

Introduction

- ✓ **Overpopulation is a growing problem throughout the world.**
- ✓ **World's population has reached 7 billion.**
- ✓ **There will, of course, be significant increases in the demand for food, water, and energy in developing countries.**
- ✓ **Rapid population growth impedes development.**

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- ✓ India and many third world countries are now passing through the phase of population explosion.
- ✓ It is being argued that this situation has arisen because development in these countries has failed to maintain pace with population growth.
- ✓ Rapid growth of population causes poverty and proves to be a barrier to development.

Effects on agriculture land

The total area of the country is fixed & where agriculture is predominant.

Population increases at a faster rate, larger and larger area of land is needed for dwelling units, roads, factories, etc.

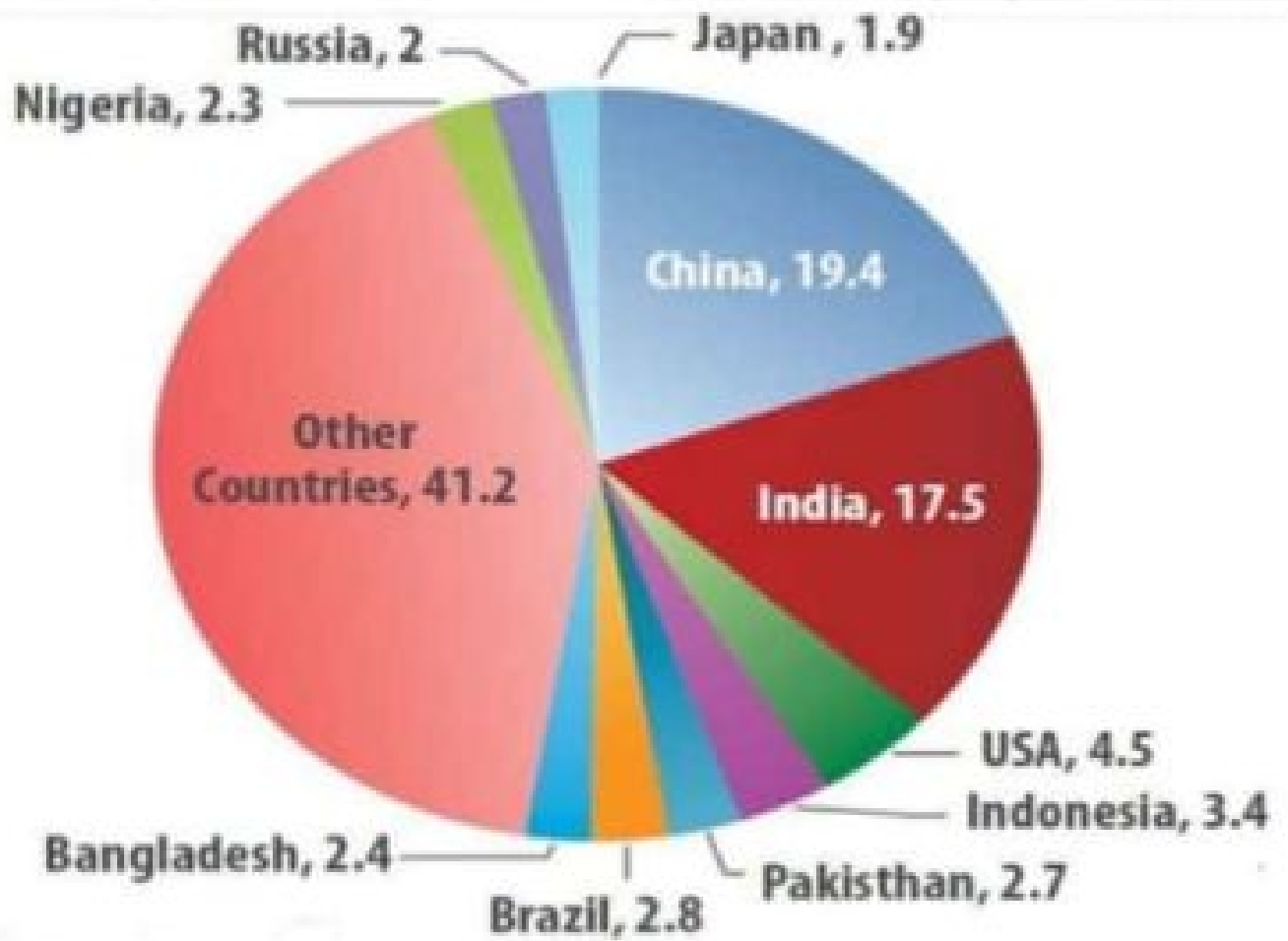


An estimated half of India's **329 million hectares of soil is degraded**. India will lose all its productive land to desertification within 200 years, if the present annual loss of land continues.

Small size of land holdings results in wastage of land & capital and productivity is adversely affected.

**“India’s large population is an important asset,
and the key to the economic future of our
nation”. - Jawaharlal Nehru**

Coale and Hoover model



Sources: Population Reference Bureau, 2011

Population and Development: China & India

Two of the world's fastest growing economies.

China and India, also happen to be the world's two most populous nations.

In India, it is common to hear the view that,

Everything is growing faster in China than India, except population.

India, which had well under 2/3rd of China's population half a century ago, is projected to surpass China's population by 200 million people by 2050.

Youth Bulge

- Population pyramid depicts the current distribution of people across age groups.
- A large number of youth constitute India's population; about 36 percent of the population is under age 15.
- This young age structure creates a powerful momentum for future population growth.
- Many females will soon enter their reproductive years and have children within the next decade. Even if fertility declines rapidly, it will take 50 years for the population to stabilize.

How to reduce rapid population growth?

