

GROWTH AND DISTRIBUTION OF WORLD POPULATION

Dr. Jonali Saikia Borkakoty
Associate Professor
Department of Geography, Nanda Ntha Saikia College
Titabar

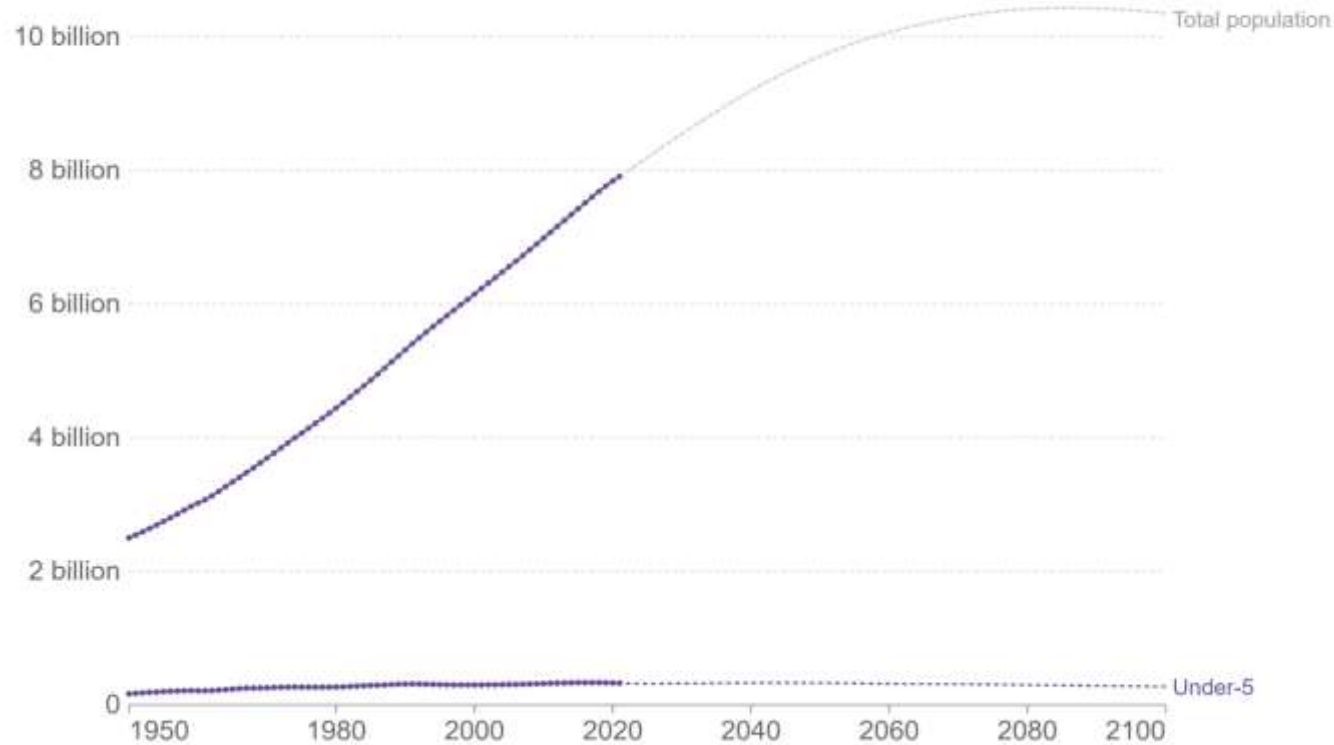
Growth and distribution

1. Parts- Quantitative and distribution in terms of space and time.
2. Demography with with this distribution forms the core of population geography.
3. Defined as the change in the number of individuals in a population in an area over time.
4. Observed from the graph (next slide), there is an exponential growth of population over the turn of the century

Population and projected growth (total population and under 5), World, 1950 to 2100

Our World
in Data

Projections are based on UN median estimates. The two series correspond to total population and population under age 5.

