POPULATION GROWTH IN INDIA

Pinki Mandal Sahoo

INDIA

- India's 2020 population is estimated at 1.38 billion based on the most recent UN data. India, located in South Asia, is bordered by the Bay of Bengal, the Arabian Sea, and the Indian Ocean, and is also bordered by the countries of Pakistan, Bhutan, China, Nepal, Myanmar (formerly Burma), and Bangladesh. India is the world's 7th largest country by area and the 2nd most populous country with more than 1.3 billion residents.

INDIA AREA AND POPULATION DENSITY

- 1 of every 6 people on the planet live in India, and between the 2001 and 2011 censuses, the country grew by 17.7%, adding 181.5 million people. The country has doubled in size in just 40 years, and is expected to unseat China as the world's most populated country in the next couple of decades. India's current yearly growth rate is 0.99%.

- The country as a whole has a population density of 420 people per square kilometer, which ranks 31st in the world. In Mumbai, the population density is 21,000 people per square kilometer (54,000/square mile).

LARGEST CITIES IN INDIA

- India's largest city is Mumbai, with a population of 12.5 million, closely followed by Delhi, with a population of over 11 million. Overall, there are more than 50 urban areas in India with a population of more than one million people.

- Mumbai (formerly Bombay) had an official population of 12,478,447 in 2011, although its wider metropolitan area is much larger - home to 18,414,288 people. It has more than doubled in size in the past forty years, although growth has slowed dramatically in the past decade. During the 1971 census, its population was recorded as 5.9 million.

- **Delhi,** India's second most populous city was home to 11,034,555 people according to 2011 data, and its metro area contains 21,753,486 people. Growth in Delhi is even more rapid than Mumbai's, and it is likely that it will overtake Mumbai to become the largest city in India within a decade. The city has struggled to keep up with growth. Nearly half of its residents live in slums, and the city's poverty rate is four times the national average. Contained within Delhi's boundaries is the city of New Delhi, an enclave city which is the official capital city of India. It has a population of 249,998 people.

- Other major cities in India are Bangalore (pop: 8.43 million), Hyderabad (pop: 6.81 million) and Ahmedabad (pop: 5.57 million). There are 53 cities in India with a population of at least 1 million.

INDIA DEMOGRAPHICS

- Data on ethnicity is not collected by the Indian census, although the CIA World Factbook estimates the population is **72% Indo-Aryan, 25% Dravidian, and 3% Mongoloid and other.**

- Hinduism is the most common religion in India, accounting for about 80% of the population. Islam is the second-largest religion at 13% of the population. **Other major religious groups in India are Christians (2.3%), Sikhs (1.9%), Buddhists (0.8%) and Jains (0.4%).** People who claimed no religion are officially recorded under 'other' by the census. In 2011, 0.9% of Indians selected the 'No Religion' category.

- While the number of Indians living in urban areas has increased over the last two decades, **about 67% of people still live in rural areas. In 2011**, India had a literacy rate of 74%: 82% for men and 65% for women. The literacy rate varies wildly by state.

INDIA'S POPULATION GROWTH

- The 2011 census was the second largest the world has ever seen - second only to China's census the previous year. It took place in two phases. The first phase, in April 2010, counted all of the buildings in India, and the second phase collected data about the people of India.

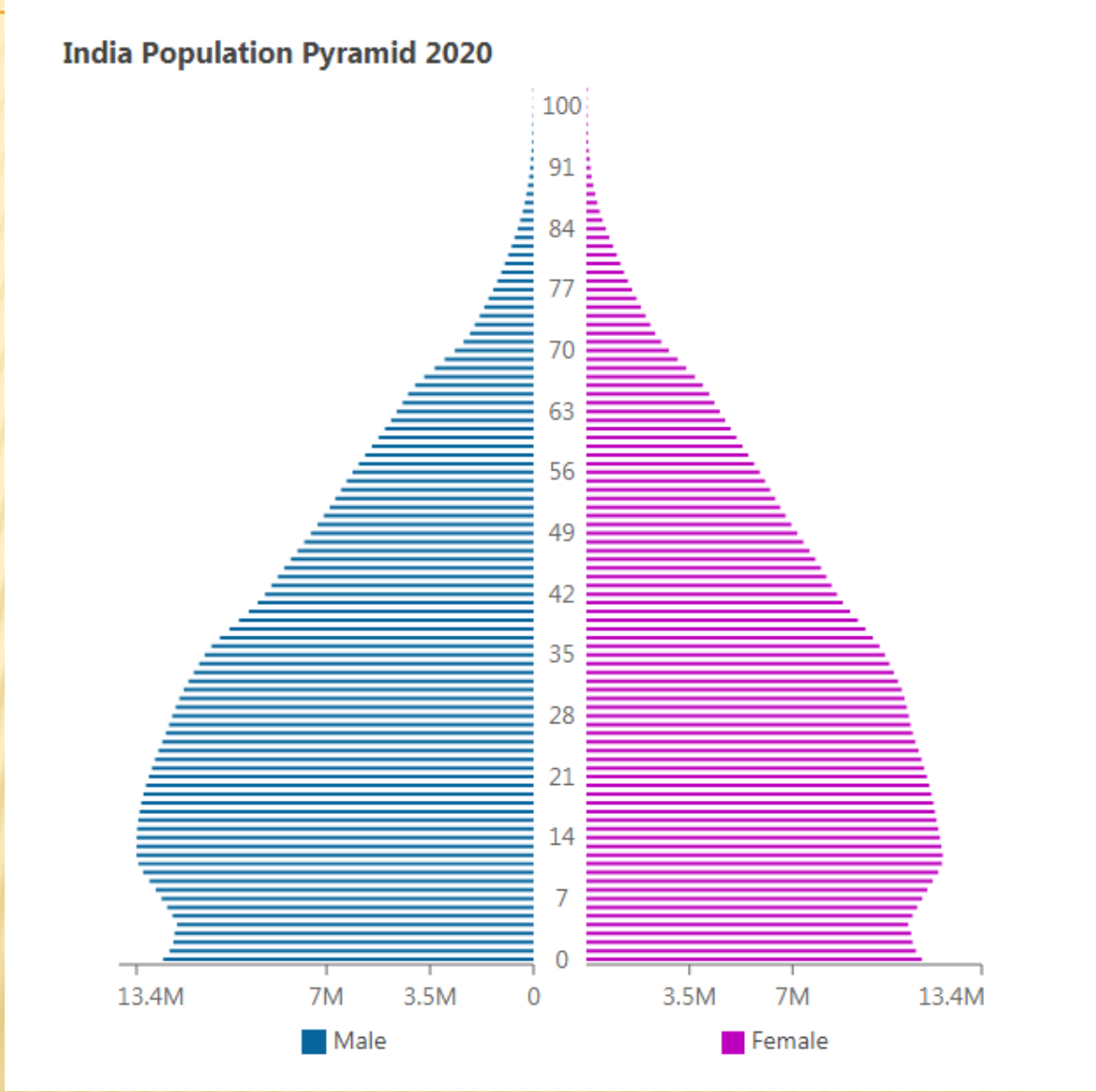
- The census was a massive exercise, employing millions of Indians. The total cost of the census came to $439 million which was actually considerably cheaper per person than most censuses held around the world. The average census costs over $4 per person, whereas the census in India cost just $.50 per person.

- The 2011 census was the fifteenth nationwide census carried out in India. The first was held in 1881, although it was not able to cover all of the British-held Indian territory.

INDIA POPULATION PROJECTIONS

- India's population continues to grow fairly steadily as the years progress. Most notably, the population is growing faster than China's. India is expected to surpass China as the world's most populous country around 2024, but like China, the growth is expected to stagnate and eventually decrease in the latter half of the 21st century.

INDIA POPULATION PYRAMID 2020



AGE STRUCTURE TRANSITION

- **Decline in fertility** leads to decline in the birth rate and decrease in the annual number of births.
- Decrease in the annual number of births results in a **decrease in the proportion of young** population.
- The large base of population pyramid shifts upwards. **Age pyramid no longer remains triangular in shape.**

AGE STRUCTURE TRANSITION

- Upward shift of the large base of population pyramid results in an increased concentration of population in the working ages – the bulging of age pyramid.
- As fertility continues to decline, the bulge continues to move upwards until it reaches old ages.
- The age pyramid in this situation resembles like a rectangle of inverted triangle.

AGE STRUCTURE TRANSITION

- During the period between the decline in young dependency and **increase in old dependency,** the ratio of the working age population to the dependent population increases.

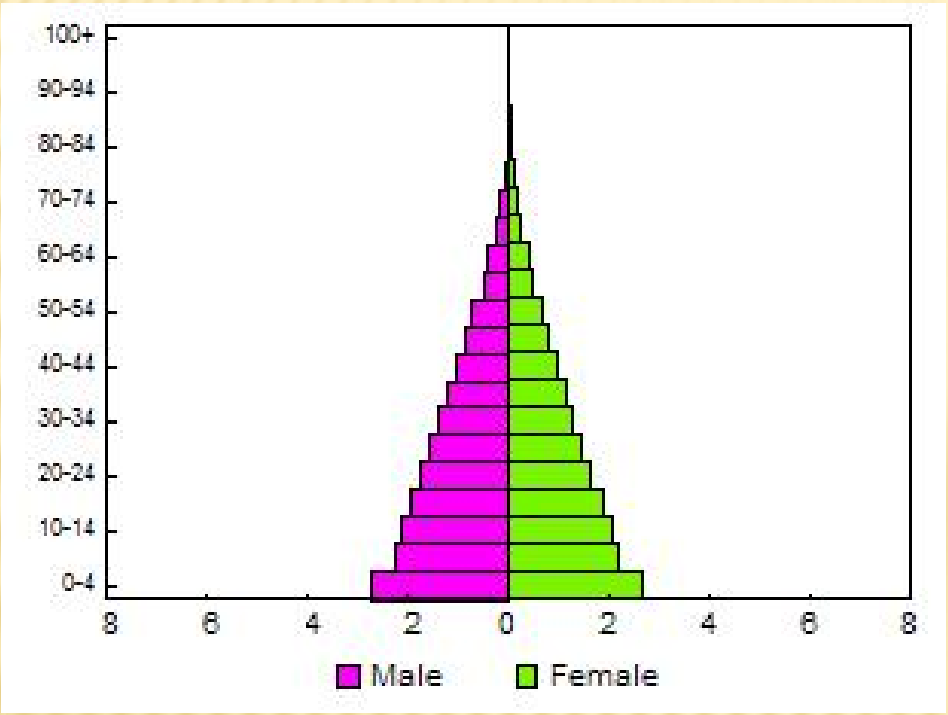
- The increased concentration of population in working ages as the result of **demographic transition may be a dividend as well as a liability for economic growth and social and economic development.**