1. Expansion of industrial sector:

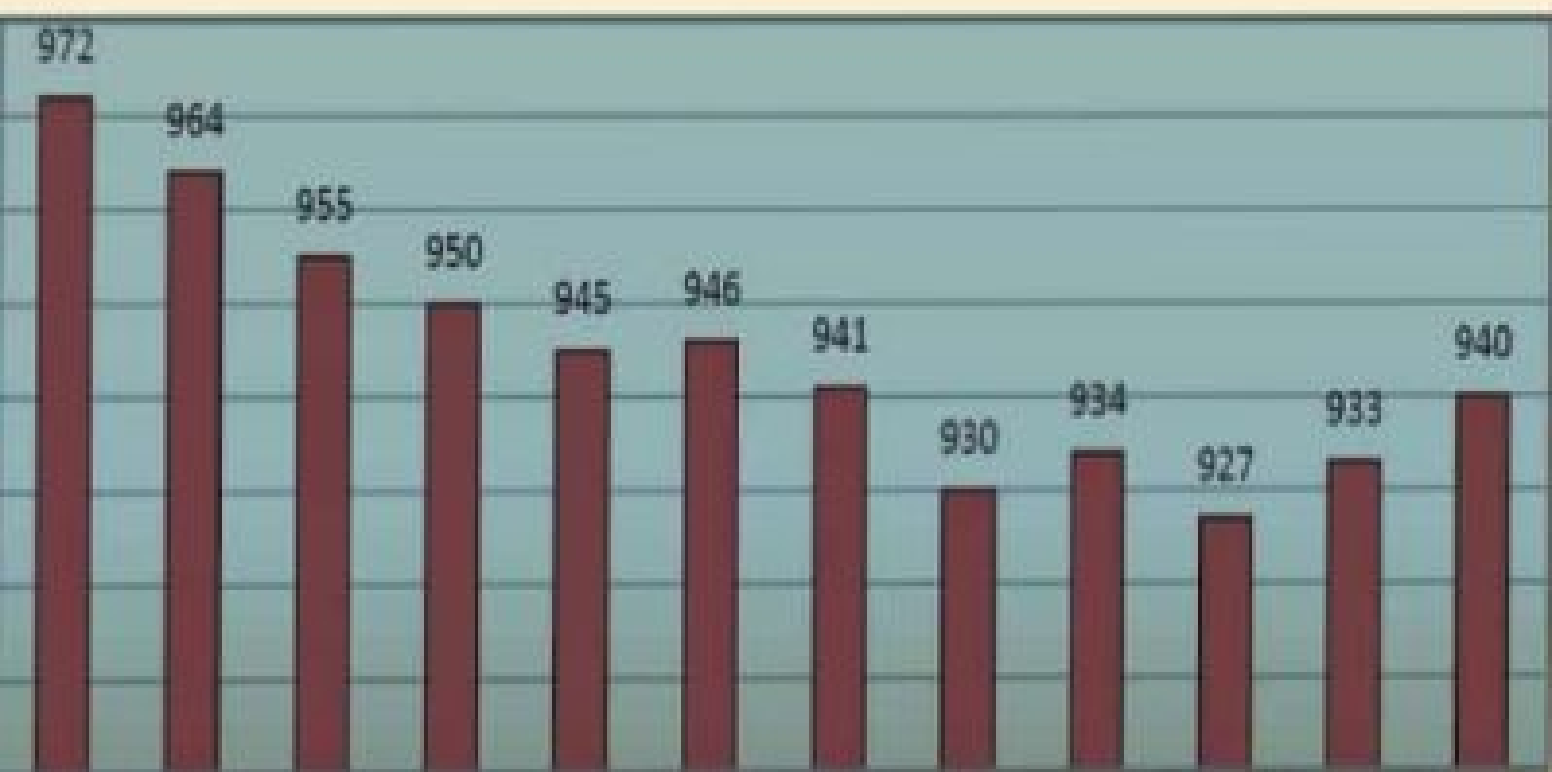
Industrial workers are aware of difficulties in getting the employment & are interested in restricting the size of their family.

2. Creation of employment opportunities in urban areas:

The housing problem and the cost of upbringing of children in urban areas are the two factors which usually deter people from having big families



Sex Ratio- All India



8.8

9.5

9.2

8.9

7.8

7.2

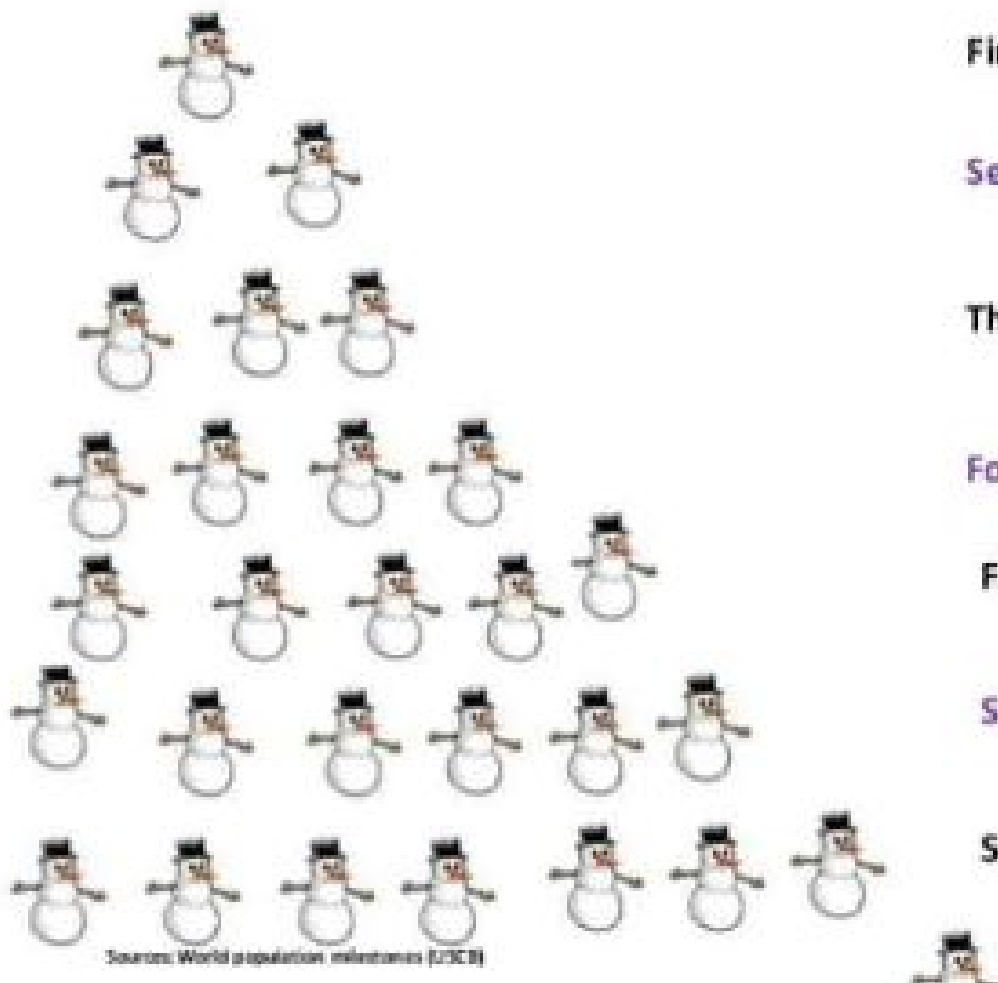
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World Population Growth



First Billion: 1804

Second Billion: 1927 (123 yrs)

Third Billion: 1960 (33 yrs)

Fourth Billion: 1974 (14 yrs)

Fifth Billion: 1987 (13 yrs)

Sixth Billion: 1999 (11 yrs)

Seventh Billion: 2011 (12 yrs)

Population of Indian States Compared to a Few Countries in the World (in million)

State	Population	Vs	Country	Population
Uttar Pradesh	200		Brazil	194
Maharashtra	112		Japan	128
Bihar	104		Mexico	107
West Bengal	91		Philippines	92
Andhra Pradesh	85		Germany	82
Madhya Pradesh	73		Turkey	75
Tamil Nadu	72		Iran	73
Rajasthan	69		Thailand	68
Karnataka	61		UK	62

Reasons for High Birth Rate

A. Economic factors

B. Social factors

A. Economic factors

1. Predominance of agriculture

In agrarian society children never been considered as economic burden.

2. Slow urbanization process & predominance of villages

3. Poverty

People are not poor because they have large families. Quite the contrary, they have large families because they are poor.

-(Mahmood Mandani)



Population growth =

(Birth rate+ Immigration) - (Mortality + Emigration)

In India the population has rapidly increased mainly due to decline in the death rate, while the birth rate remained high.