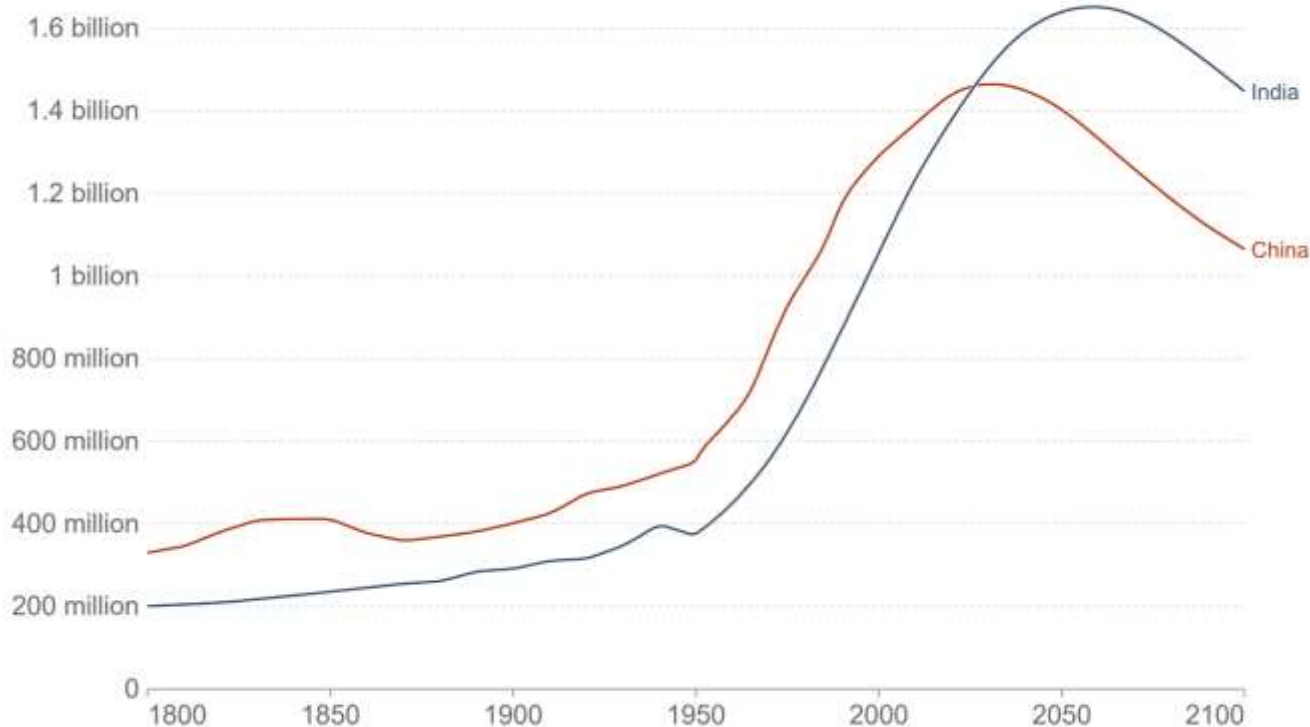


Source: United Nations - Population Division (2022)

OurWorldInData.org/world-population-growth/ • CC BY

Population, 1800 to 2100

Historical estimates of population, combined with the projected population to 2100 based on the UN's medium variant scenario.



Source: Gapminder (v6), HYDE (v3.2), UN (2019)

Note: Historical country data is shown based on today's geographical borders.

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Observations:

1. Based on circumstantial evidence, it can be estimated that the total population in 8,000 BC was 5 million or 50 lakhs.
2. Human civilization were primarily in the hunting gathering stage.
3. Period of high BRs and DRs
4. Conjecture: size was deliberately controlled to not exceed the carrying capacity of the territory used for hunting and gathering.