AGE STRUCTURE TRANSITION

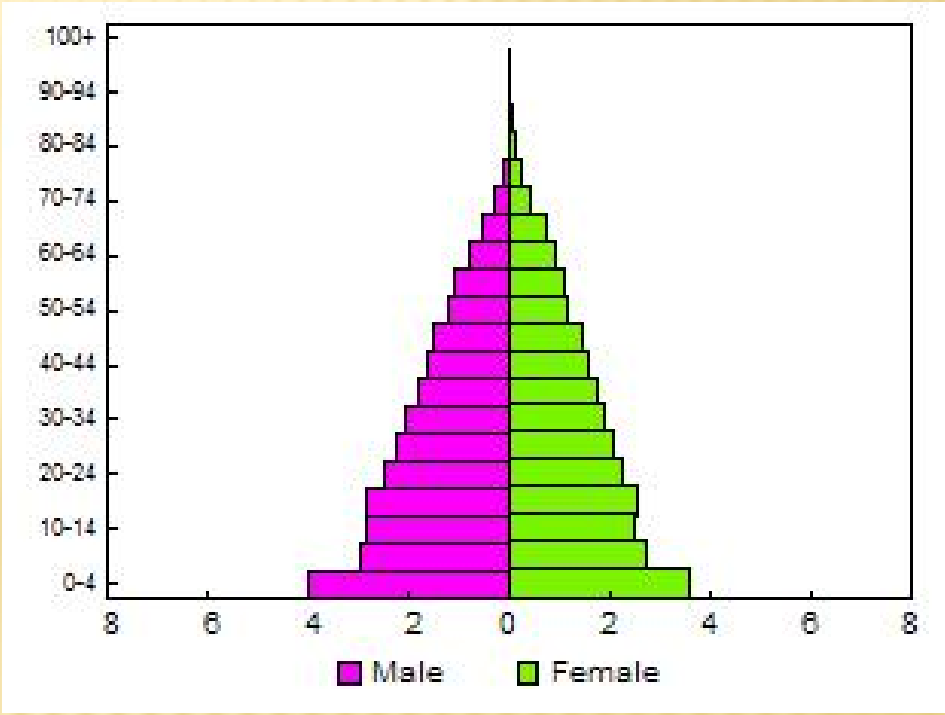
- It is an opportunity when **increased manpower is utilized as producers** of goods and services.
- In this situation, age structure transition spurs economic growth and accelerates social and economic progress.
- If the increased manpower is not productively utilized, it becomes a **liability to the social and economic production system** and retards social and economic progress.

