



M.A. / M. Sc. Geography-Part-I

Paper-VII -Human and Population Geography

TOPIC:- *The World Population : Growth and Control measures*

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Outline of the Topic

- Introduction
- Population growth
- Factors affecting the future population growth
- Components of population of change
- Trends in population growth
- Doubling time of world population
- Spatial pattern of population change
- Impact of population change
- Population control measures
- Recapitulation



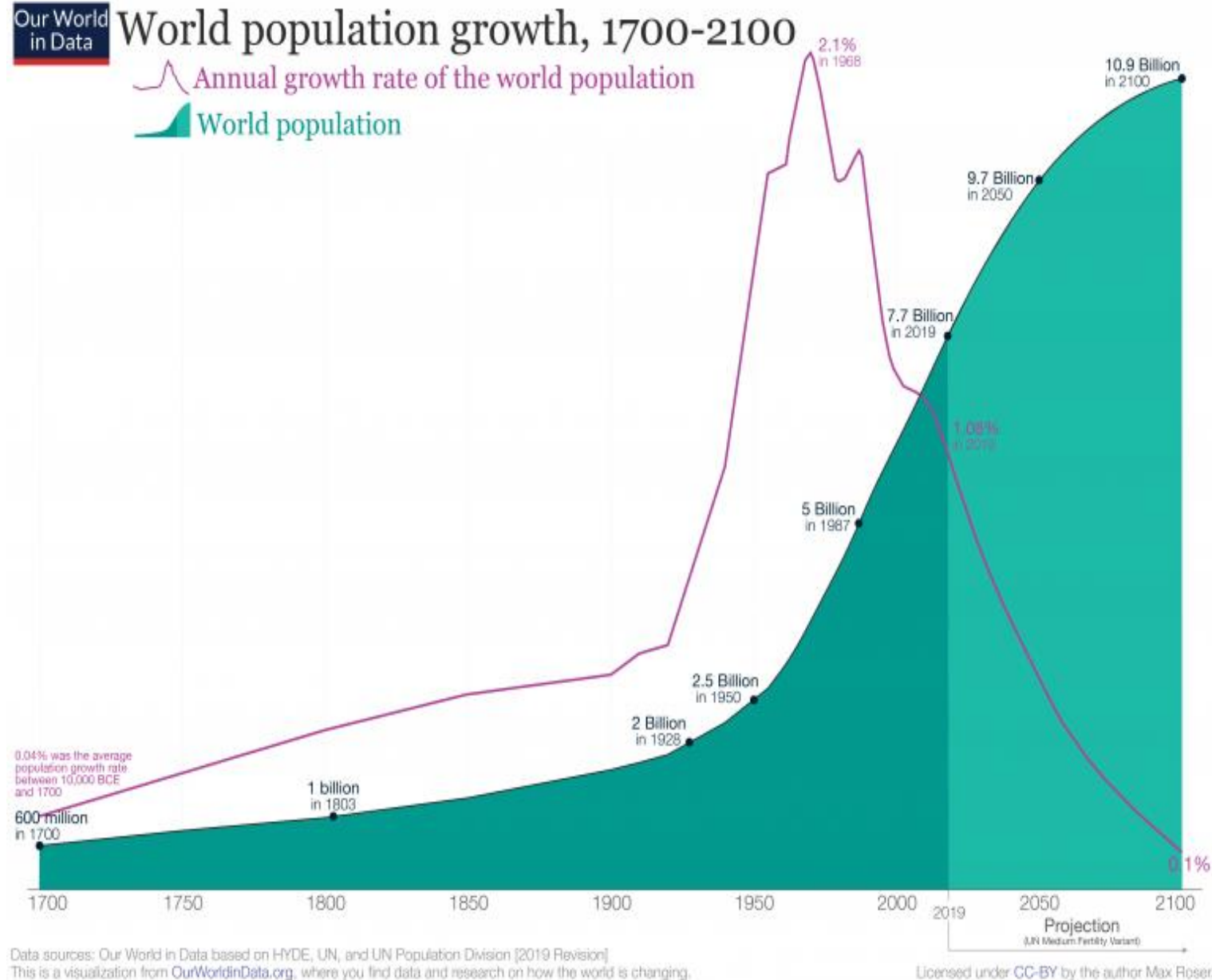
INTRODUCTION

- ❑ The people of a country are its real wealth.
- ❑ It is they who make use of the country's resources and decide its policies.
- ❑ Ultimately a country is known by its people.
- ❑ It also plays an important role in modern economic development.



