



INDIA AND CHINA POPULATION GROWTH

AUTHOR – RUPIKA GOUNDLA

STUDENT AT O.P JINDAL GLOBAL UNIVERSITY, SONIPAT

BEST CITATION – RUPIKA GOUNDLA, INDIA AND CHINA POPULATION GROWTH, *ILE JOURNAL OF POLITICAL STUDIES (ILE JPS)*, 1 (1) of 2023, Pg. 12-16, APIS – 3920 – 0054 | ISBN – 978-81-964391-3-2

Abstract

Increased demand for daily life necessities like food, housing, health, water and increased risk for large-scale disasters like covid-19 pandemic and environmental degradation is just some of the effects caused by overpopulation. Overpopulation also leads to many economic problems like huge unemployment which further leads to increased inequalities in income distribution. The rapid growth of population is a huge hinderance to the economic and social development of a country. The factors like better health facilities lead to decrease in mortality rates has contributed to the increased population growth. Overpopulation has created a lot of pressure on the availability of natural resources leading to the over extraction of these resources which is further leading to the degradation of the natural resources. It created unemployment further leading to poverty and due to increased migration to urban areas, it led to slums with congested areas. In this paper, the primary objective to compare the most rapidly growing countries in population which are India and China through three factors contributing to this population growth which are age structure, fertility rates and regional disparities. As India and China are the only countries in the world which have a population of more than one billion, they are taken into consideration to compare with age diversity and fertility rates statistics. The dynamics of the age structure, fertility rates and reginal differences are examined throughout the article.

Keywords – India, China, Fertility Rates, Age-Structure, Regional Differences

I. Introduction

In population ecology, population growth can be defined as a change in the number of members of a certain plant or animal species in a particular location during a particular time period. The global population size has rapidly increased because of continuous increasing innovation and industrialization.¹³ Population explosion which can be defined as a sudden increase in the number of individuals in a specific area at a given time which has taken place due to many factors like better medical

care, more available resources.¹⁴ India has faced the problem of population explosion from 1951 to 1981 with an average annual growth rate of 2.2 percent.¹⁵ According to Inter-American Development Bank (IDB) estimates, there are now 1.330 billion people in China and 1.173 billion in India, and population growth rates have been consistently higher in India than in China since the early 1970s and will remain so for years to

¹³ Population growth Understanding Global Change, <https://ugc.berkeley.edu/background-content/population-growth/#:~:text=Population%20growth%20is%20the%20increase,became%20more%20available%20and%20reliable> (Accessed: 01 July 2023).

¹⁴ Explain the term population explosion, byju, <https://byjus.com/question-answer/explain-the-term-population-explosion/> (Last Accessed on 1th July, 2023 – 06.35 am).

¹⁵ Testbook, [solved] which period is referred to as the period of population expl, Testbook, <https://testbook.com/question-answer/which-period-is-referred-to-as-the-period-of-popul-6066de86d10908d1ca296ac6#:~:text=The%20correct%20answer%20is%201951%2D1981.&text=The%20decades%201951%2D1981%20are,as%20high%20as%202.2%20percent> (Last Accessed on 1th July, 2023 – 02.56 pm).

come. India's population is projected to grow through at least 2050 (when it will be 1.656 billion), surpassing China in 2025, whereas China's population is projected to reach a maximum, of 1.395 billion, in 2026.¹⁶ This paper aims to draw a comparison between the two most populated countries in the world, India and China, with the three of the many factors like fertility rates, regional differences and age structure contributing to it. At the end, the future aspects of both the countries are examined so as to know the necessary measures to control or face the future problems. It is said that though China will remain world's most populated country in the present year, India will cross China to become the world's populated country. It is important to acknowledge the factors contributing to India to surpass China as the most populated country in the coming years. The constantly growing human population has caused many issues like increased extraction and burning of fossil fuels which to the reduction of the quality of the environment and also for massive food production, farmers started huge cultivation which has led to the degradation of the soil and also led to the increased consumption of meat which is causing high degree of fishing.