INDIA AND CHINA, 1950

India

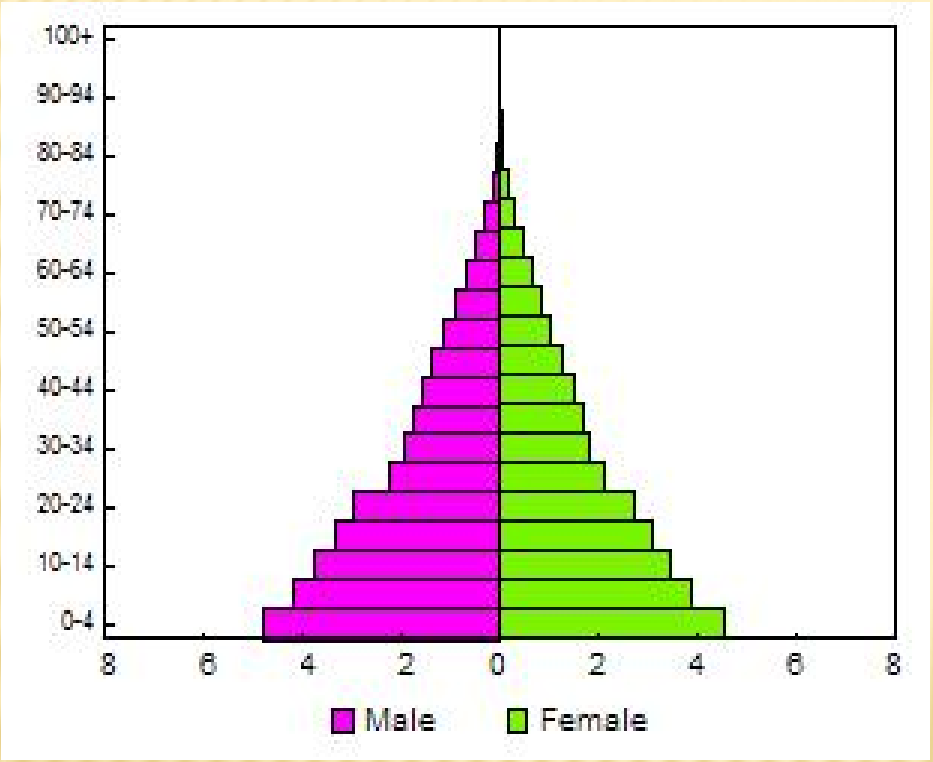


China

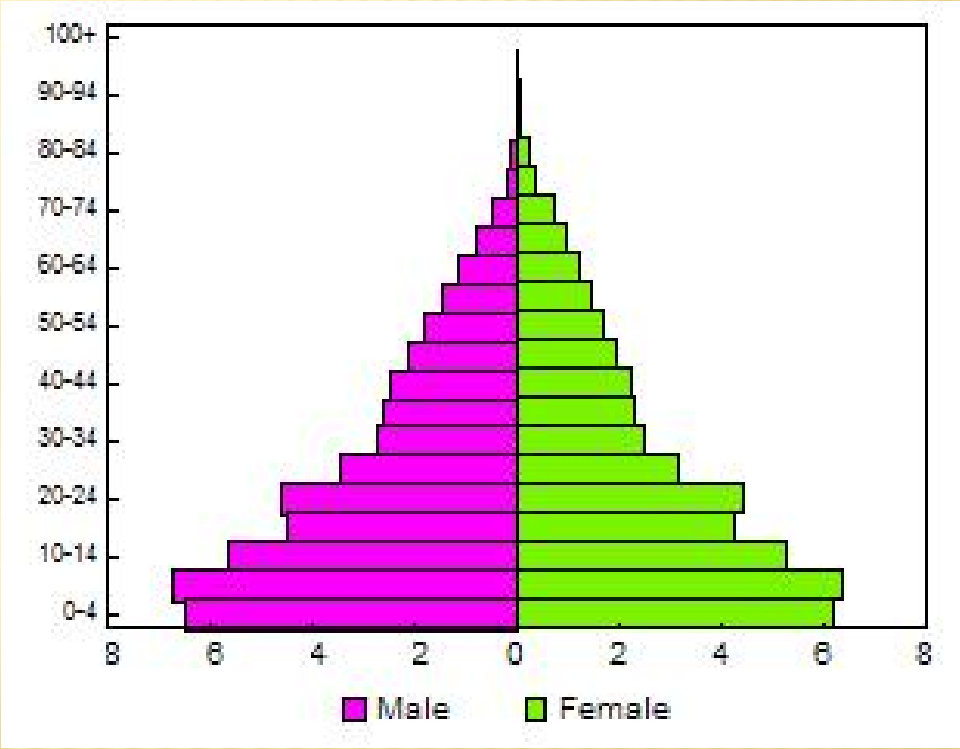


INDIA AND CHINA, 1975

India

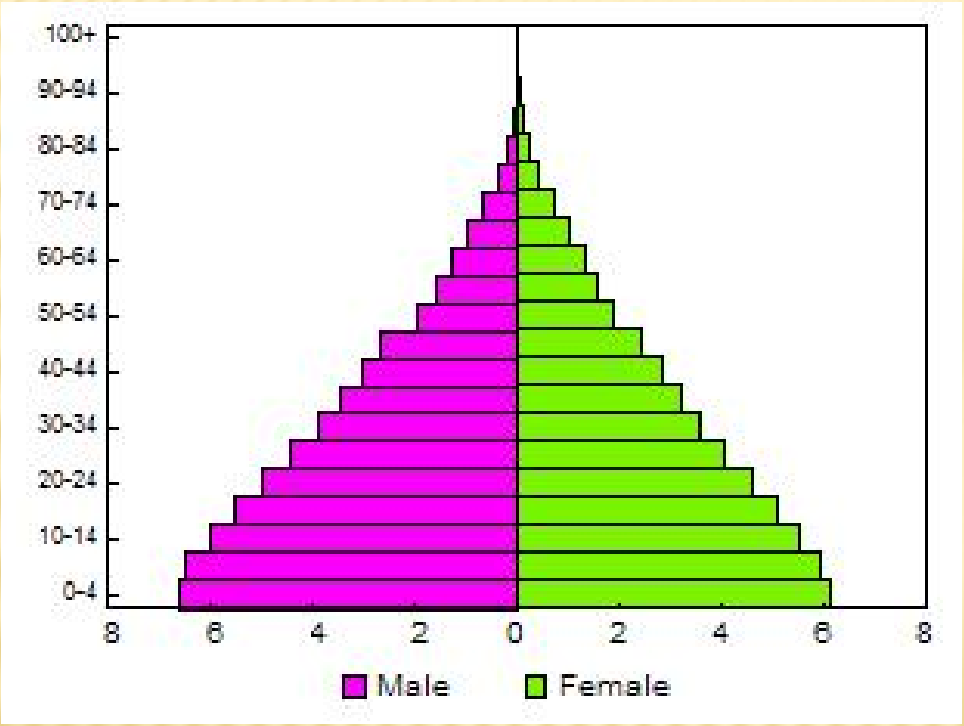


China

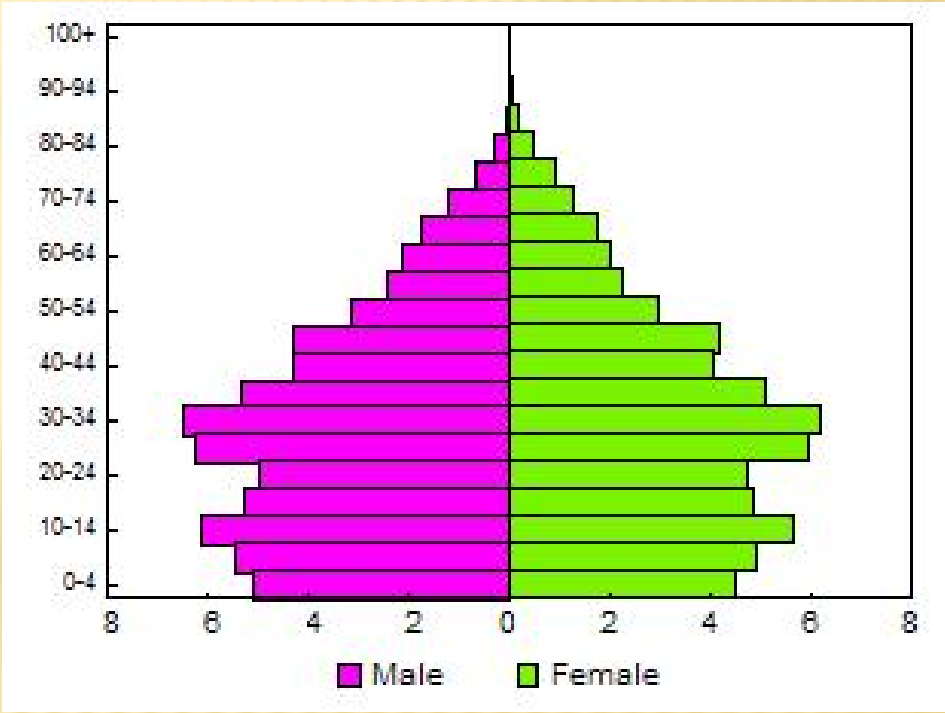


INDIAN AND CHINA, 2000

India

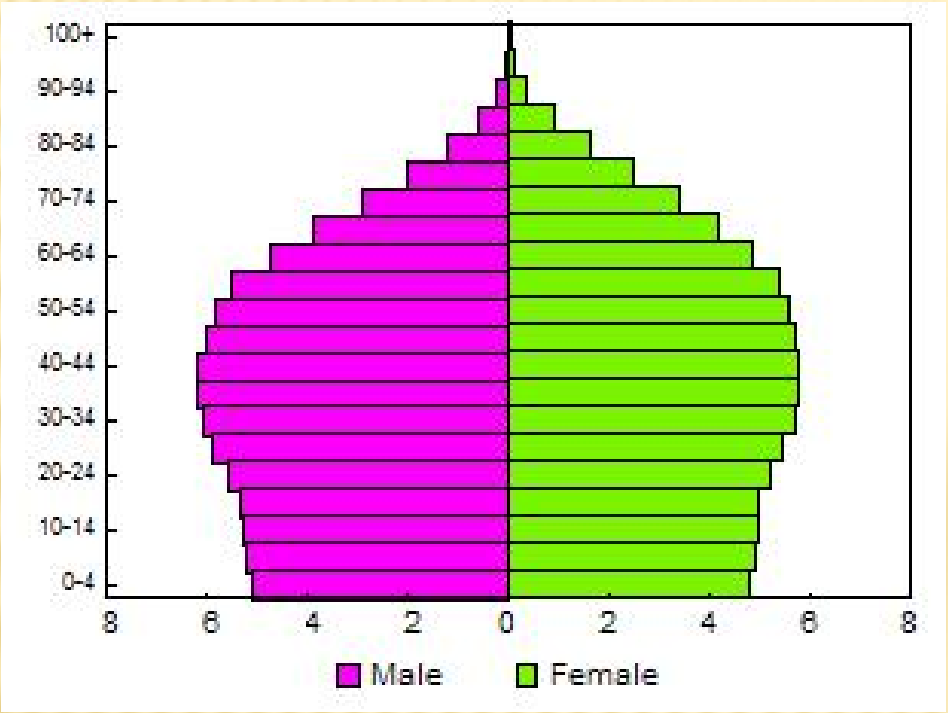


China

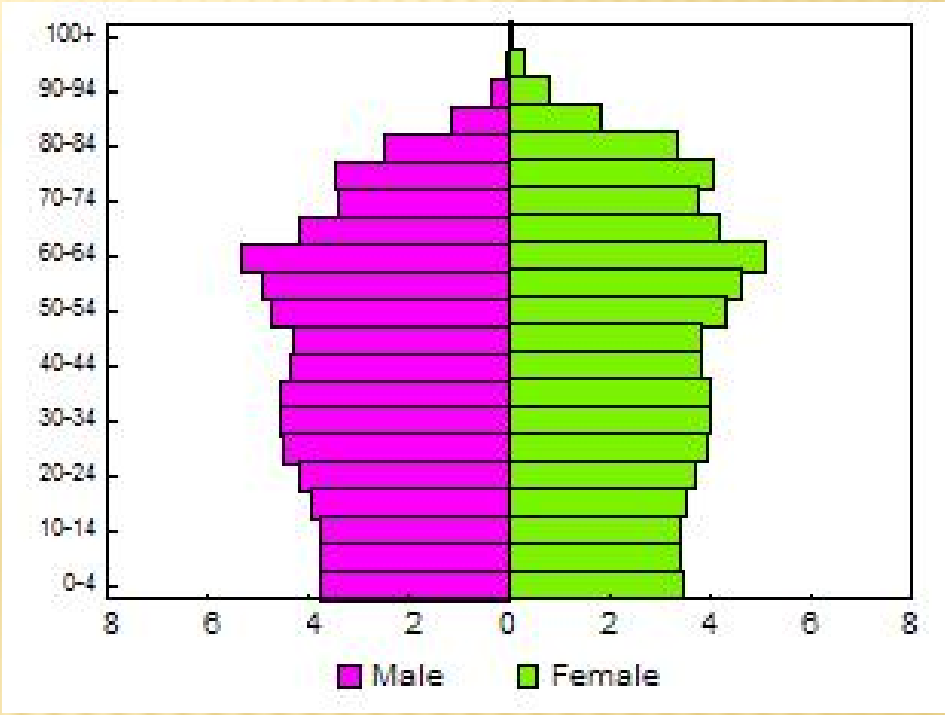


INDIA AND CHINA, 2050

India

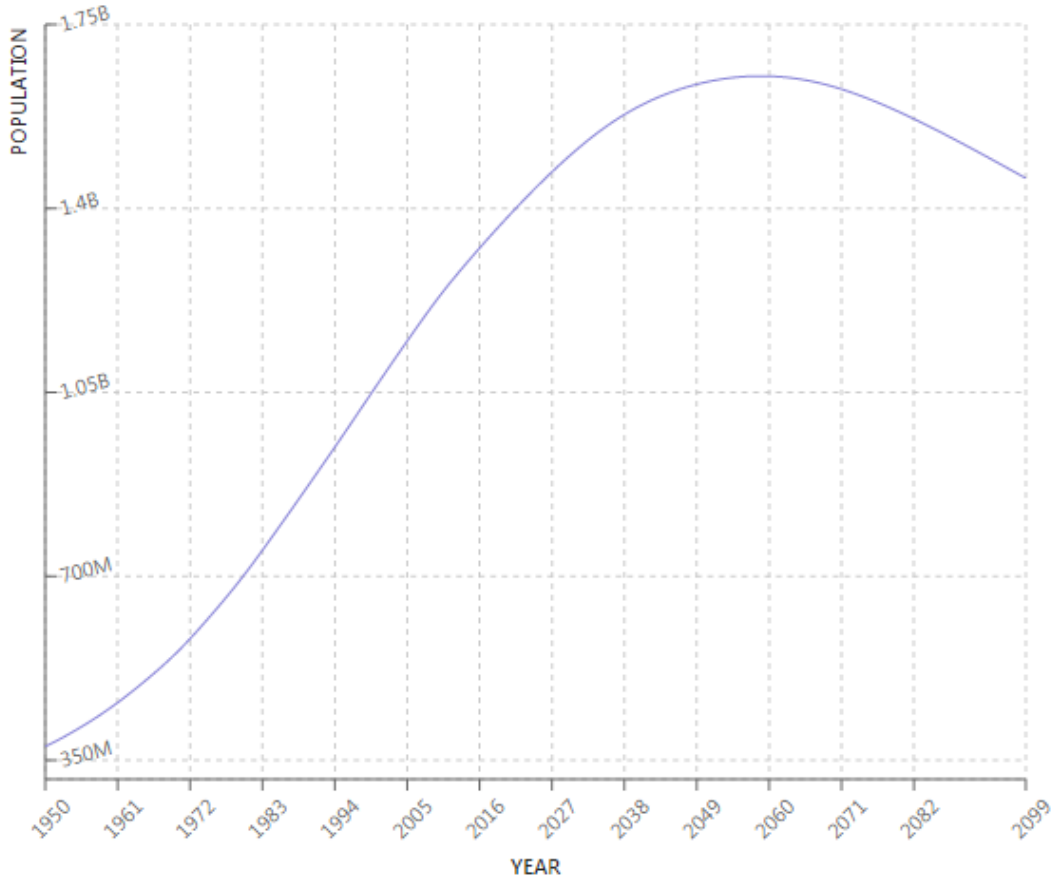


China



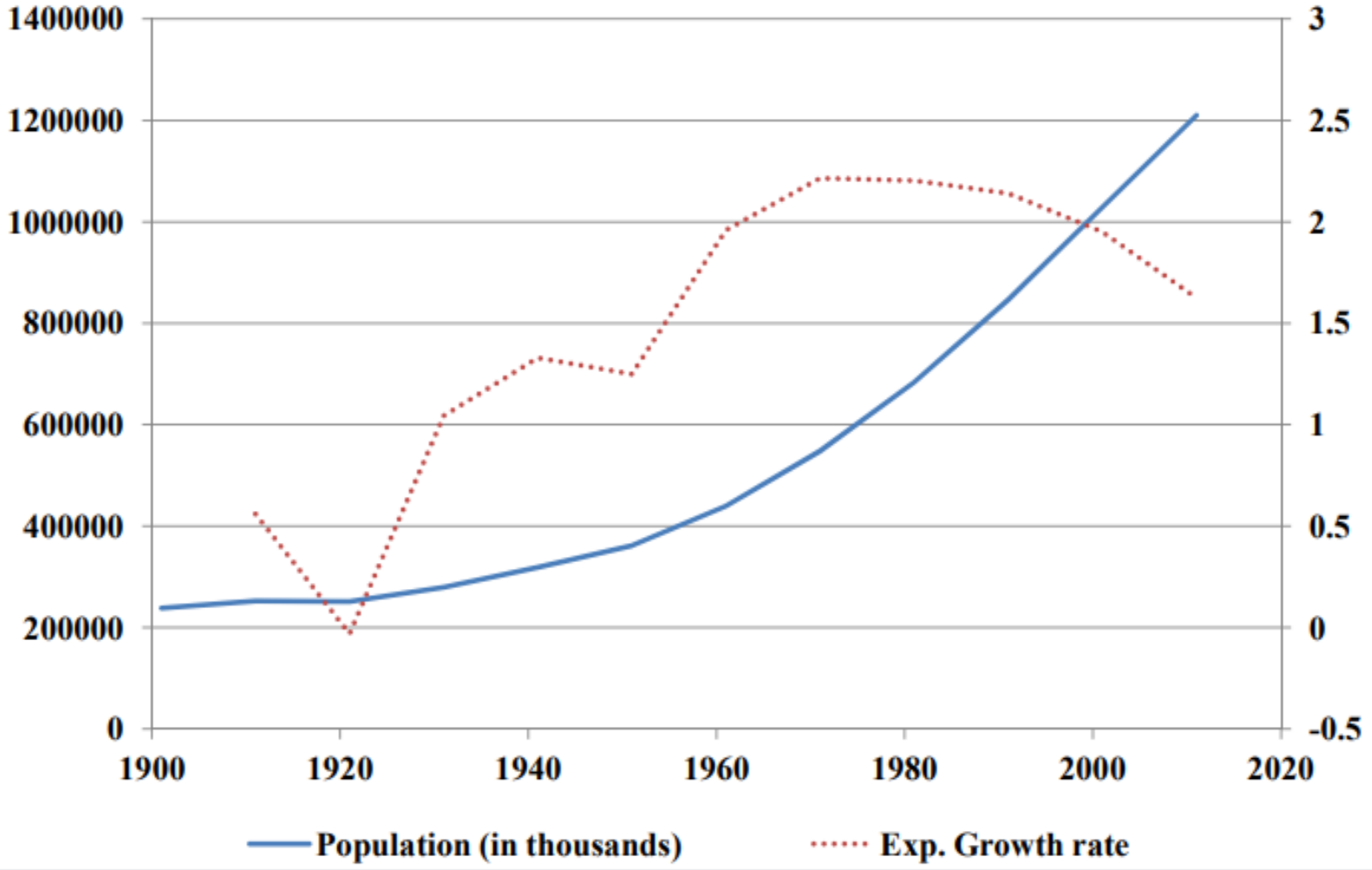