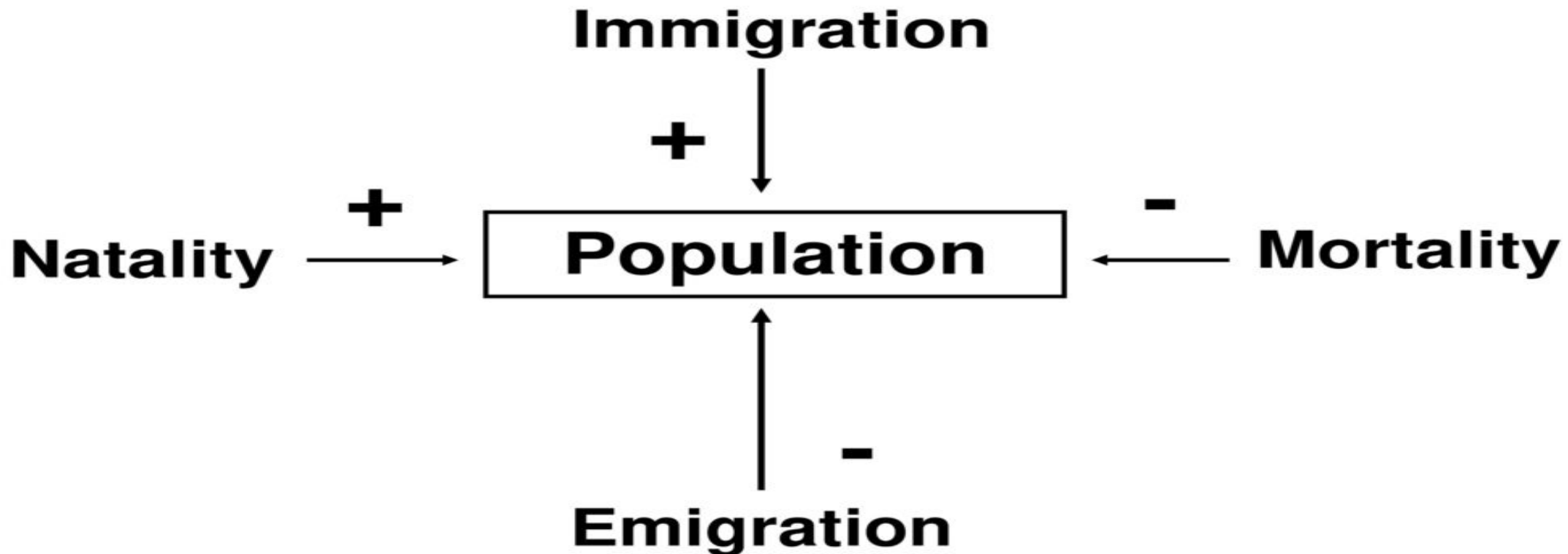
POPULATION GROWTH

- ❑ Population growth or population change denotes the change in the number of people of a region between two points of time.
- ❑ The change in the number of inhabitants can be both positive or negative.
- ❑ It can be expressed in terms of the absolute numbers or percentage.