AGRICULTURAL REVOLUTION

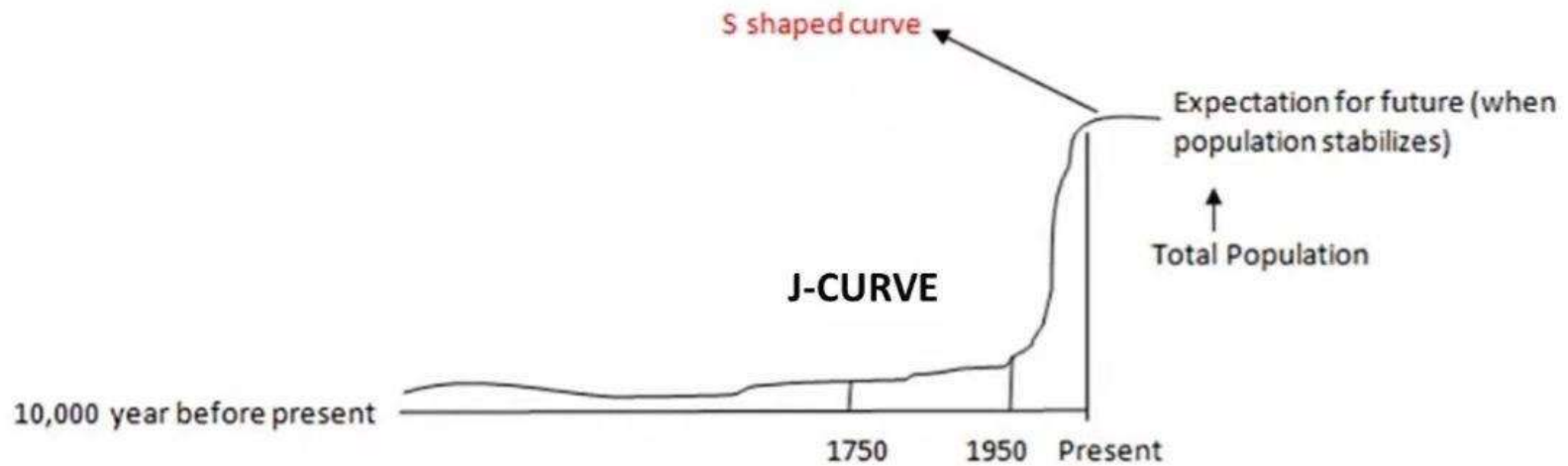
Features:

1. 8000 BCE- development of agriculture- resulted in a decline in the death rate due to increased food supply, better nutrition, increased longevity etc.
2. Imperatives of child spacing disappeared since mothers in the earlier times could only carry one child during movement.
3. Agriculture and higher family members go hand in hand, as the perceived economic value of having more children in farming families was that they will be an extra helping hand and would take care of the parents in the future.
4. The total population during the time of christ wasa round 200-300 mill and increased to 500 mill around 1650.

Agrarian to Industrial Revolution

1. Diversification of the economy, working factors, better standards of living increase.
2. Other revolutions such as medical revolution, green revolution, IT revolution, etc are causes of the exponential growth of population that we have seen in the past decades.

J curve simply means exponential growth of population; S shaped curve defines the future expectations and trends.



Medieval period

1. More emphasis on trade and commerce- as a result cities and town started to grow as the demand for consumer goods started to rise.
2. Agriculture was commercialized.

Industrial Revolution

1. Increase in population- systemization of production with help of power driven machines- higher output per capita and substantial accumulation of wealth and growth of secondary and tertiary sectors.
2. Rural-Urban Migration

