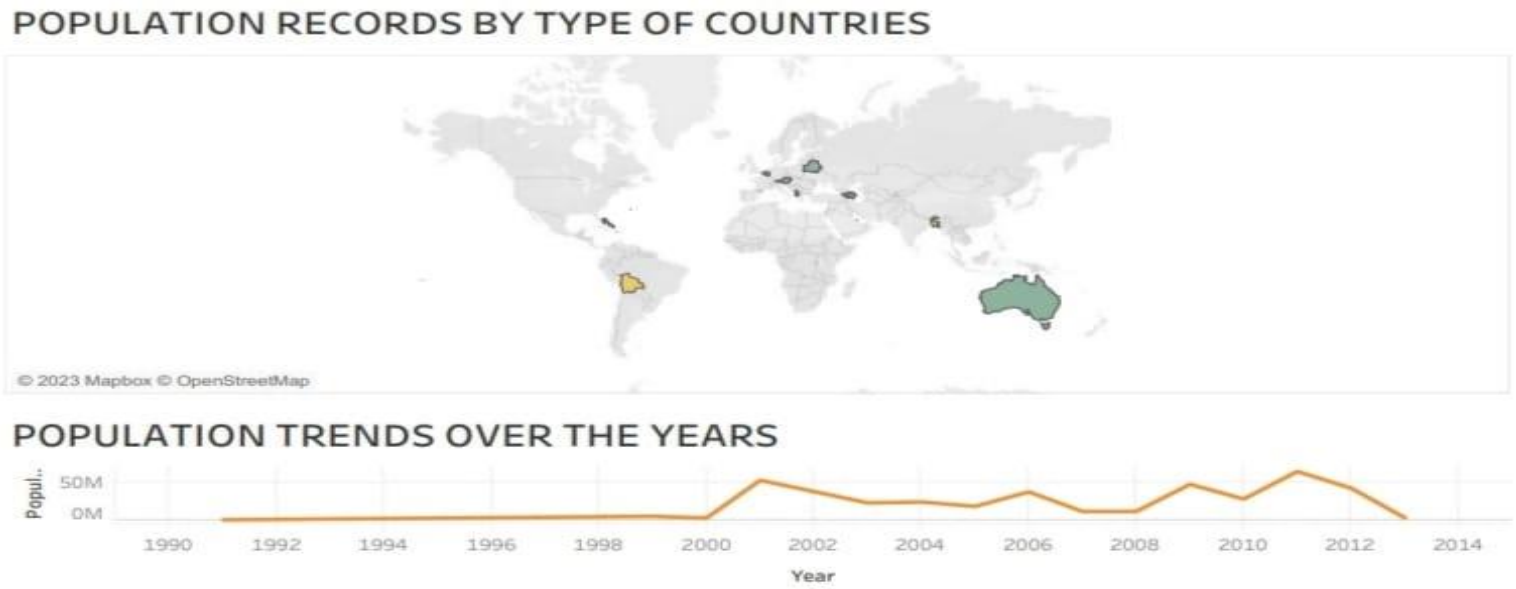


2.2 IDEATION AND BRAINSTORMING MAP

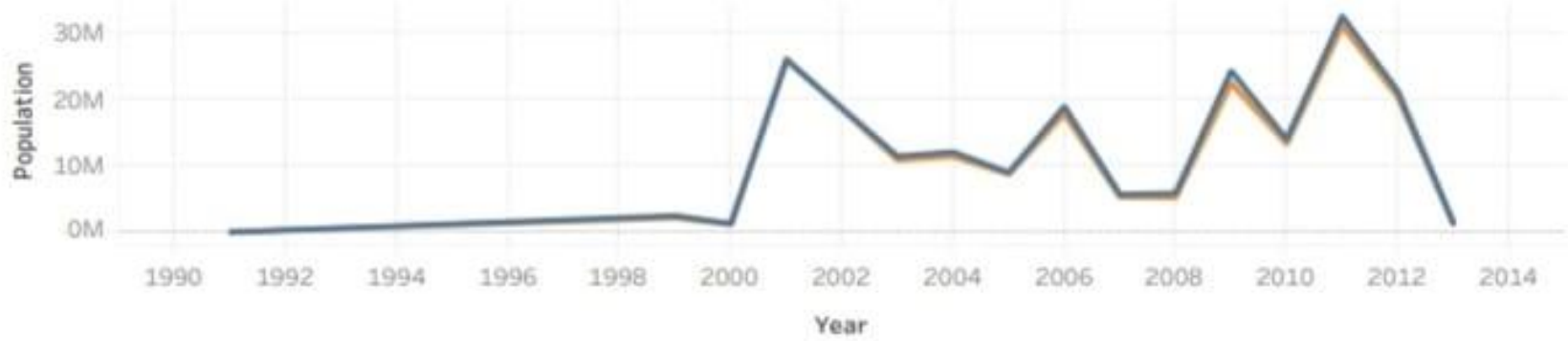


RESULT:

STORY & DASHBOARD:



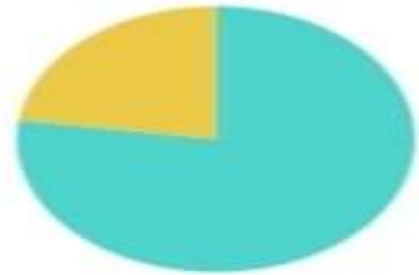
POPULATION TRENDS OVER THE YEAR BY SEX



CITIES WITH HIGHEST AVERAGE POPULATIONS

COUNTRIES WITH HIGHEST AVERAGE POPULATION

POPULATION BY CITY TYPE



POPULATION OF CITIES BY YEAR

City	ae and Isla...	Albania	American S...	Andorra	Armenia	Aruba	Australia	Austria	Azerbaijan	Bahamas	Bahrain
							Country or Area				
Adelaide							13,645,206				
Albury-Wod...							586,088				
Anderlecht											
ANDORRA L...				188,738							
Antwerpen ...											
BAKU									15,829,138		
Baranovichi											
Barisal											
Bobruisk											
Bogra											
Borisov											
Brahmanba...											
Bregenz								461,951			
Brest											

ADVANTAGES AND DISADVANTAGES

Advantages of population growth:

- Increased human capital
- More scope for innovation, invention and Creative genius
- Economies of scale from higher population.
- Enables specialization
- Higher population densities more efficient

Disadvantages of population growth:

- Increases pressures on natural environment
- Water shortages
- Increases pollution
- Exacerbates global warming
- More waste creation
- Congestion
- Over-use of non- renewable resources

APPLICATION:

There are some applications associated with population growth, including, human evolution studies, the population growth is helped to study and observe the advancements in both anatomy and physiology. A growing population can be a result of many advantageous or beneficial traits or characteristics. Population growth or any kind of evolution in a population can also provide information on how the species changed and evolved with time. In the case of pest control, the uses of pesticides also affect the pests to modify genetically, so they can increase their population in the presence of pesticides.

Population growth also plays a vital role in the prediction of the endangered and/or threatened species or organisms and one can determine their numbers that are present today. Overpopulation has pushed India to its breaking point.

Seventy percent of India's wealth is controlled by 57 billionaires. Poverty, a lack of free medical care, a lack of social security, and poor living circumstances are all consequences of economic inequality Rapid population growth makes it more difficult for low-income and lower-middle-income countries to afford the increase in public expenditures on a per capita basis that is needed to eradicate poverty, end hunger and malnutrition, and ensure universal access to health care, education and other essential services. Too much and speedy growth of the population would strain the natural resources and lead to starvation, health ailments, and even death. On the other hand, an increase in population also has a few positive effects.

This is seen in terms of an economic boost, low mortality rate, increased innovation, etc Methods used to control wildlife populations include hunting/culling, reintroducing predators, and sterilization /neutering. Methods to control the human population include increased access to contraception, family planning, wealth redistribution, and one-child policies. Limiting factors are environmental factors that keep a population's numbers from growing out of control. Some examples of limiting factors are food, water, living space, and disease. The maximum number of any one organism an environment can support is the carrying capacity for that ORGANISM.

CONCLUSION

The Earth's current population is almost 7.6 billion people, and it is expanding. It is expected to surpass 8 billion people by 2025, 9 billion by 2040, and 11 billion by 2100. The population is quickly increasing, far surpassing our planet's ability to maintain it, given existing habits. The most important solutions to overpopulation are education and public awareness. Overpopulation will become less likely as society becomes more aware and aware. Despite significant government efforts to control the population, much more needs to be done Development does not just involve the biological and physical aspects of growth, but also the cognitive and social aspects associated with development throughout life. The past five decades of population growth in India were accompanied by considerable progress. Living standards and life expectancy rose; the proportion of poor people fell from over 50% to just over 30%, although the actual numbers virtually doubled. Fertility fell from over 6 children per couple to about 3.2 today. The number of individuals living within that specific location determines the population density, or the number of individuals divided by the size of the area. Population density can be used to describe the location, growth, and migration of many organisms. Since the population grows through geometric progression and the food production increases through arithmetic progression, we can conclude that the population will grow more quickly than the food supply.

FUTURE SCOPE

Population projections are attempts to show how the human population statistics might change in the future. These projections are an important input to forecasts of the population's impact on this planet and humanity's future well-being. Models of population growth take trends in human development, and apply projections into the future. These models use trend-based-assumptions about how populations will respond to economic, social and technological forces to understand how they will affect fertility and mortality, and thus population growth.

The 2019 projections from the United Nations Population Division showed that annual world population growth peaked at 2.1% in 1968, has since dropped to 1.1%, and could drop even further to 0.1% by 2100, which would be a growth rate not seen since pre-industrial revolution days. Based on this, the UN projected that the world population, 8 billion as of 2022, would level out around 2100 at 10.9 billion, assuming a continuing decrease in the global average fertility rate from 2.5 births per woman during the 2015–2020 period to 1.9 in 2095–2100, according to the medium-variant projection.