II. Total Fertility Rate

The fertility rate can be defined as at a given age is the number of children born alive to women of that age during the year as a proportion of the average annual population of women of the same age.¹⁷ Fertility rate is considered to be the better measure compared to the measure of birth rates. The Inter-American Development Bank (IDB) estimates that the total fertility rate in China decreased to 1.5 children per woman in 2003 but projects that it will start to increase toward 1.6 when approaching to 2035. As a result, throughout the period, India's the total fertility rate remains

higher than China's, though the difference between the two countries will decrease over time. By 2025, women in India are projected to average 0.65 children more than those in China; and in 2050 the difference is projected to be 0.45 children.¹⁸ The decline in the fertility rate in China is due the raising age of marriage in the Marriage Acts of China which resulted in the childbearing postponement among women of all age groups. And also, due the dissemination of education and women empowerment among the societies lead to many women having their career as their first priority than childbearing which further resulted in the declining of the fertility rate of China. According to the estimates of the World Bank, China's fertility rate that is the total number of births per women in the year 2021 is 1.2 as compared to 2.5 in the year 1990. In India, according to the estimates of the World Bank, fertility rate that is the total number of births per women in the year 2021 is 2 as compared to 4 in the year 1990.¹⁹ In India, high spread of education and women development, increased access of resources for women for them to become financial independent and choosing to career over family resulting in late marriage further leading to a decline in total fertility rates. The development women and them becoming independent is one of the main reasons as to why there is a decline in the fertility rates. Other reasons as why a decline the fertility rates are occurring because of increased available facilities like contraceptives and better family planning. The decline the total fertility rate in China is comparatively better than India is because of the policies of China like one-child policy, though these policies were removed, still couples in China are deciding to have less number of children as this would help them financially better to raise their children. As it is

¹⁶ Wolf, Charles, et al. "Population Trends in China and India: Demographic Dividend or Demographic Drag?" China and India, 2025: A Comparative Assessment, RAND Corporation, 2011, pp. 7–36.

¹⁷ Fertility Rate, Insec, <https://www.insec.fr/en/metadonnees/definition/c1872> (Last Accessed on 1th July, 2023 – 06.55 am).

¹⁸ Wolf, Charles, et al. "Population Trends in China and India: Demographic Dividend or Demographic Drag?" China and India, 2025: A Comparative Assessment, RAND Corporation, 2011, pp. 7–36.

¹⁹ Yang, S., Jiang, Q. and Sanchez-Barricarte, J.J, China's fertility change: An analysis with multiple measures - population health metrics, BioMed Central, <https://pophealthmetrics.biomedcentral.com/articles/10.1186/s12963-022-00290-7> (Last Accessed on 1th July, 2023 – 12.35 pm).

Regional geography can be defined as a field of study which is concerned with understanding of the spatial that is the regional difference and uniqueness and temporal that is the regional change and development aspects of the increasingly complex world we inhabit.²⁵ As China and India are huge countries, they are divided into many regions with different regional traditions and cultures. Both the countries have a massive amount of internal migration because of urbanisation. Many are migrating from rural areas to urban areas in search of increased quality of lives and opportunities that are easily available in urban areas compared to rural areas. According to the report released by Ministry of Statistics and Program Implementation in June 2022, all-India migration rate was 28.9 percent for July 2020–June 2021, with a 26.5 percent migration rate in rural areas and 34.9 percent in urban areas. With females recorded a higher share of migration rate of 47.9 percent and males recording a migration rate of 10.7 percent.²⁶ In China, The current net migration rate for China in 2023 is -0.256 per 1000 population, a 0.79 percent increase from 2022. The net migration rate for China in 2022 was -0.254 per 1000 population, a 0.79 percent increase from 2021. The net migration rate for China in 2021 was -0.252 per 1000 population, a 1.2 percent increase from 2020.²⁷

V. Conclusion

India is expected to surpass China in terms of population size in the next few years. They are many factors like differences in age-structure and decline in total fertility rate in both the countries which are contributing to the increase

in population. It can be considered that huge amount of increase in population is the one of the reasons why many people in India is still in poverty and is considered to be economically and socially backward.