FACTORS AFFECTING THE FUTURE POPULATION GROWTH

Factors That Affect Future Population Growth



COMPONENTS OF POPULATION CHANGE

□ The three main components of population change :

- 1) Crude Birth Rate (CBR)
- 2) Crude Death Rate (CDR)
- 3) Migration

$$\text{CBR} = \frac{B_i}{P} \times 1000$$

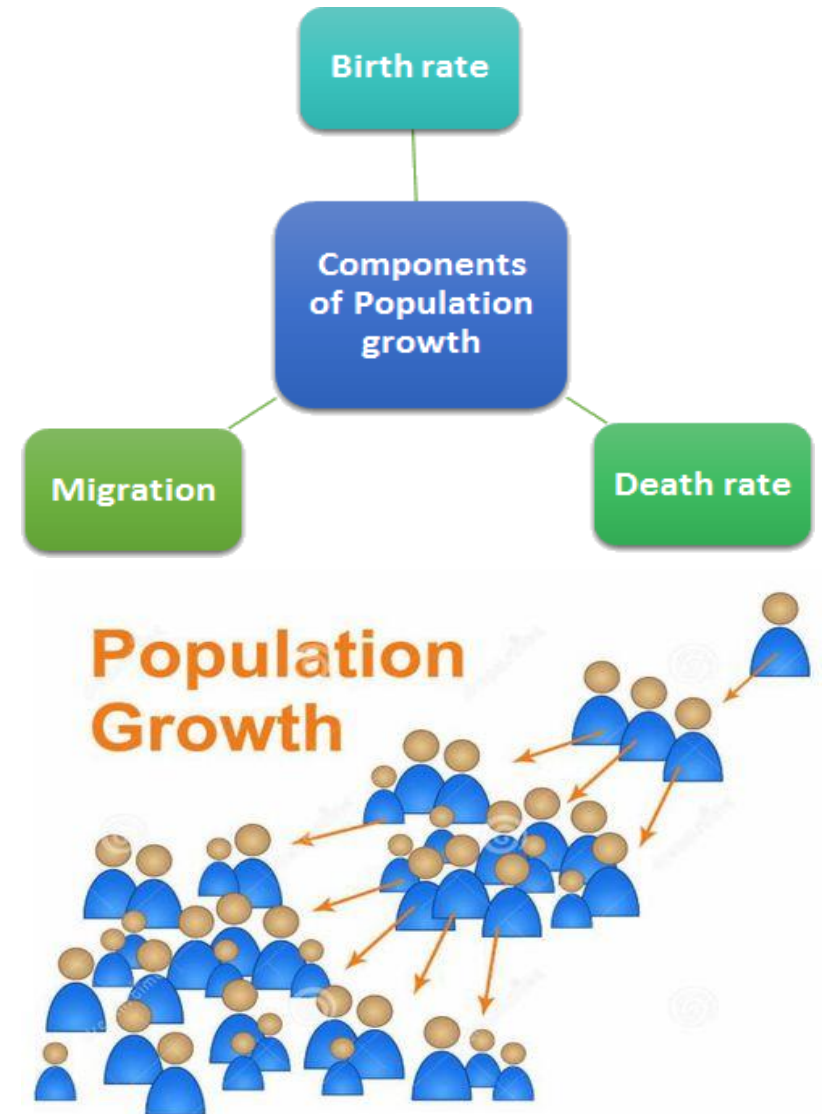
$$\text{CDR} = \frac{D}{P} \times 1000$$

Here, **CBR** = Crude Birth Rate; **CDR** = Crude Death Rate;

B_i = live births during the year;

P = Mid year population of the area;

D = Number of deaths.