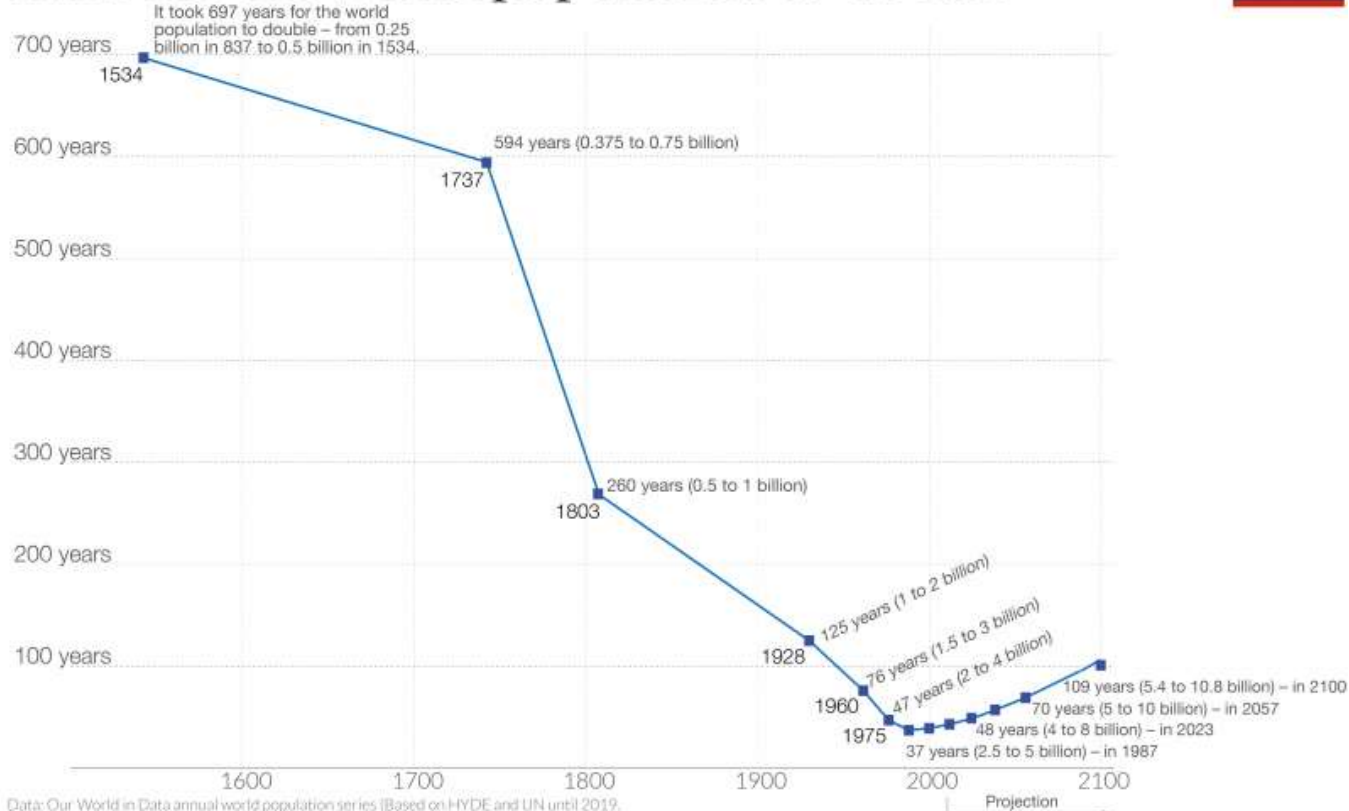
20th century

1. Development of medical services, DRs fell (For eg. Life expectancy in India 1901 was 23 years, whereas it was 65 years in 2001)
2. Technological advancement- increase in food supply (Eg. Green Revolution and biotechnology)

Distribution Of World Population (Population Doubling Time)