VI. Reference

1. Diva Rai et al, Current and global issues in international law in the last 5 years, iPleaders, <https://blog.ipleaders.in/current-and-global-issues-in-international-law-in-the-last-5-years/> (Last Accessed on 1th July, 2023 – 10.09 am).
2. Person, Overpopulation: Cause and effect, Population Media Center, <https://www.populationmedia.org/the-latest/overpopulation-cause-and-effect#:~:text=More%20people%20mean%20an%20increased,large%2Dscale%20disasters%20like%20pandemics> (Last Accessed on 1th July, 2023 – 11.15 pm).
3. Population growth Understanding Global Change, <https://ugc.berkeley.edu/background-content/population-growth/#:~:text=Population%20growth%20is%20the%20increase,became%20more%20available%20and%20reliable> (Accessed: 01 July 2023).
4. Explain the term population explosion, byju, <https://byjus.com/question-answer/explain-the-term-population-explosion/> (Last Accessed on 1th July, 2023 – 06.35 am).
5. Testbook, [solved] which period is referred to as the period of population expl, Testbook, <https://testbook.com/question-answer/which-period-is-referred-to-as-the-period-of-popul--6066de86d10908d1ca296ac6#:~:text=The%20correct%20answer%20is%201951%2D1981.&text=The%20decades%201951%2D1981%20are,as%20high%20as%202.2%20percent> (Last Accessed on 1th July, 2023 – 02.56 pm).

²⁵ Regional difference, Regional Difference - an overview | ScienceDirect Topics, <https://www.sciencedirect.com/topics/social-sciences/regional-difference#:~:text=As%20a%20field%20of%20study,increasingly%20complex%20world%20we%20inhabit> (Last Accessed on 1th July, 2023 – 07.47 am).

²⁶ Drishti IAS, India's internal migration, Drishti IAS, <https://www.drishtiias.com/daily-updates/daily-news-analysis/india-s-internal-migration> (Last Accessed on 1th July, 2023 – 03.24 am).

²⁷ China net migration rate 1950-2023, MacroTrends, <https://www.macrotrends.net/countries/CHN/china/net-migration#:~:text=The%20current%20net%20migration%20rate,a%201.2%25%20increase%20from%202020> (Last Accessed on 1th July, 2023 – 02.45 am).

6. Fertility rate, total (births per woman) – China, India, World Bank Open Data, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=CN-IN> (Last Accessed on 1th July, 2023 – 03.57 am).
7. Yang, S., Jiang, Q. and S & Barricarte, J.J, China's fertility change: An analysis with multiple measures – population health metrics, BioMed Central, <https://pophealthmetrics.biomedcentral.com/articles/10.1186/s12963-022-00290-7> (Last Accessed on 1th July, 2023 – 12.35 pm).
8. Team, C., Fertility Rate in India: Reasons for decline, ClearIAS, <https://www.clearias.com/fertility-rate-india/> (Last Accessed on 1th July, 2023 – 01.48 am).
9. Fertility Rate, Insee, <https://www.insee.fr/en/metadonnees/definition/c1872> (Last Accessed on 1th July, 2023 – 06.55 am).
10. Published by C. Textor and 10, M, China: Working-age population 1980-2050, Statista, <https://www.statista.com/statistics/1219212/china-number-of-working-age-persons/> (Last Accessed on 1th July, 2023 – 04.56 am).
11. Libretexts, 45.4C: Age structure, population growth, and economic development, Biology LibreTexts, [https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_\(Boundless\)/45%3A_A_Population_and_Community_Ecology/45.04%3A_Human_Population_Growth/45.4C%3A_Age_Structure_Population_Growth_and_Economic_Development#:~:text=age%20structure%3A%20The%20compositio](https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(Boundless)/45%3A_A_Population_and_Community_Ecology/45.04%3A_Human_Population_Growth/45.4C%3A_Age_Structure_Population_Growth_and_Economic_Development#:~:text=age%20structure%3A%20The%20compositio) (Last Accessed on 1th July, 2023-05.56 am).
12. Regional difference, Regional Difference – an overview | ScienceDirect Topics, <https://www.sciencedirect.com/topics/social-sciences/regional-difference#:~:text=As%20a%20field%20of>
13. Raghavan, T.S, Imminent end of 'demographic dividend': Share of India's working age population set to fall by 2036, ThePrint <https://theprint.in/india/imminent-end-of-demographic-dividend-share-of-indias-working-age-population-set-to-fall-by-2036/1451773/> (Last Accessed on 1th July, 2023 – 07.45am).
14. Drishti IAS, India's internal migration, Drishti IAS, <https://www.drishtias.com/daily-updates/daily-news-analysis/india-s-internal-migration> (Last Accessed on 1th July, 2023 – 03.24 am).
15. China net migration rate 1950-2023, MacroTrends, <https://www.macrotrends.net/countries/CHN/china/net-migration#:~:text=The%20current%20net%20migration%20rate,a%201.2%25%20increase%20from%202020> (Last Accessed on 1th July, 2023 – 02.45 am).
16. Wolf, Charles, et al. "Population Trends in China and India: Demographic Dividend or Demographic Drag?" China and India, 2025: A Comparative Assessment, RAND Corporation, 2011, pp. 7-36.