TRENDS IN POPULATION GROWTH

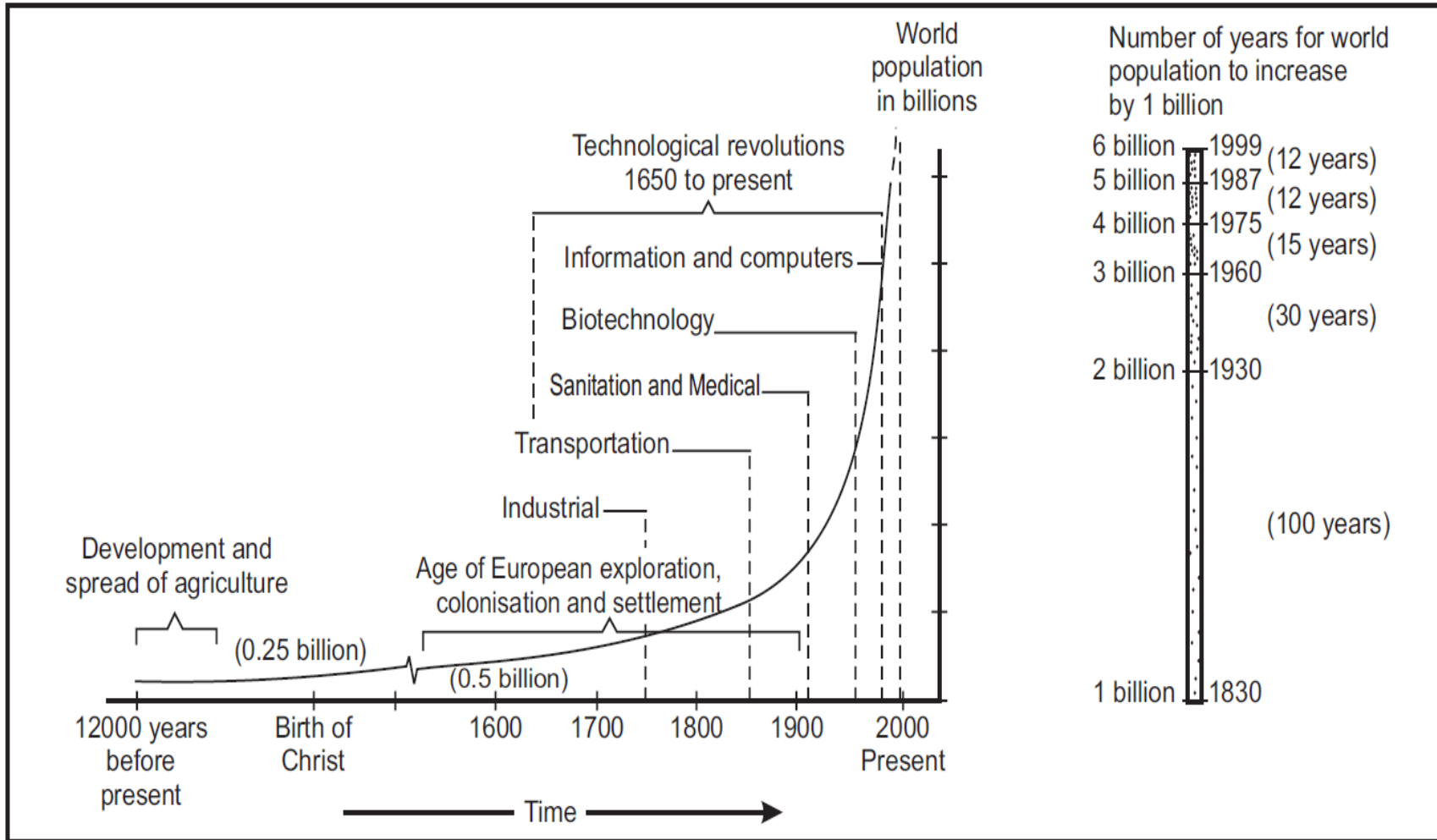