Food Security

- To provide for the food requirements of the additional population, **India will have to consistently increase food production by 3% every year.**



- The number of people who require a food subsidy would double in 50 years; and
- Greater pressure would be placed on the government to provide food subsidies.



Malthusian views

- ✓ Population tends to increase at a geometric rate
- ✓ Food can only increase arithmetically
- ✓ Population expands to eat up any surplus
- ✓ Choose moral checks or positive checks

Forests contribute in a big way to economic growth of the country.

The Theory of Demographic Transition

Acc. to The Theory of Demographic Transition, every country passes through 3 stages of demographic transition.

Stages of demographic transition:

1st stage: Both birth rate and death rates are high. Hence the population remains more or less stable.

2nd stage: Rapid growth of population because, despite substantial reduction in the mortality rate there is no corresponding decline in the birth rate.

3rd stage: The birth rate declines significantly and thus the rate of population growth remains low.

Year	Density of population per sq km
1901	77
1911	82
1921	81
1931	90

8. Improve child health to reduce infant mortality

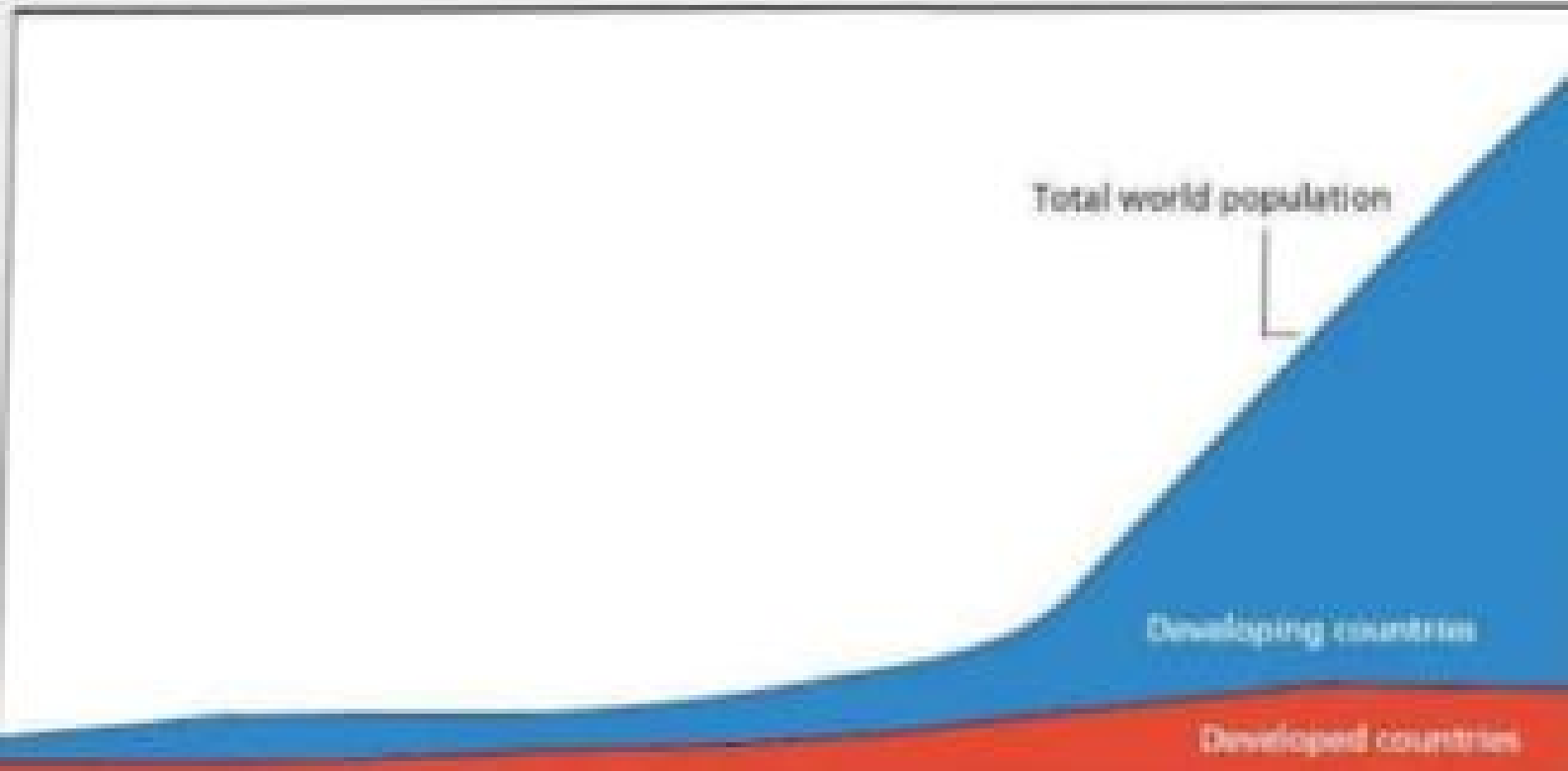
9. Implementation of family-planning programs

10. Monetary subsidies to small families



World population, 1750–2050

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- Today, 36% of India's one billion populations are below the age of 15 years.
- This means that by 2020, 325 million people in India will reach the working age. India will have the largest working population in the world.
- This expected rise in India's working population comes at a time when the developed world is faced with large, ageing populations.



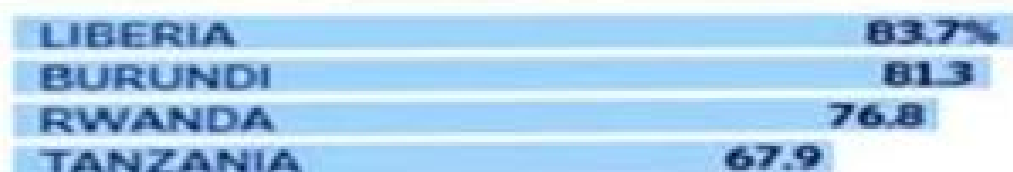
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- Today, high population densities have led to overloaded infrastructure in urban areas.
- **27% of India's urban population today lives without sanitation; 24% lives without access to tap water.**
- The population of India's major cities is expected to increase by an average of 25% by 2020.



Countries with the largest percentage of people living on \$ 1.25 or less /day (2011)



A horizontal bar chart with four bars, each representing a country and its corresponding percentage. The bars are light blue with black outlines. The country names are in bold black uppercase letters on the left, and the percentages are in bold black numbers on the right. The bars are ordered from highest to lowest percentage.

LIBERIA	83.7%
BURUNDI	81.3
RWANDA	76.8
TANZANIA	67.9



International migration, 2010 (Top 10)

Highest percentage of international migrants		Largest number of international migrants, (millions)	
Qatar	87%	USA	42.8
UAE	70%	Russia	12.3
Kuwait	69%	Germany	10.8
Jordan	46%	Saudi Arabia	7.3
Palestine	44%	Canada	7.2
Singapore	41%	France	6.7
Israel	40%	UK	6.5
Hong Kong	39%	Spain	6.4
Saudi Arabia	38%	India	5.4

Causes of rapid population Growth



1. High birth rate

2. Relatively lower death rate and



3. Migration

Net Migration is the difference between emigration & immigration

- Emigration is when a person moves out of the country.
- Immigration is when a person moves into a country.

Sex wise composition of population in India



Sex ratio: No. of females per thousand males.

All time lowest sex ratio was 927 in 1991.