RECENT PUBLICATION FROM INSTITUTE OF LEGAL EDUCATION

(May utilization for reference/ bibliography)

1. Prasanna, S., et al. EMPOWERMENT AND EQUALITY NAVIGATING HUMAN RIGHTS LAW IN A COMPLEX WORLD. Institute of Legal Education, 2023. Access Here - <https://scholar.google.com/scholar?cluster=8073531615629308019>
2. PRASANNA, S., and P. LAVANYA. "NAVIGATING THE MAZE: UNDERSTANDING KEY DATA PRIVACY AND SECURITY LAWS WORLDWIDE." Access Here - <https://scholar.google.com/scholar?cluster=14275456488561985070>
3. Gopala, Bhagyamma. "A constitutional imperative for gender equality and dignity: a discourse on menstrual leave in India." ILE Constitutional Review 2 (2023). Access Here - <https://scholar.google.com/scholar?cluster=14542656713228494739>
4. Tulsyan, Aryan. "Cannabis and the constitution:'High time for amending the NDPS act?." ILE Human Rights Law Review 1.1 (2022). Access Here - <https://scholar.google.com/scholar?cluster=1620071720487117886>
5. SINGH, UJJWAL. "CUSTODIAL VIOLENCE IN MODERN INDIA." Journal of the Indian Law Institute 36.3 (1994). Access Here - <https://scholar.google.com/scholar?cluster=4641833531038214506>
6. Azizfan, Sayed Malik Shah. "A BLUEPRINT FOR SUSTAINABLE POVERTY ALLEVIATION AND UNEMPLOYMENT MITIGATION: SYNTHESIZING SOCIOECONOMIC TRANSFORMATION IN AFGHANISTAN." Access Here - <https://lspr.iledu.in/wp-content/uploads/2023/06/V1I116.pdf>
7. PRASANNA, S., and P. LAVANYA. "PROTECTING PERSONAL DATA: A COMPREHENSIVE GUIDE TO DATA PRIVACY REGULATION." Access Here - <https://ijclp.iledu.in/wp-content/uploads/2023/11/V1I114.pdf>
8. PRASANNA, S., and P. LAVANYA. "NAVIGATING THE MAZE: UNDERSTANDING KEY DATA PRIVACY AND SECURITY LAWS WORLDWIDE.". Access here - <https://ipclr.iledu.in/wp-content/uploads/2023/11/V2I17.pdf>
9. PRASANNA, S., and P. LAVANYA. "DATA PRIVACY IN THE DIGITAL AGE: COMPLIANCE WITH INDIAN LAWS.". Access Here - <https://liu.iledu.in/wp-content/uploads/2023/11/V2I116.pdf>
10. SRIVASTAVA, AVANTIKA. "A CRITICAL ANALYSIS OF LAWS PERTAINING TO RAPE AND FALSE MARRIAGE PROMISES." Access Here - <https://jcvpj.iledu.in/wp-content/uploads/2023/07/V1I16.pdf>
11. Abdurahim Zai, Mohammad Edris, and Naseebullah Amani. "The Impact of Green Supply Chain Management on Climate Change: Cursory Glance on the Food Industry." International Environmental Legal Research Journal 1.1 (2023): 150-161. Access Here - <https://ielrj.iledu.in/wp-content/uploads/2023/03/V1I117F.pdf>
12. JAYAL, HARDIK, and SHREYA SINGH THAKUR. "A COMPREHENSIVE ANALYSIS REGARDING THE PRACTICE OF BONDED LABOUR IN INDIA." Access Here - <https://llr.iledu.in/wp-content/uploads/2023/01/I11.pdf>