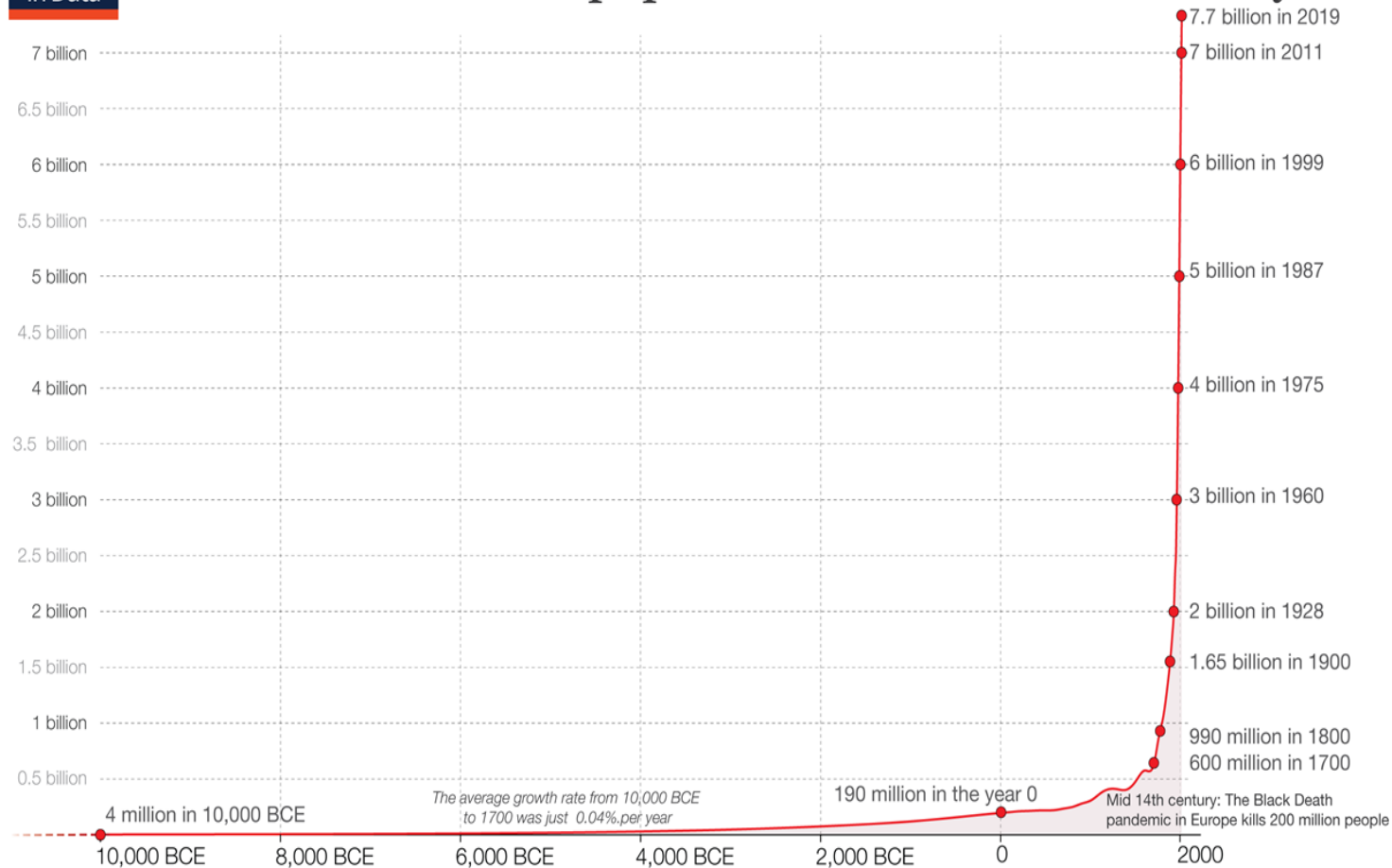