The sex ratio of India has shown improvement during last two decades.

Sex ratio, as per the recent census is **940** which is largely comparable to the **best performance (941 in 1961)** in last fifty years.

1	Bihar	1,102
2	West Bengal	1,029
3	Kerala	859
4	Uttar Pradesh	689
5	Haryana	573
6	Tamil Nadu	555

Why there are so many children in poor countries ??

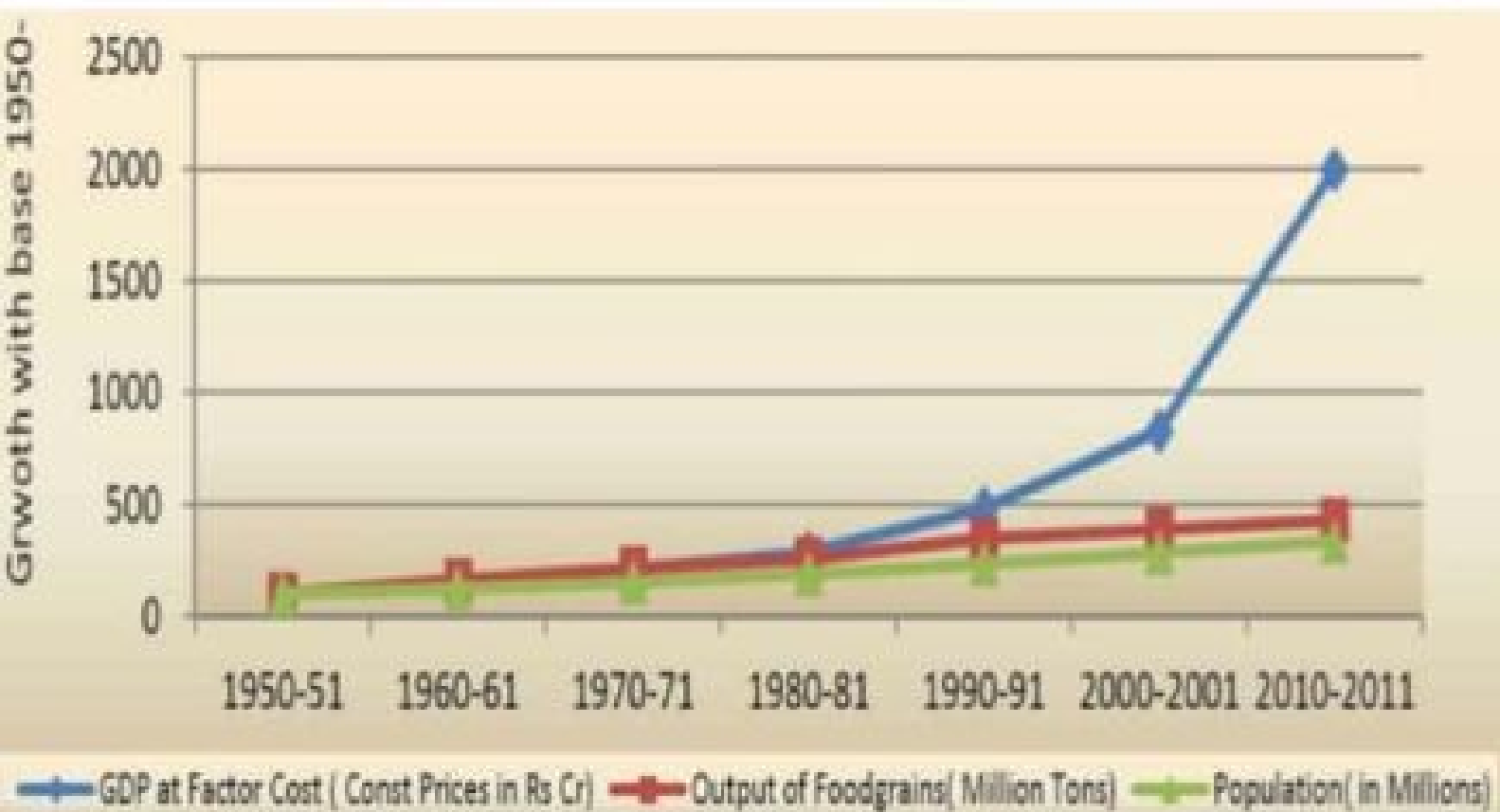


Because children are "*investment goods*" rather than "*consumption goods*"

The "expected return of the investment" is given by **child labour** and **financial support for parents in old age**



Population growth, GDP and food grain production in India



World Population Growth Rate (Decadal growth- 2001 to 2011)

S.No.	Country	Population (In millions)	Decadal change (in %)
1	China	1,341.0	5.43
2	India	1,210.2	17.64
3	U.S.A	308.7	7.26
4	Indonesia	237.6	15.05
5	Brazil	190.7	9.39
6	Pakistan	184.8	24.78
7	Bangladesh	164.4	16.76
8	Nigeria	158.3	26.84
9	Russian Fed.	140.4	-4.29



Indian economy

Today, India is one of the **fastest growing** economies in the world.

The economy of India is the **10th largest** in the world by **nominal GDP** and the **3rd largest** by **purchasing power parity (PPP)** With **4,793 billion USD**.

According to the IMF, India is the **19th-largest exporter** and **10th-largest importer** in the world.

The economy is growing around **5.0% growth rate**.

India's **low-cost, skilled labour force** has been an important driver in its economic growth.

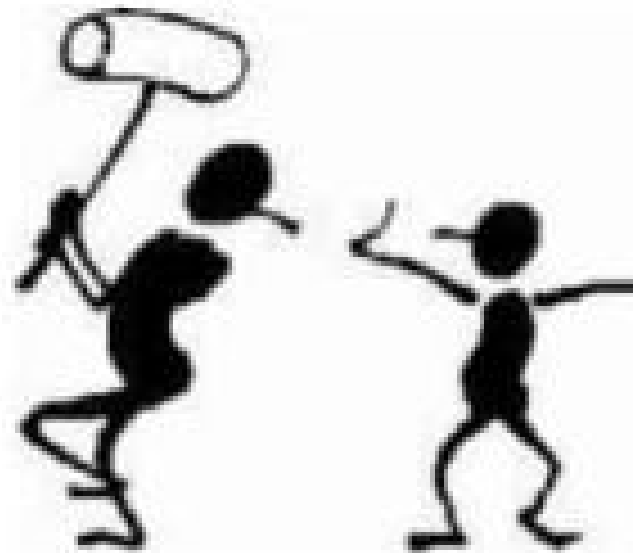
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e. Nutrition levels