Time for the world population to double

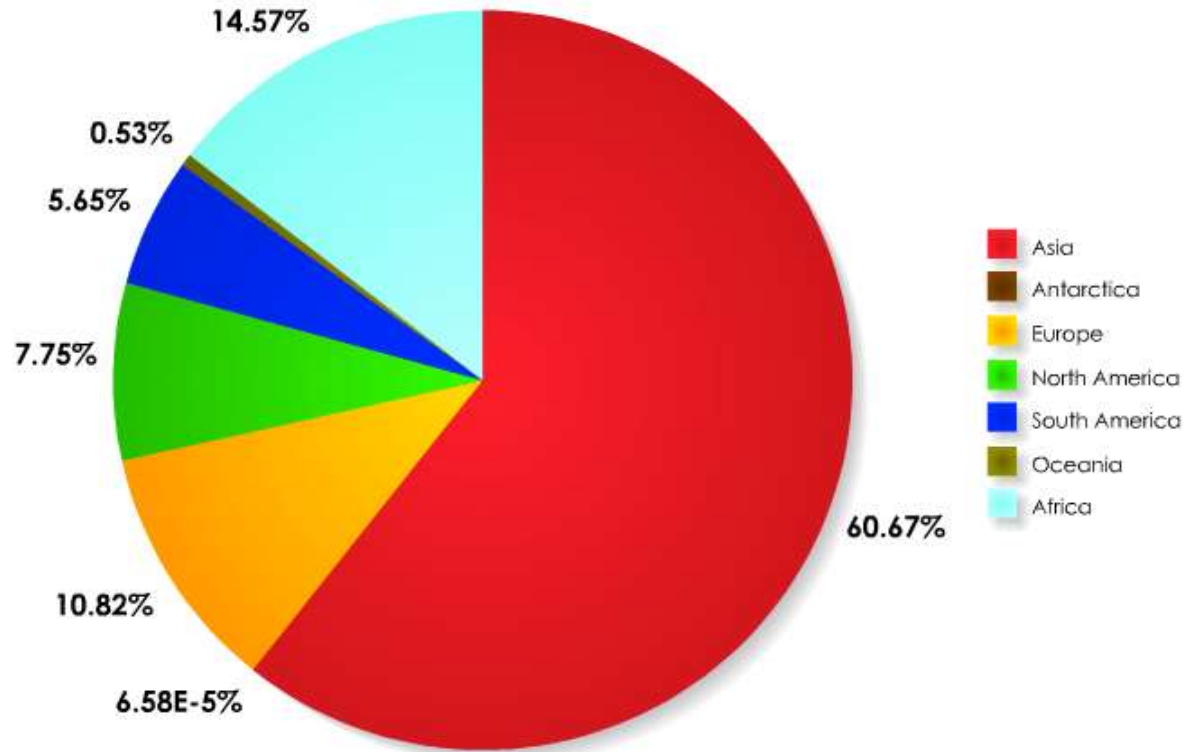


Data: Our World in Data annual world population series (Based on HYDE and UN until 2019. And projections from the UN after 2019 ('Medium Variant' 2019 Revision).

The data visualization is available at [OurWorldinData.org](https://ourworldindata.org). There you find more data and research on demography and global change

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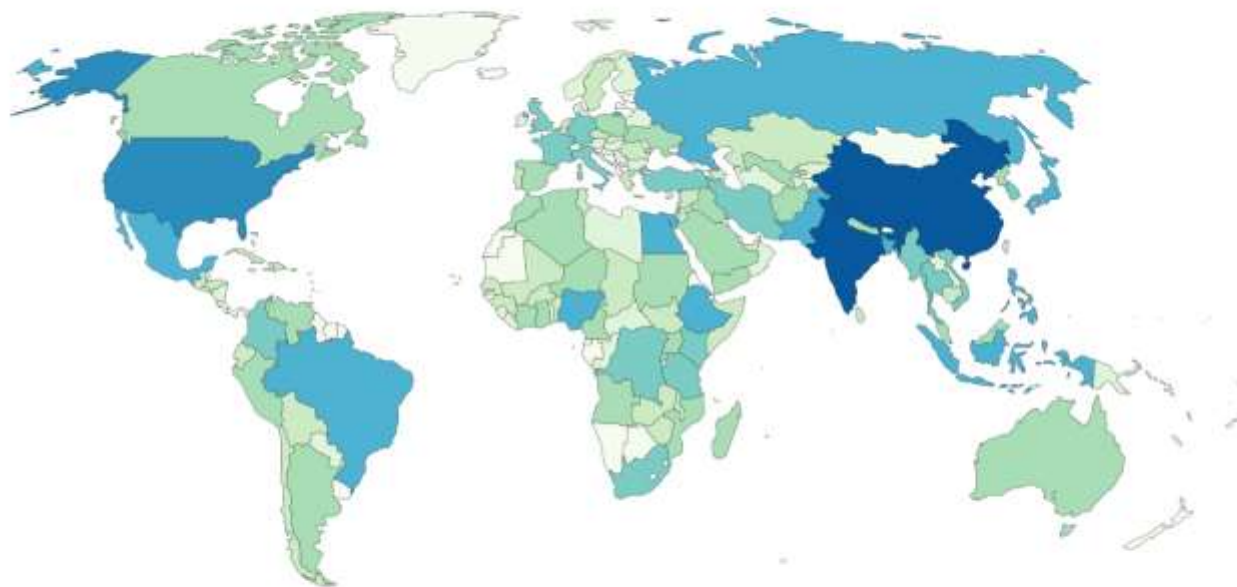
World Population By Continent



Discussion: Developed vs Developing debate
in terms of population!

Population projection by the UN, 2022

Shown is the total population since 1950 and the 'medium variant' projections by the UN Population Division.



Discuss: Trends of population seen in developed countries.

1. Very slow population growth
2. Less than 1%
3. Growth rate sharply declining
4. Racial Suicide Stage= Negative Population Growth

Factors for low population growth

1. Socio-economic transformation
2. More emphasis on career perspective rather than family
3. A hectic and fast paced life
4. Nuclear family concepts
5. Frequent break of marriages
6. More same sex marriages

NB: Societies such as these have the following characters:

1. High Literacy level,
2. higher female literacy,
3. higher job opportunities,
4. older marriage ages,
5. scientific approach towards religion,
6. Urbanization,
7. industrialization and no poverty.