Figure: Resource, Technology and Population Growth

- ❑ In the early stage of evolution the growth rate was very slow.
- ❑ Man was totally dependent on nature for survival.
- ❑ Cultural and technological changes that influenced population growth came in the 20th century through the Medical Revolution.

DOUBLING TIME OF WORLD POPULATION

Our World in Data The size of the world population over the last 12,000 years



- ❑ Time taken to double the population of an area at the current rate of growth is referred to as the population doubling time.
- ❑ For the world population, it took millions of years to attain the 1 billion mark, but it only took twelve years to rise 5 to 6 billion.

Period	Population	Time in which Population Doubles
10,000 B.C.	5 million	
1650 A.D.	500 million	1,500 years
1850 A.D.	1,000 million	200 years
1930 A.D.	2,000 million	80 years
1975 A.D.	4,000 million	45 years
2012 A.D.	8,000 million projected figure	37 years

Figure : Doubling Time of World Population

SPATIAL PATTERN OF POPULATION CHANGE

- ❑ Population growth is lower in developed countries than in developing countries.
- ❑ Population growth and economic development are negatively correlated.

<i>Region</i>	<i>Growth Rate</i>	
	<i>1990-95</i>	<i>2004-05 (Estimated)</i>
World	1.6	1.4
Africa	2.4	2.6
Europe	0.2	0.0
North & Central America	1.4	1.1
South America	1.7	1.4
Asia	1.6	1.4
Oceania (Australia, New Zealand and Fiji)	1.5	1.3

Figure : Growth of Population 2004-05 over 1990-95

IMPACT OF POPULATION CHANGE

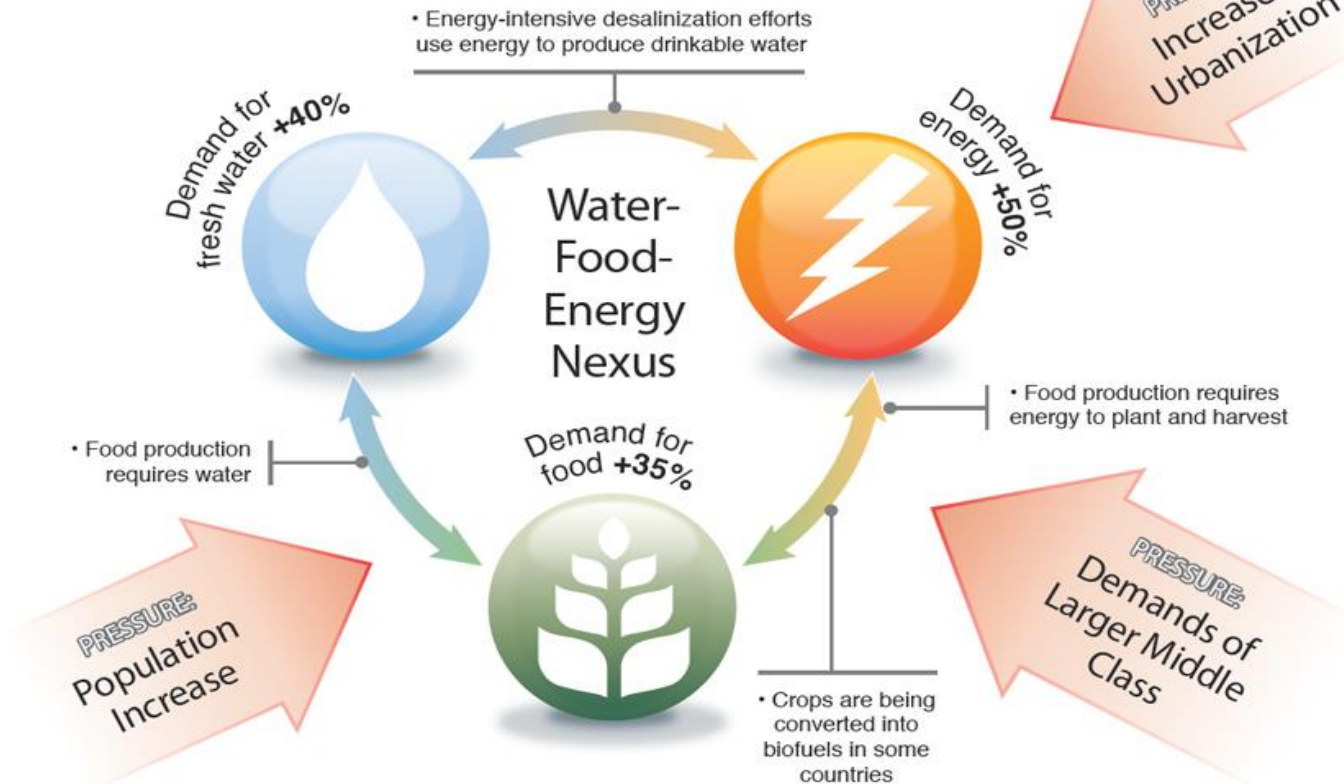
❑ In order to have a growing economy a small increase in population is a boon.