f. Living standard

g. Education, health care & expanded medical facilities

h. Social factors such as conflicts and levels of violent crimes

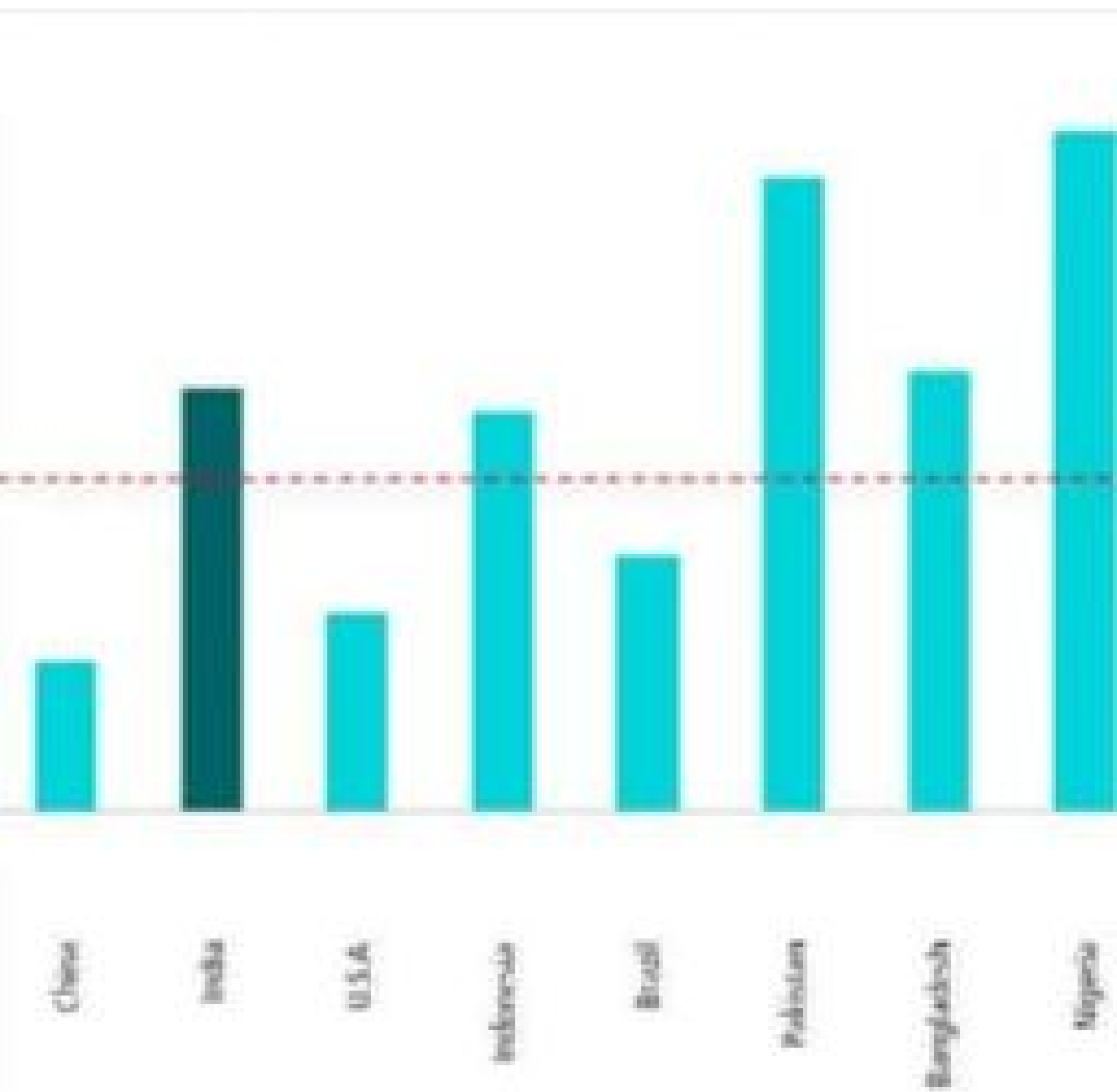


Density of Population

'Density of Population' is defined as the number of persons per square kilometer.

With a population density of **382/km²**, India ranks **31st** among the most densely populated countries in the world.





ources: Population Reference Bureau, 2011

Concepts & Definitions

Population:

The population of an area is the total number of all individuals alive in a particular point in time.

Thomas Frejka, (1973)

Population explosion:

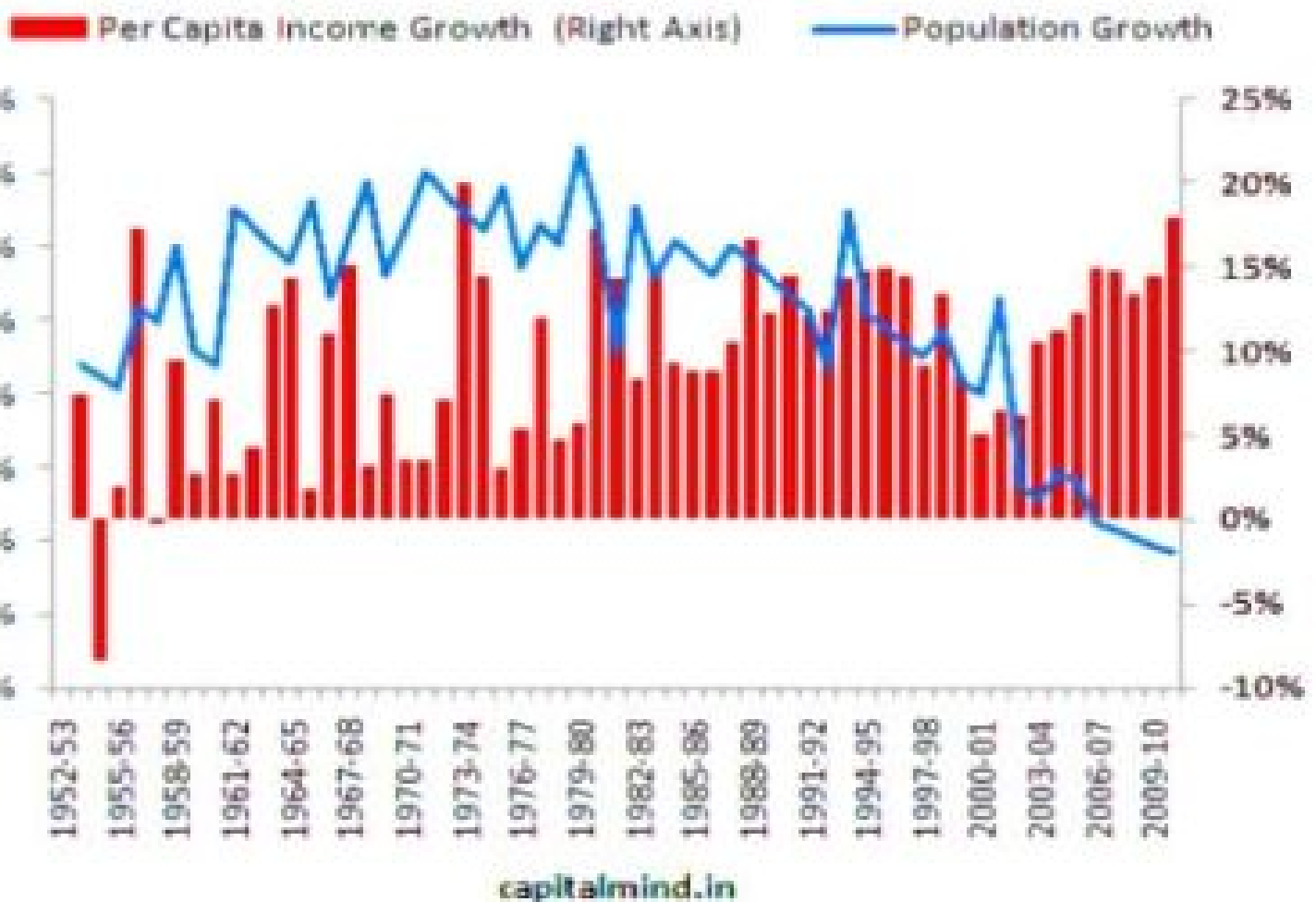
The Theory of Demographic Transition, asserts that the population explosion implying a sudden spurt in the rate of population growth is a transitory phenomena that occurs in the second stage of demographic transition due to rapid fall in mortality rate without a corresponding fall in the birth rate.