POPULATION GROWTH OF INDIA

India Population Growth — **Source:** World Population Prospects (2019 Revision)

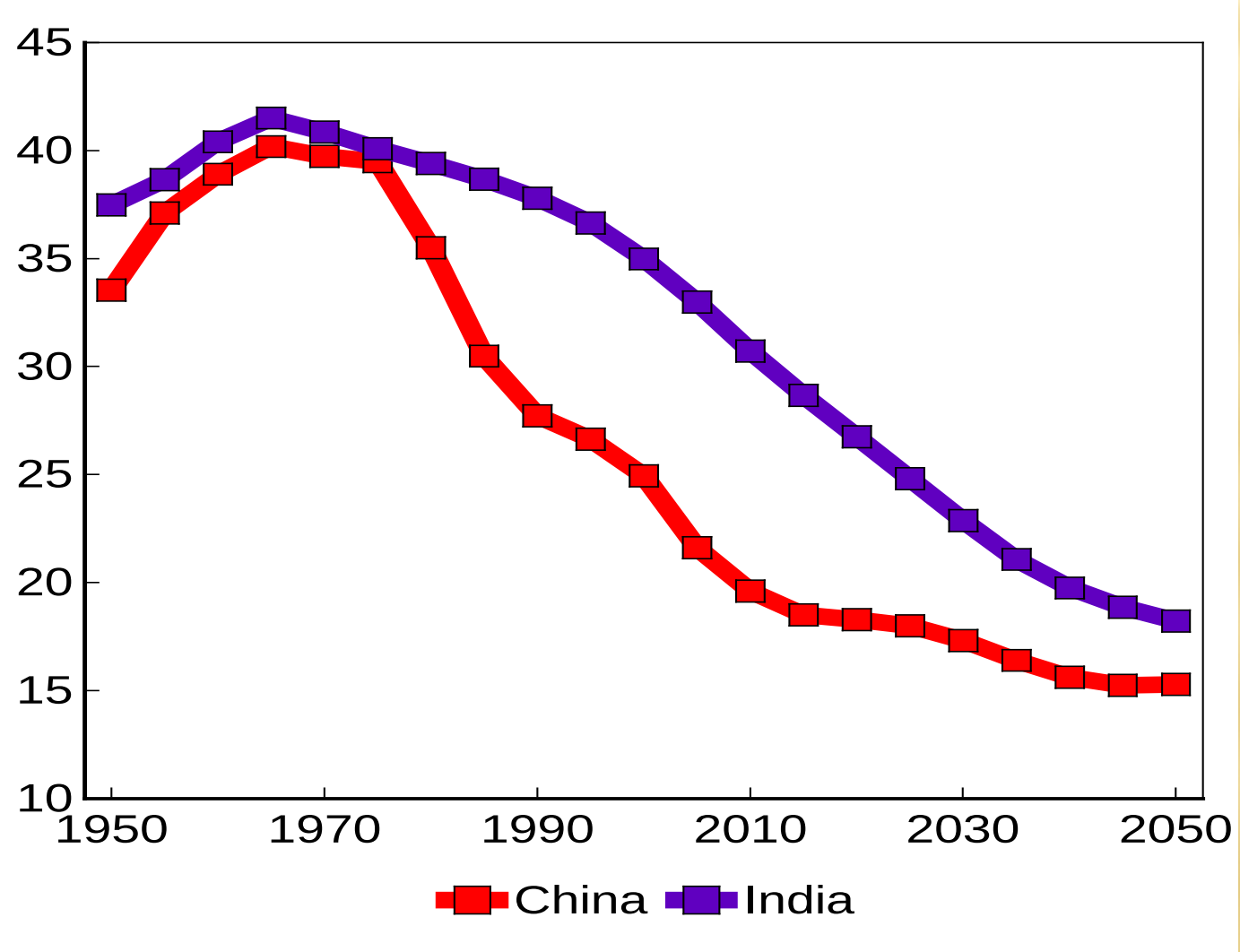


While India's population growth has slowed remarkably over the last few years, it's still growing faster than China and is expected to surpass China in population by 2028, when both will have about 1.55 billion people.

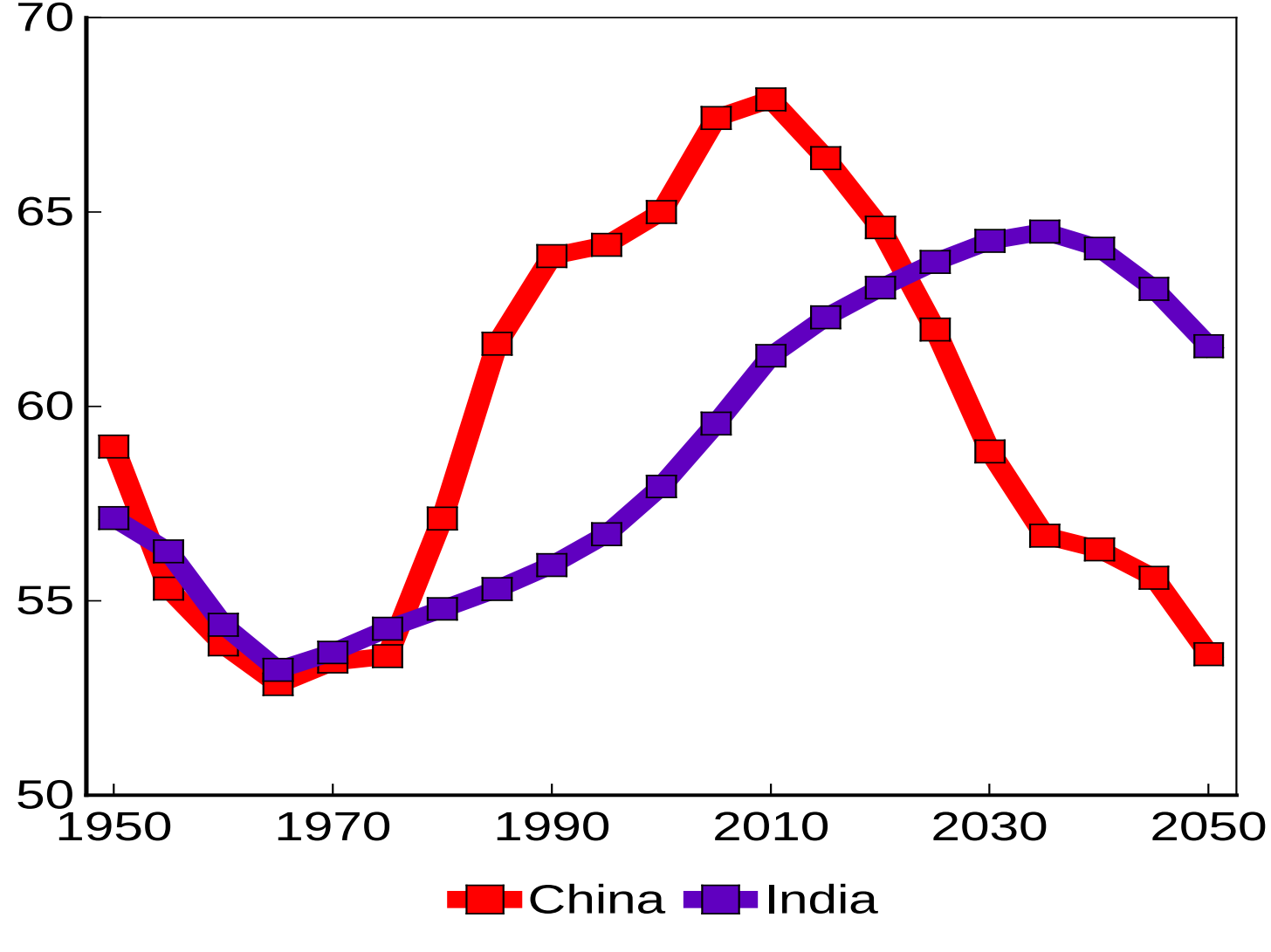
Trends in population size and growth rate, India, 1901-2011