❑ However, population growth beyond a certain level leads to problems, of these the depletion of resources is the most serious.

As population grows, pressures mount

And the relationships between food, water, and energy supplies become critical

Because of growth in global population and the consumption patterns of an expanding middle class, in less than two decades three key demands will sharply increase ...

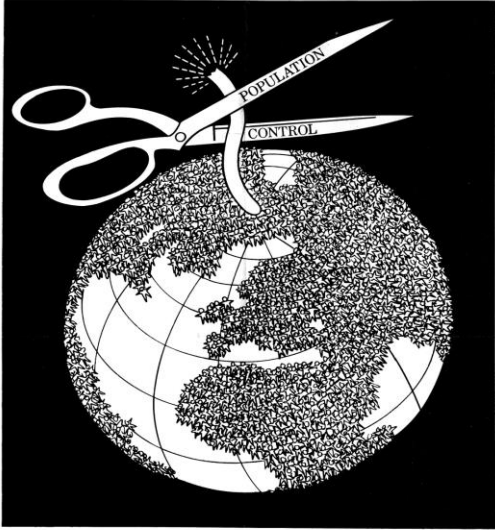


POPULATION CONTROL MEASURES

- Family planning is the spacing of preventing the birth of children.
- Access to family planning services is a significant factor in limiting population growth and improving women's health.

THE NEW YORK TIMES

THE POPULATION BOMB THREATENS THE PEACE OF THE WORLD



SO WHAT ARE WE DOING ABOUT IT?

Fifteen years ago there were 2.5 billion people on earth. Today there are 3.2 billion—and new ones are arriving on the scene at the rate of more than 300 million a year! In another fifteen years there will be a total of 4.5 billion people on this small planet of ours. Most of them hungry. And make no mistake about it, America cannot long remain an island of prosperity in a sea of poverty and hunger.

If corrective measures to check this human flood are not taken right here and now the resulting world-wide misery, strife, revolutions and wars will make our experience in Viet Nam appear minor by comparison.

President Johnson has said that the population crisis is the greatest problem humanity faces. And the National Academy of Sciences has said that "the Population Bomb" can be successfully averted by developing new methods of family regulation and implementing programs of family planning widely and rapidly throughout the world." For the accompanying chart reflects the exact amount of attention the population problem is currently receiving from our Government.

This is your problem and you can do something about it. Tear out this ad and send it to anyone in Washington you think might be helpful. Urge the Government to initiate a special program for population stabilization. And write us for two things: (1) Measures the Government can take to implement such a program. (2) Additional things you can do to help.

We can't afford to wait much longer. Every day lost only compounds the problem. The time to act is now.

CURRENT GOVERNMENT PROGRAMS (1968 Estimates from 1969 Budget)

Space Program for Welfare	\$1.5 billion
Health and Death Control Programs	\$1.5 billion
Food for Peace Program	\$1.5 billion
Supernutrient Plans (Food Model)	\$1.5 billion
Food Program	\$1.0 billion
Land Control	\$1.0 billion
Sea Control	\$1.0 billion
Population Control (United States)	\$1.0 billion
Population Control (Foreign)	\$1.0 billion

CAMPAIGN TO CHECK THE POPULATION EXPLOSION
EMERSON FOOT, CHAIRMAN

EMERSON FOOT, Chairman, World Bank
100 EAST 42ND STREET
NEW YORK, N.Y. 10017 PHONE: (212) 986-6469

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THE 360-DEGREE HOLISTIC FAMILY PLANNING CAMPAIGN HAS A NEW LOGO



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#FamilyPlanning

RECAPITULATION

- ❑ Population growth is the change in population over a period of time.
- ❑ The population of the world increased from 1550 million in 1900 A.D to 6.7 billion in 2008.
- ❑ Difference between birth and death rates is called the Natural Growth Rate of Population. When the effect of migration is added to it, it is called the Actual Growth of Population.
- ❑ The population of developing countries is rising faster than that of developed countries.