Birth Rate is the total number of births per 1000 of a population each year.

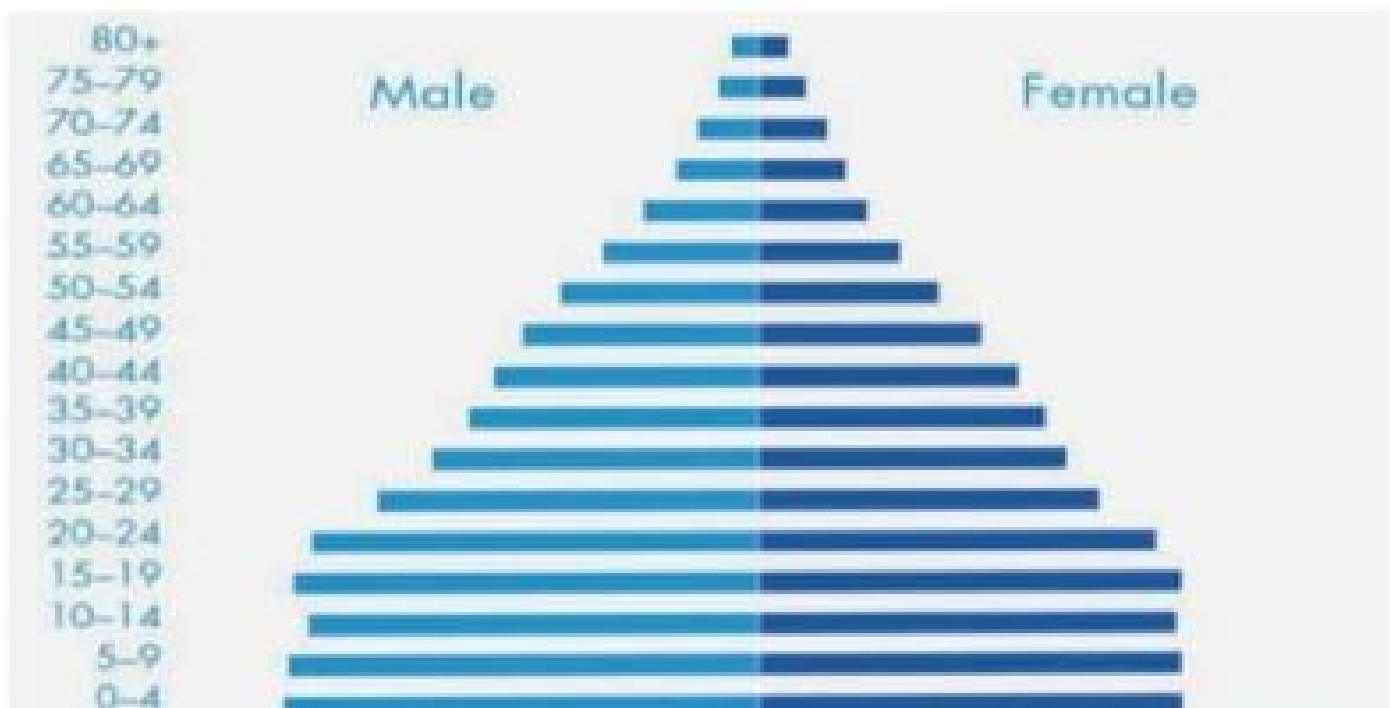
Mortality rate is the total number of deaths per 1000 individuals per year.

Total fertility rate (TFR) is the average number of children that would be born to a woman over her lifetime.

India's Population and Per Capita Income



India's Youth Bulge



Census year	population	Decadal growth		Avg. annual exp. growth rate (%)
		absolute	percent	
1901	23,83,96,327		-	-
1911	25,20,93,390	1,36,97,063	5.75	0.56
1921	25,13,21,213	-7,72,177	(0.31)	-0.03
1931	27,89,77,238	2,76,56,025	11.00	1.04
1941	31,86,60,580	3,96,83,342	14.22	1.33
1951	36,10,88,090	4,24,27,510	13.31	1.25
1961	43,92,34,771	7,81,46,681	21.64	1.96
1971	54,81,59,652	10,89,24,881	24.80	2.20
1981	68,33,29,097	13,51,69,445	24.66	2.22
1991	84,64,21,039	16,30,91,942	23.87	2.16
2001	1,02,87,37,436	18,23,16,397	21.54	1.97
2011	1,21,01,93,422	18,14,55,986	17.64	1.64

Effects on mineral resources



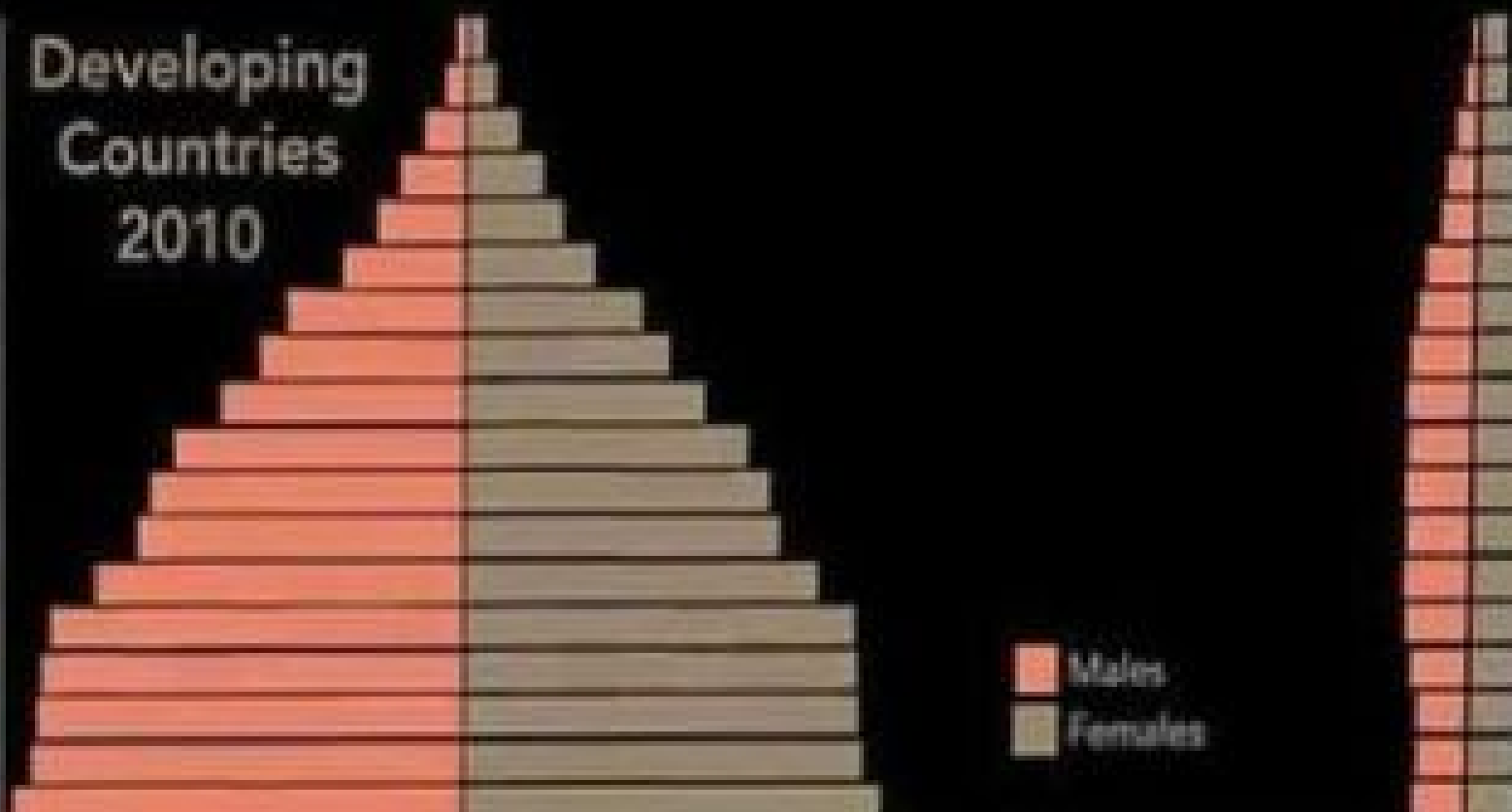
Mineral resources are limited.