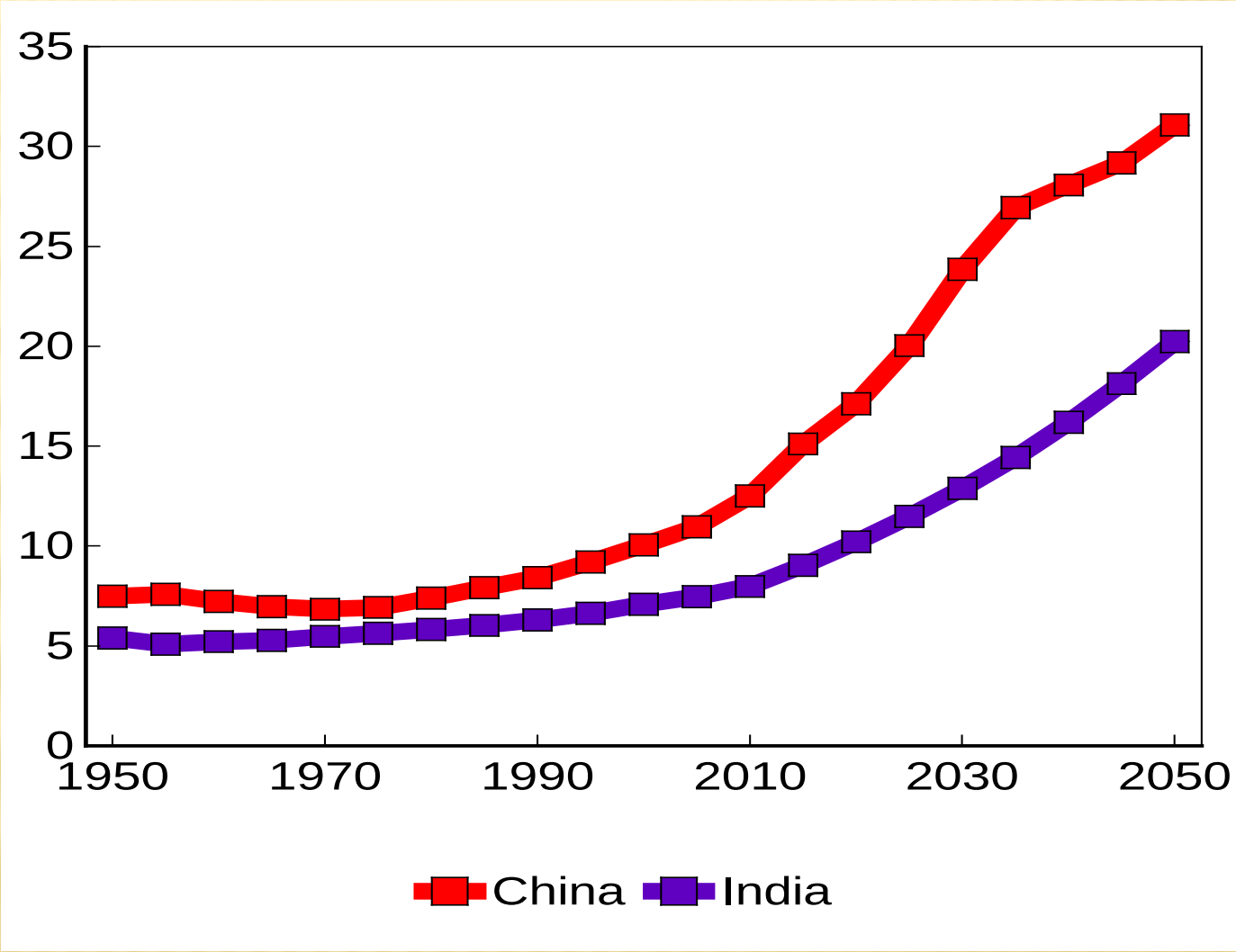
POPULATION (0-14 YEARS)



POPULATION (15-59 YEARS)

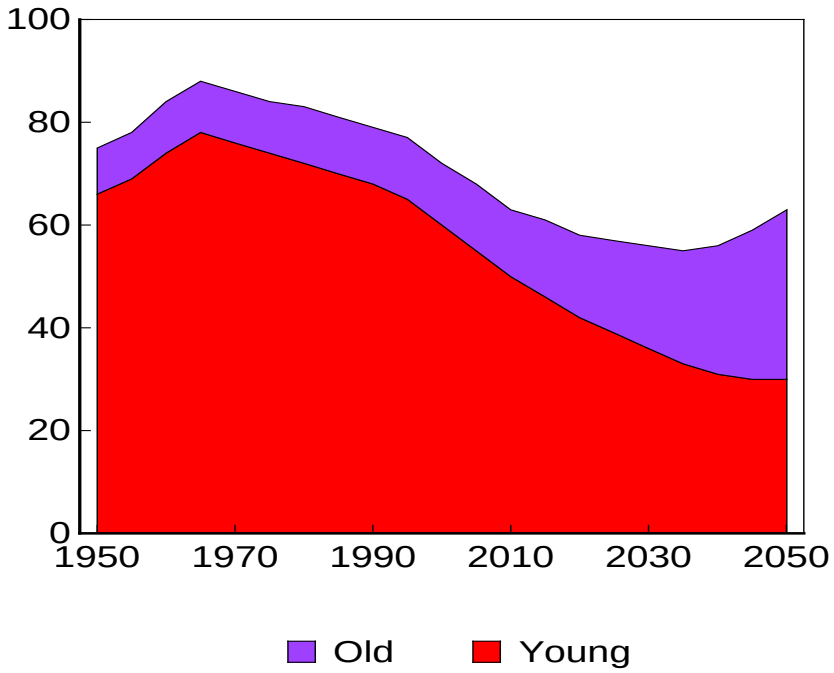


POPULATION (60+ YEARS)