Discuss: Problems of Low Population Growth

A BRIEF CLASSROOM DISCUSSION

1. Demographic problems; like inversion of age pyramids, higher proportion of older population.
2. Shortage of Labour
3. School closure
4. Higher investment on social services for elderly
5. Liberalization of migration laws by countries
6. Pluralistic societies

DEVELOPING COUNTRIES

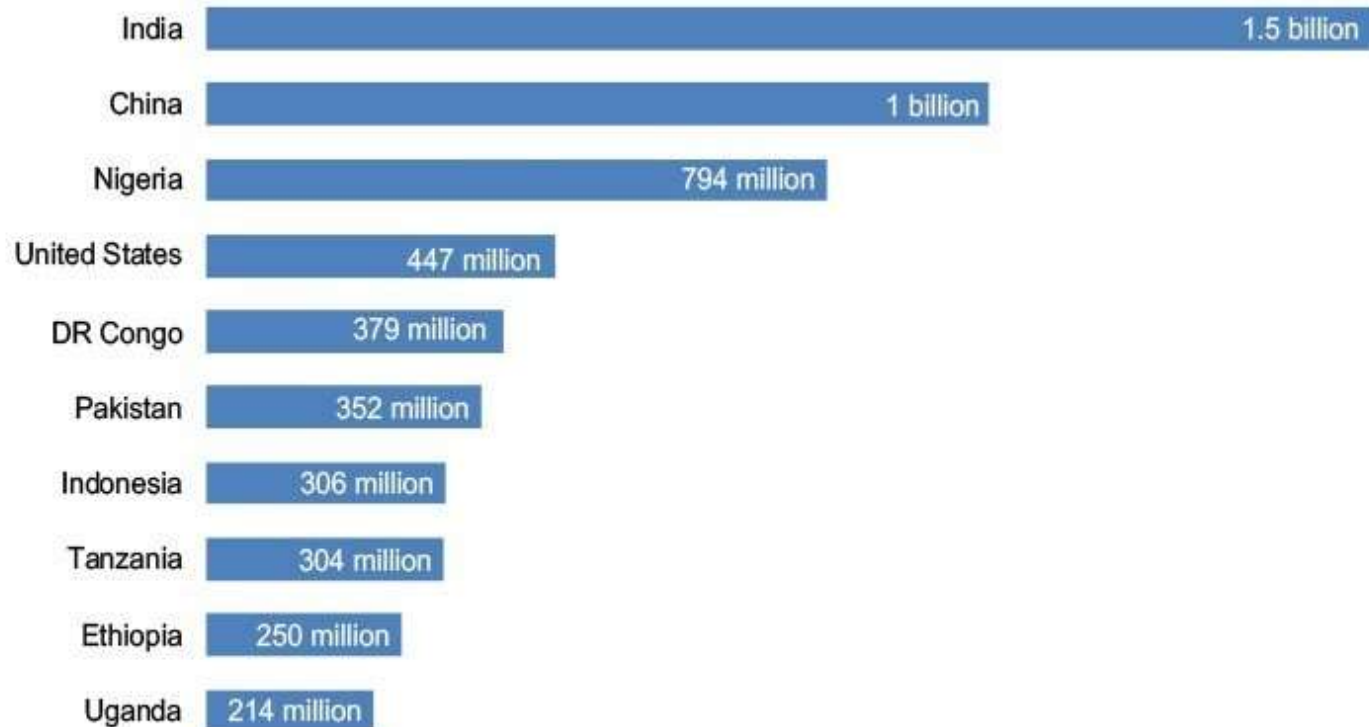
1. Characterized by rapid population growth
2. Explosive Growth (GR > 3%)- African countries like Nigeria and Uganda
3. Rapid Growth (GR > 2-3%)- Pakistan, Maldives, Nepal
4. Moderate Growth (GR = 1-2%)- India, Egypt
5. Slow Growth (GR = 0-1%)- Argentina, China
6. The population pyramids in developing countries are characterized by a demographic bulge. The bottom and mid blocks are large.
7. They are major contributors to world population explosion. According to Ashok Mitra, “these are the countries whose real problem is increased fertile group of the population”.

Problems of Rapid Population growth

1. Lack of proper education, food, housing
2. Rapidly increasing workforce- greater demand of employment, lower supply- unemployment problems
3. Food and nutrition problems
4. Economic backwardness, illiteracy
5. Development of slums
6. Higher pressure on limited resource- resource exploitation and environmental degradation.

These will be the world's biggest countries by population in 2100

Figures are rounded to the nearest million based on UN data



Thank you!