Faster growth of population & its size in India resulted in greater exploitation of these resources.

This will obviously affects adversely the future

- India is the **2nd** most populous country in the world, with over **1.21 billion people** (2011 census)
- India already containing **17.5% of the world's population** and projected to be the world's most populous country by 2025, surpassing China.
- **Population growth rate is 1.5%**, ranking **90th** in the world. (Qatar ranks **1st** with a rate 4.93%)
- India has **more than 50% of its population below the age of 25** and more than **65% below the age of 35**.
- It is expected that, in 2020, the **average age of an Indian will be 29 years**, compared to 37 for China and 48 for Japan.

Developing Countries 2010



Population growth & Economic development in india

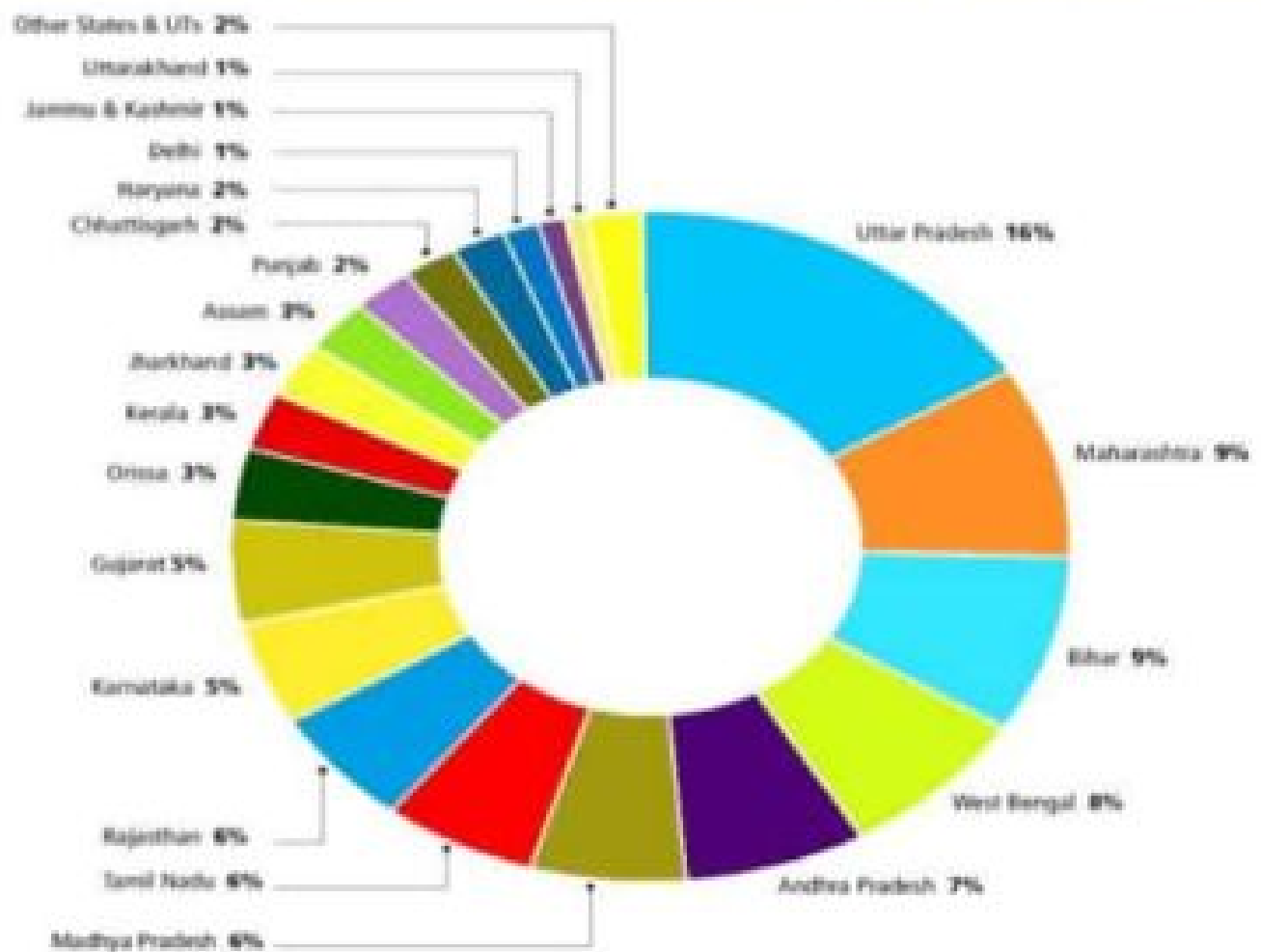


India's population is large and growing.

The rapidly growing population affect India's **impressive economic growth** and commitment to improving the **living standards of its citizens.**

The economic growth primarily due to a **huge increase in the size of the middle class consumer population, a large workforce comprising skilled workers, good education standards and**

Population share of state & UT, India 2011



Sources: Census, GOI, 2011



Growth of population, GDP and food grain production, India: 1950-51 to 2010-11.

YEAR	POPULATION (millions)	GDP at facto cost (at constant price in Rs. Crore)	Output of foodgrains (million tons)
1950-51	361	2,24,786	50.8
1960-61	439	3,29,825	82.0

5. Increase the minimum-age child labor

6. Provide better old-age social security

To reduce the dependency on the children

7. Raising the minimum age of marriage

India should try to draw some lesson from the experiences of China, Malaysia and Sri Lanka where fertility decline has occurred largely through an increase in age at marriage.



Adversely affected the capital formation.

More resources are used for meeting the fast increasing population needs & this leaves less resources for increasing productive capacity of the economy.