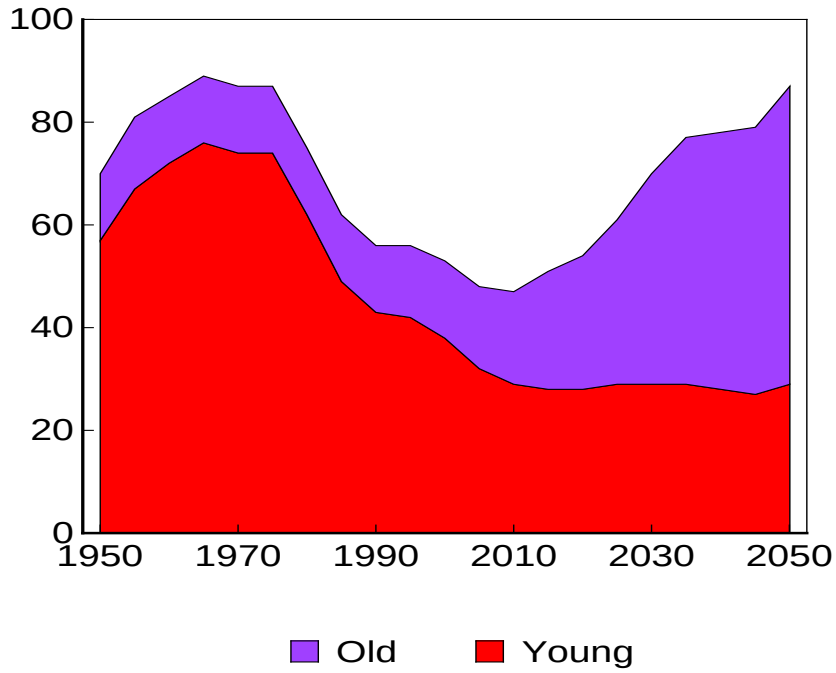


DEPENDENCY RATIO

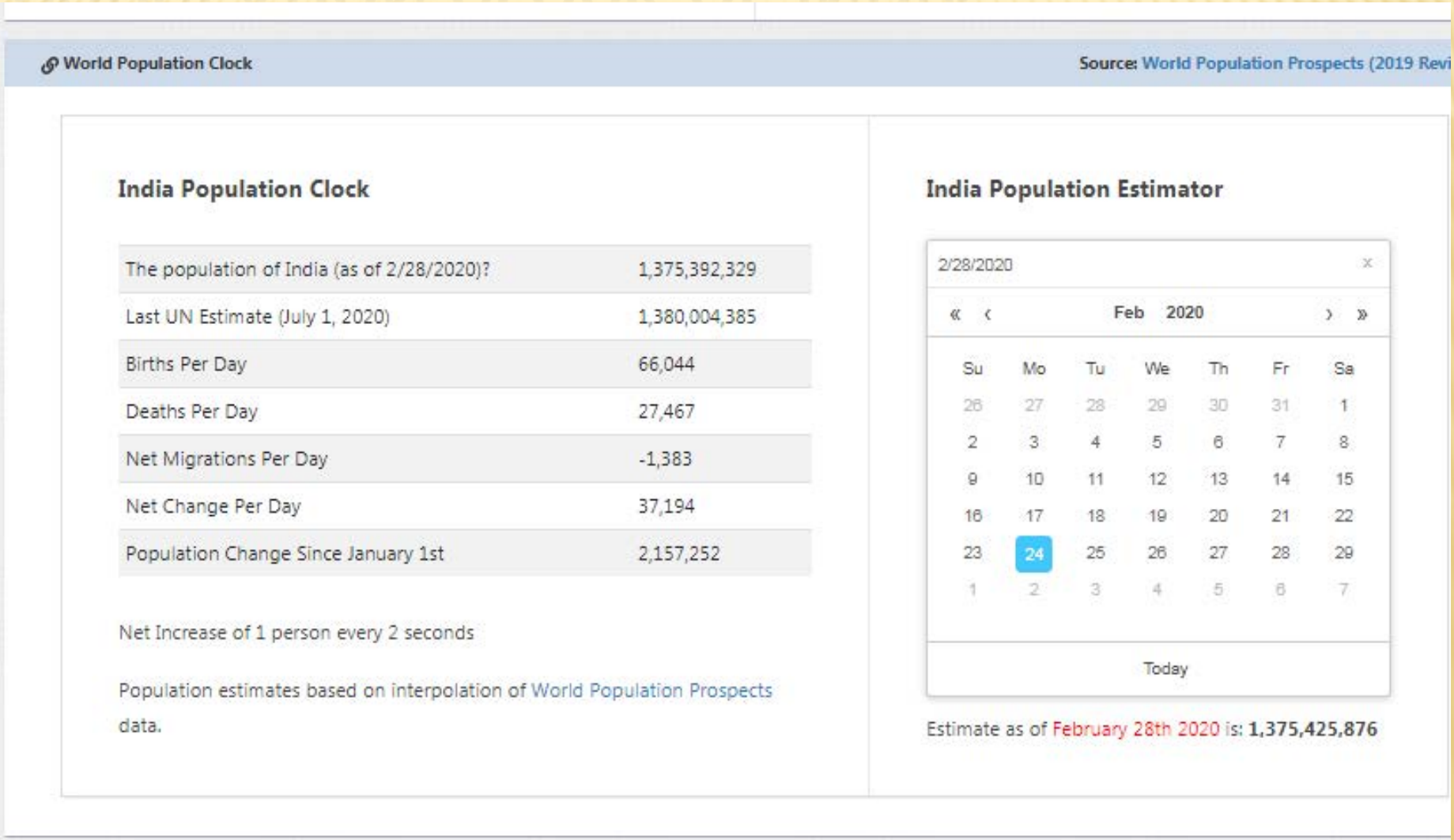
India



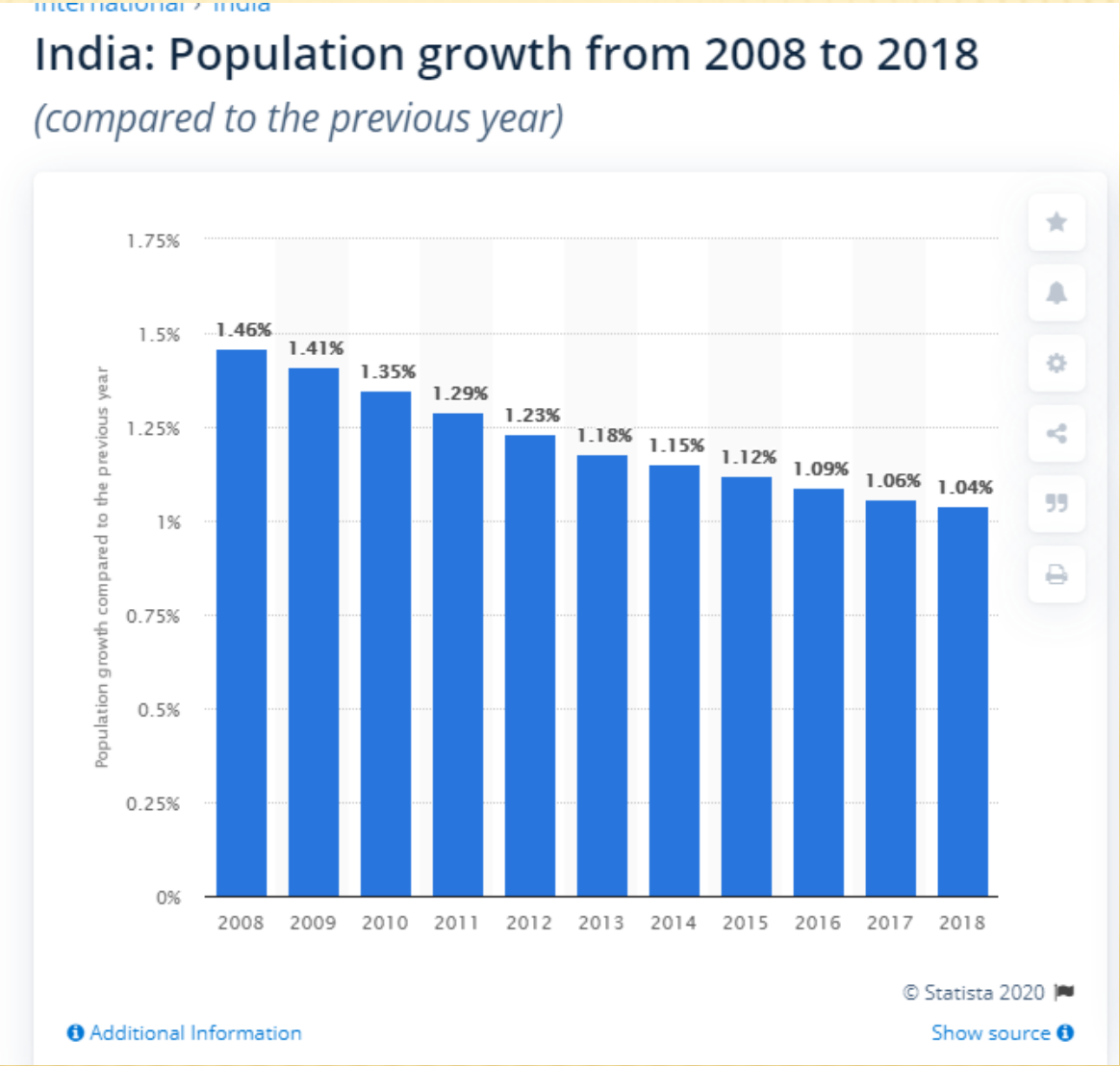
China



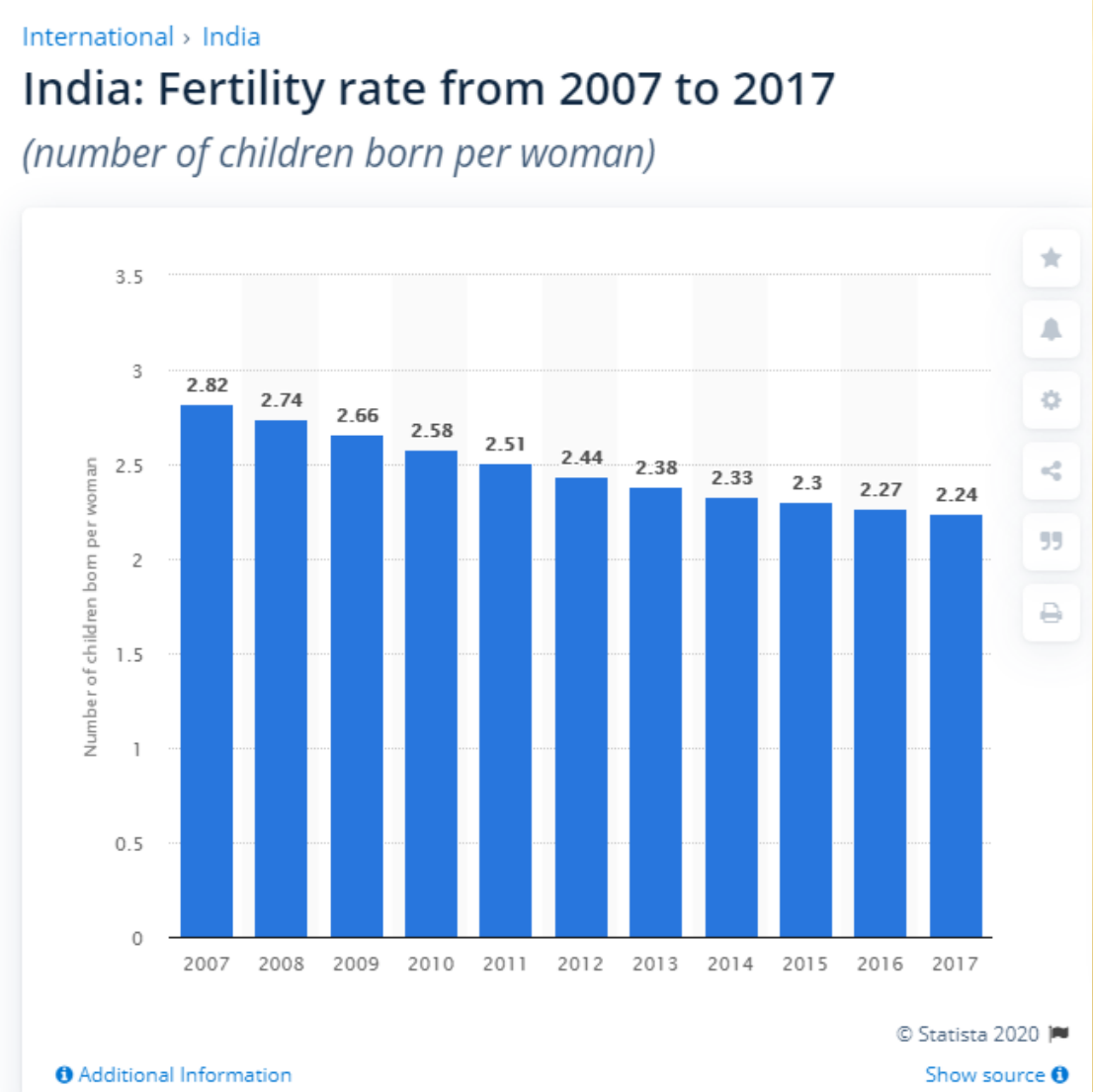
POPULATION CLOCK OF INDIA



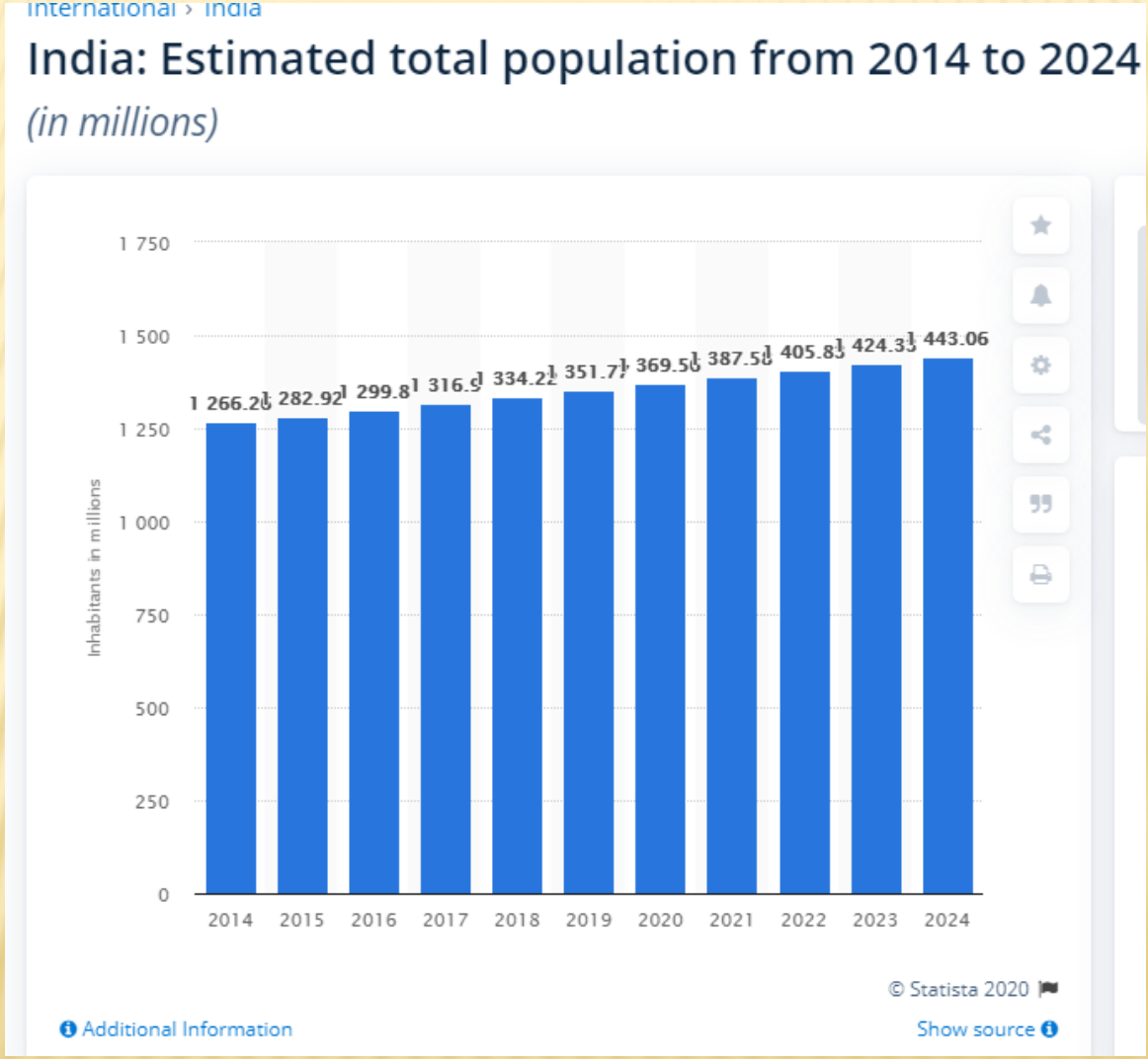
INDIA'S POPULATION GROWTH



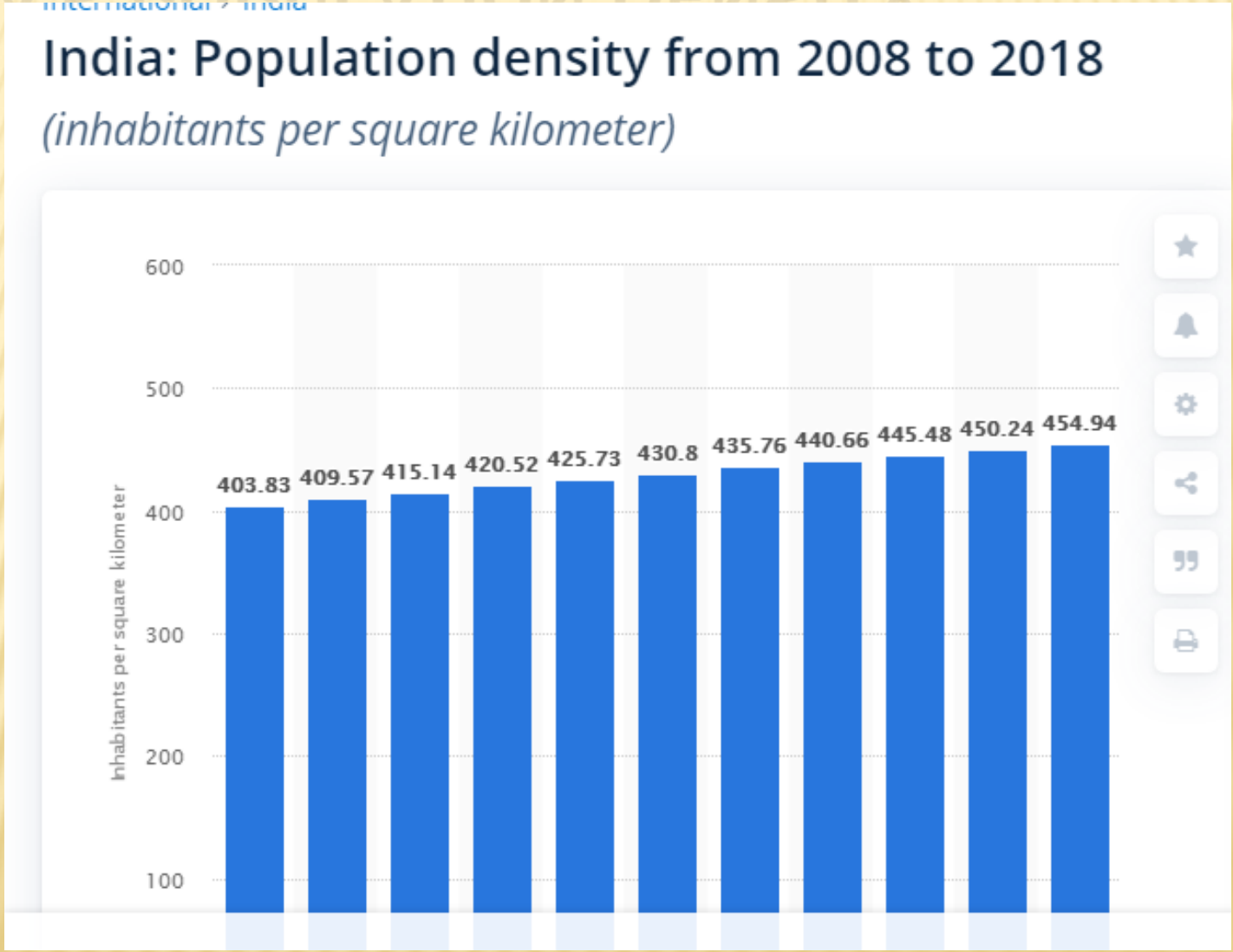
INDIA'S FERTILITY RATE



INDIA'S POPULATION PROJECTION



INDIA'S POPULATION DENSITY

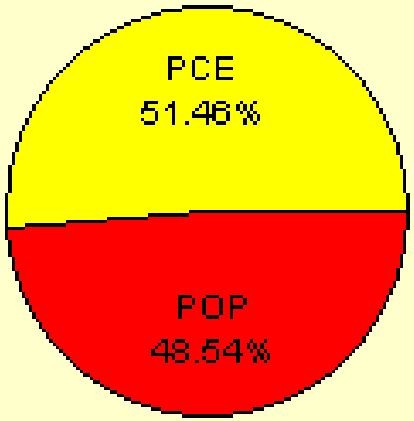


INDIA'S LIFE EXPECTANCY

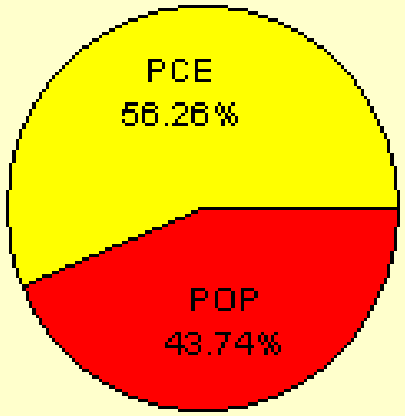
ENERGY USE AND CO_2 EMISSIONS INDIA: 1990-2006

	Year	Energy Use	Year	CO_2 Emissions
Total (ktoe and million tones)	1990	320	1990	680
	2005	537	2006	1250
Per capita (kgoe and tones)	1990	377	1990	0.80
	2005	491	2006	1.13
Population (million)	1990	851	1990	851
	2005	1094	2006	1110
Increase	1990-05	217	1990-06	570

ENERGY USE AND CO_2 EMISSIONS INDIA: 1990-2006



Energy Use



CO(2) Emissions

DYNAMICS OF POPULATION GROWTH

- The demographic opportunity/liability is only a one time phenomenon.
- The magnitude depends upon the speed of fertility decline.