Migration: geographical distribution

International

- Migration from low to middle & high income countries
- Employment based migration

Intra-national

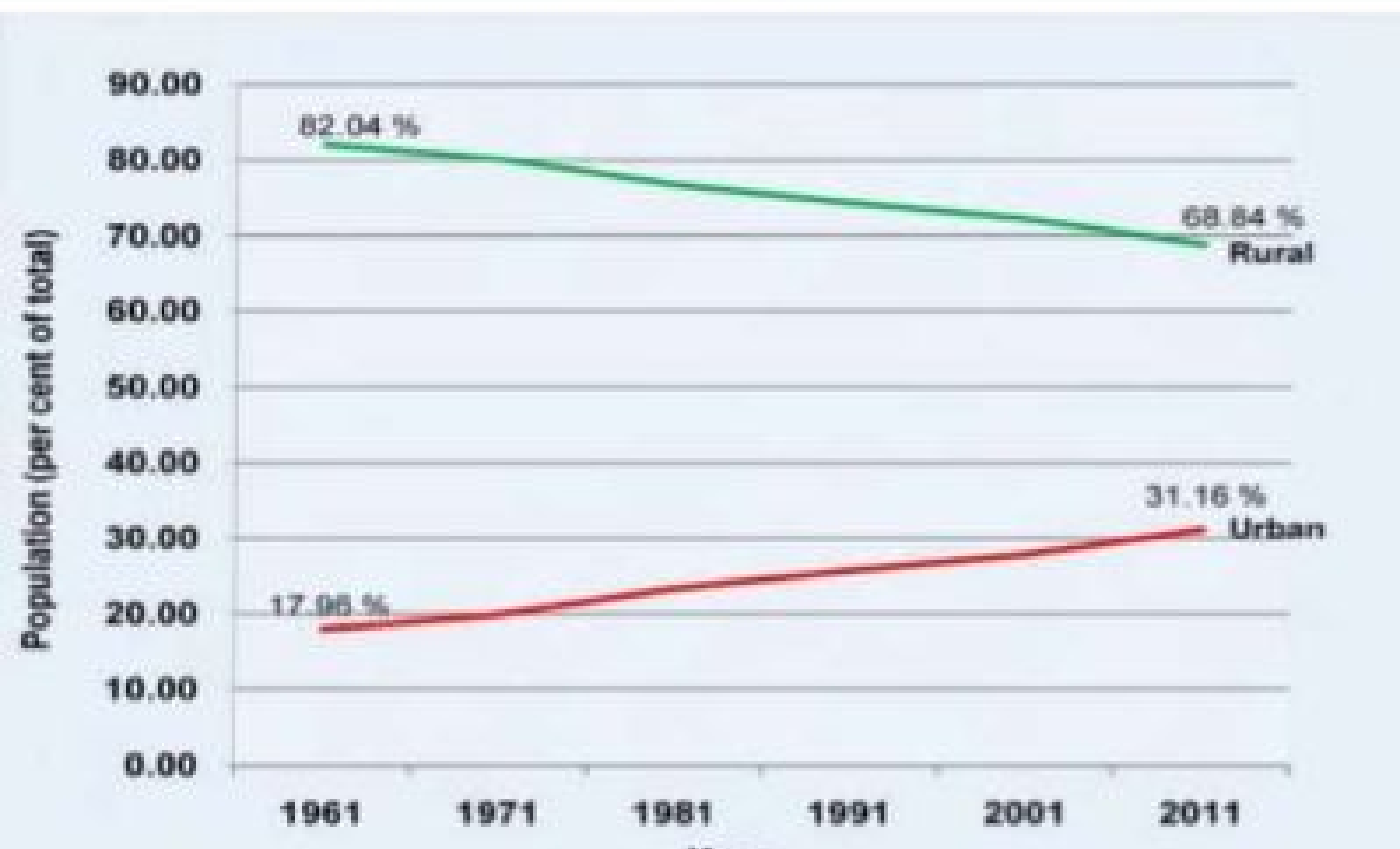
- Rural to Urban
- Semi-Urban to Urban

Why migrate?

- Lure of big city
- Job opportunities (pull factor)
- Lack of rural opportunities (push factor)



Rural & urban population in India





Government of India
Ministry of Home Affairs

Office of the Registrar General & Census Commissioner, India

Census in India



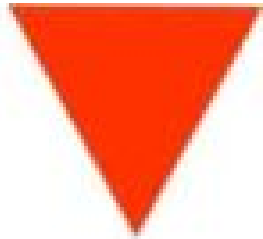
2011

Our CENSUS, Our FUTURE.

- A population Census is the process of collecting, compiling, analyzing and disseminating demographic, social, cultural and economic data relating to all persons in the country, at a particular time in ten years interval.
- It is a regularly occurring and official count of a particular population.
- The 1871 India Census was the first comprehensive census of India, then a component of the British Empire.



Population Policy in India



- It is difficult to decide as what is optimum size of population for India under the existing conditions.
- There has been complete reliance on family planning in order to reduce population explosion.
- The national family planning program was launched in 1951, and was the world's first governmental population stabilization program.
- Low female literacy levels and the lack of widespread availability of birth-control methods is hampering the use of contraception in India.
- Family planning accepted & practiced effectively in some of the states in India.
- Education and awareness needed about Family Planning.

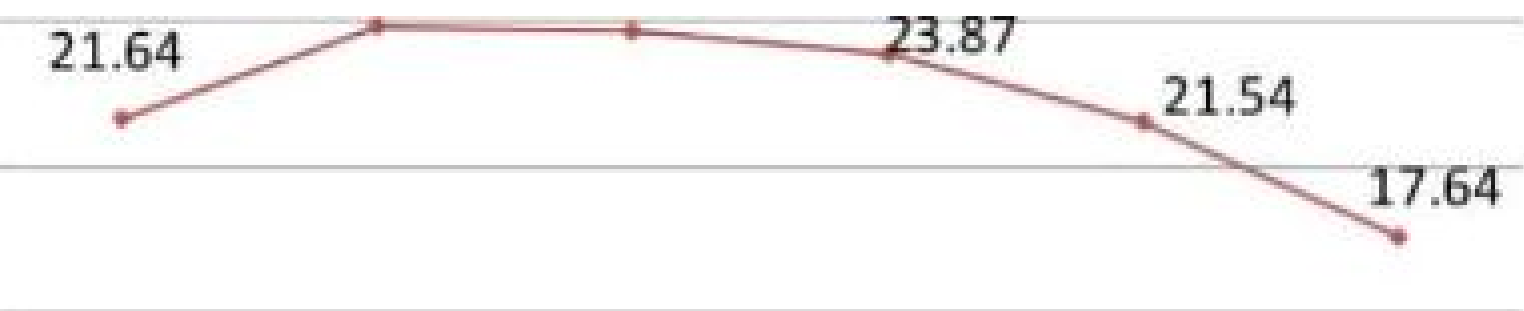
Reasons for decline in the mortality rate

- a. Elimination of famines
- b. Control of epidemics & decline in the incidence of Malaria & Tuberculosis

Cholera and small pox were the two major causes of epidemics before independence. Now cholera is completely eradicated and small pox is very much under control.

- c. Supply of pure drinking water
- d. Sanitation & hygiene





Contd..

5. Lack of education



6. Unawareness about family planning services

7. Social and religious beliefs - especially in relation to contraception and abortion

8. Infant Mortality Rate