- When fertility declines at a rapid pace, the implications of demographic opportunity/liability are large.
- When fertility declines slowly, implications are small.

DYNAMICS OF POPULATION GROWTH

- Two approaches
  - Decrease the number of births (Preventive checks)
  - Increase the number of deaths (Positive checks)
- Increasing deaths is contrary to the basic philosophy of development.
- The only alternative is to reduce births.
- Reduction in the number of deaths has generally been a precondition to reduction in the number of births.

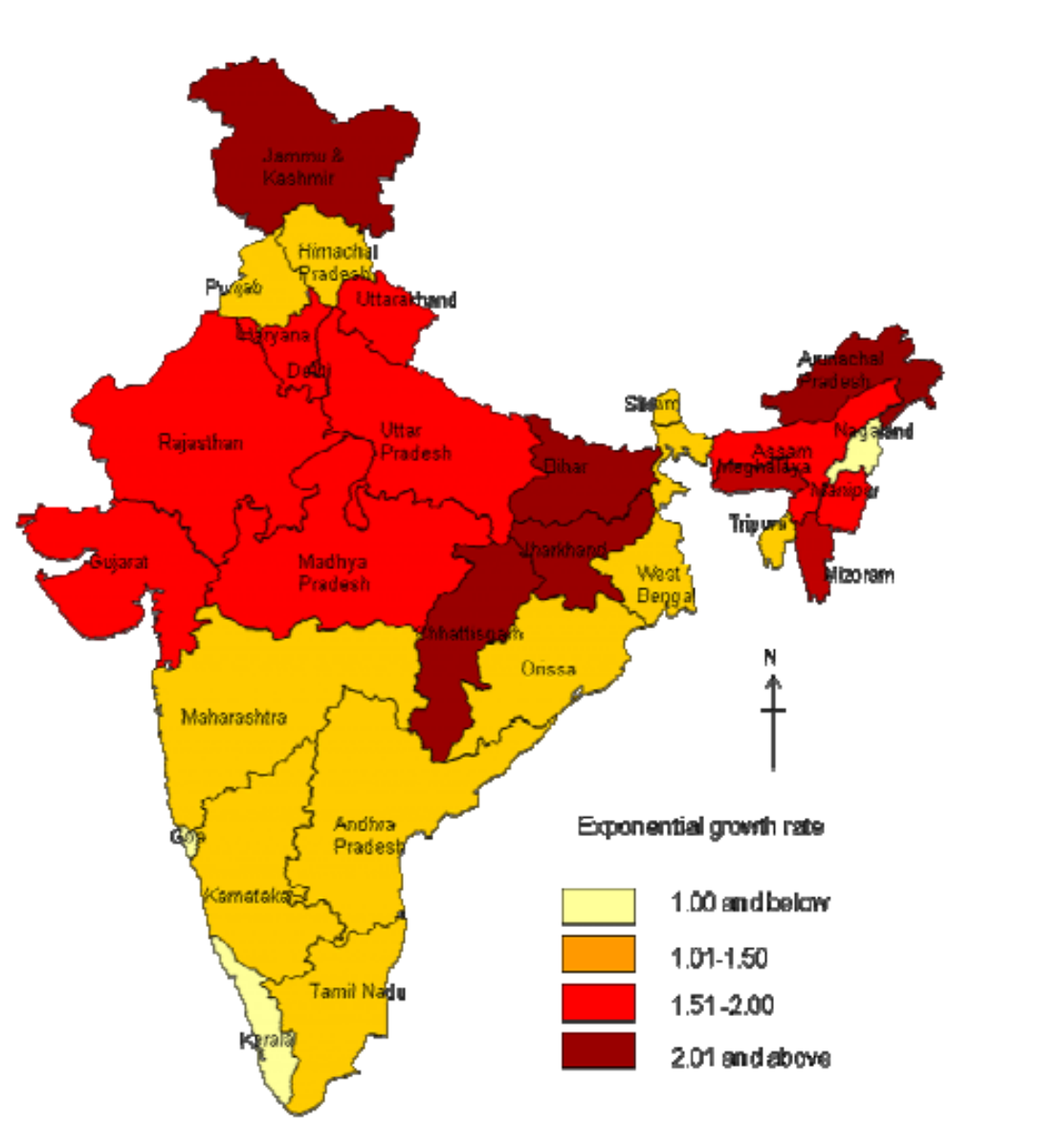
- The only way to counter deaths is **procreation.**
- When the death rate is high, a large proportion of deaths are premature deaths.
- Reduction in the number of births is possible only through regulating fertility – number of live births per couple (woman).
- Achieving replacement fertility is necessary to achieve population stabilisation.
- In the absence of mortality, replacement fertility is two children per couple.
- Replacement fertility is more than 2 children when infant and child mortality is high.

POPULATION GROWTH TABLE FOR INDIA

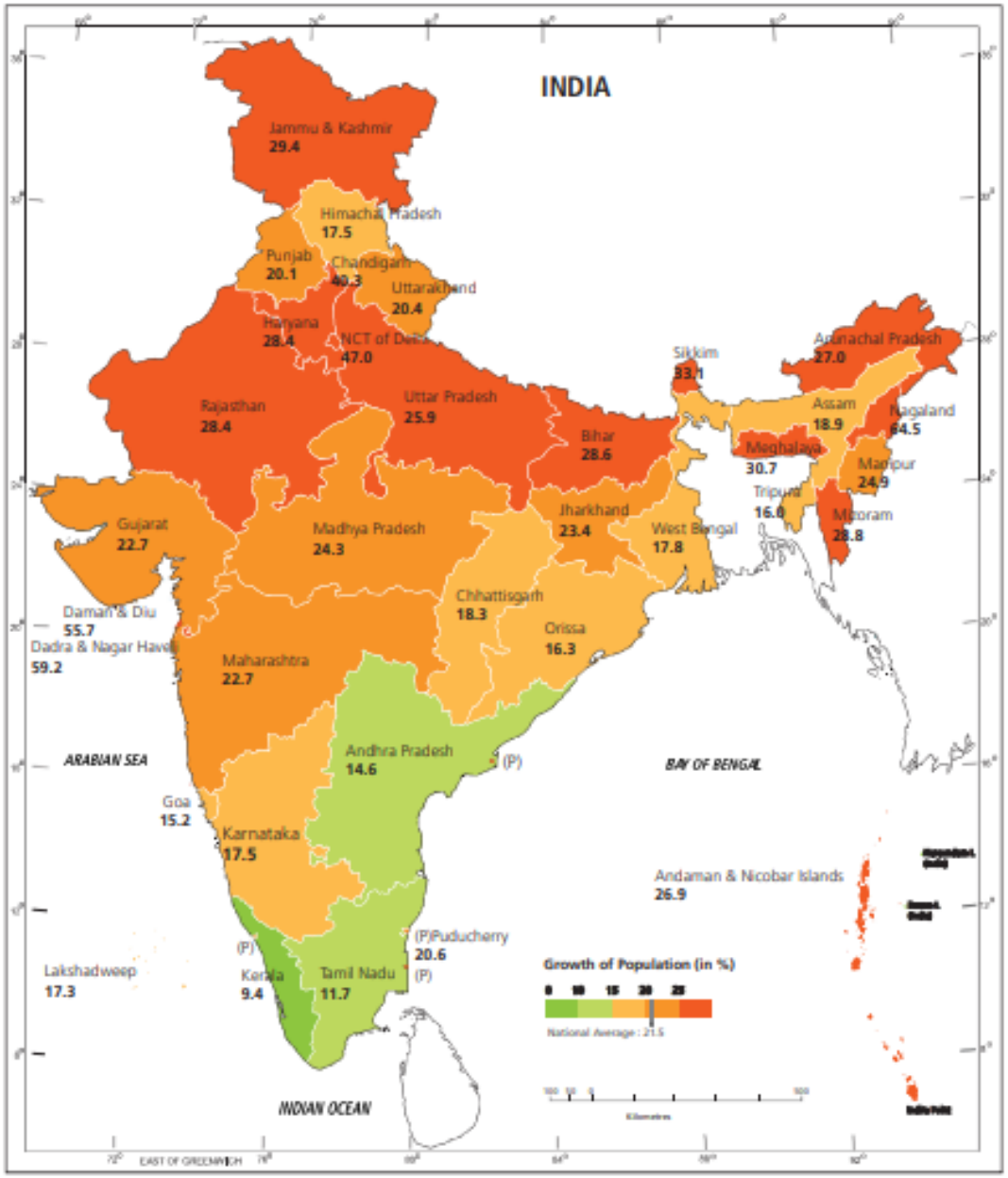
Table 4.2
India's Population in Various Census Years

Year	Population in millions	Decadal variation		Average annual exponential growth rate	Progressive growth rate
		Absolute	Percent		
1901	238,396,327	-	-	-	-
1911	252,093,390	+13,697,063	+ 5.75	0.56	5.75
1921	251,321,213	- 772,177	-0.31	-0.03	5.42
1931	278,977,238	+27,656,025	+11.0	1.04	17.02
1941	318,660,580	+39,683,342	+14.22	1.33	33.67
1951	361,088,090	+42,420,485	+13.31	1.25	51.47
1961	439,234,771	+77,682,873	+21.51	1.96	84.25
1971	548,159,652	+108,924,881	+24.80	2.20	129.94
1981	683,329,097	*135,169,445	+24.66	2.22	186.64
1991	843,387,888	+163,058,791	+23.86	2.14	255.03
2001	1,027,015,247	180,627,359	21.34	1.93	330.80

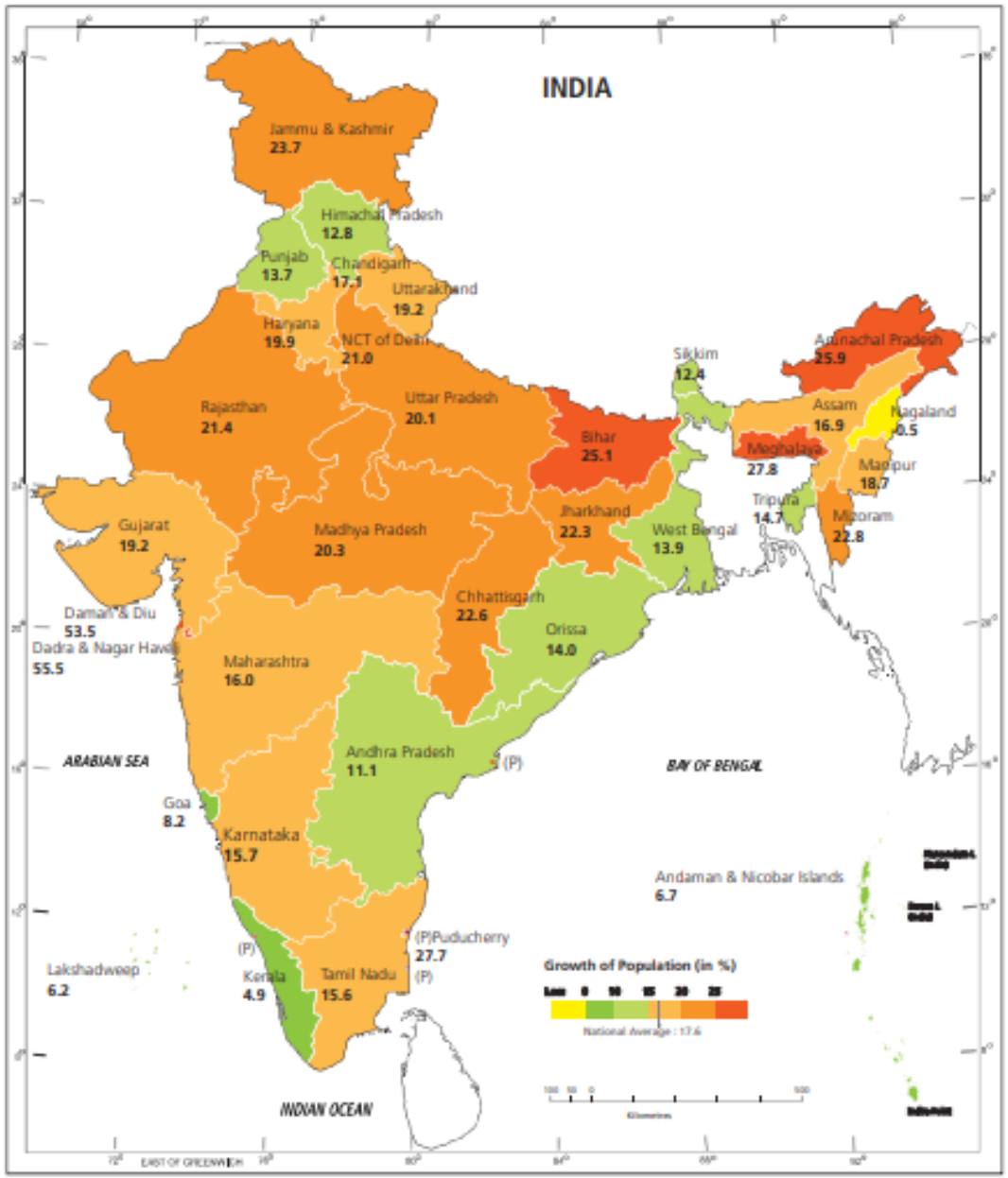
Source: Census of India, Provisional Population Totals, Series - 1, Paper - 1 of 2001.


Jammu & Kashmir
Himachal Pradesh
Punjab
Uttarakhand
Haryana
Delhi
Rajasthan
Uttar Pradesh
Bihar
Sikkim
Arunachal Pradesh
Nagaland
Assam
Meghalaya
Manipur
Tripura
Mizoram
Jharkhand
West Bengal
Gujarat
Madhya Pradesh
Chhattisgarh
Orissa
Maharashtra
Goa
Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
N
Exponential growth rate
1.00 and below
1.01-1.50
1.51-2.00
2.01 and above

Growth of Population, 1991-2001 (States/Union Territories)



Growth of Population, 2001-2011 (States/Union Territories)



CONCLUSION

- The outcomes of high population growth rates are increasing number of people below poverty line, an increasing population density, and pressure on natural resources. The study reveals that the country's population growth and poverty is imposing an increasing burden on the country's limited and continually degrading natural resource base.

CONCLUSION

- It will increasingly difficult to satisfy the basic needs of a growing population even at present levels of consumption, and the situation will deteriorate progressively as the per capita consumption of resources increases. The growth of population is a fundamental factor in its relationship to natural resources, environment and technology. To sum up, there is an urgent need to control population and poverty, conserve and protect natural resources and the environment for healthy human beings.