YOUR LOGO

POPULATION GROWTH

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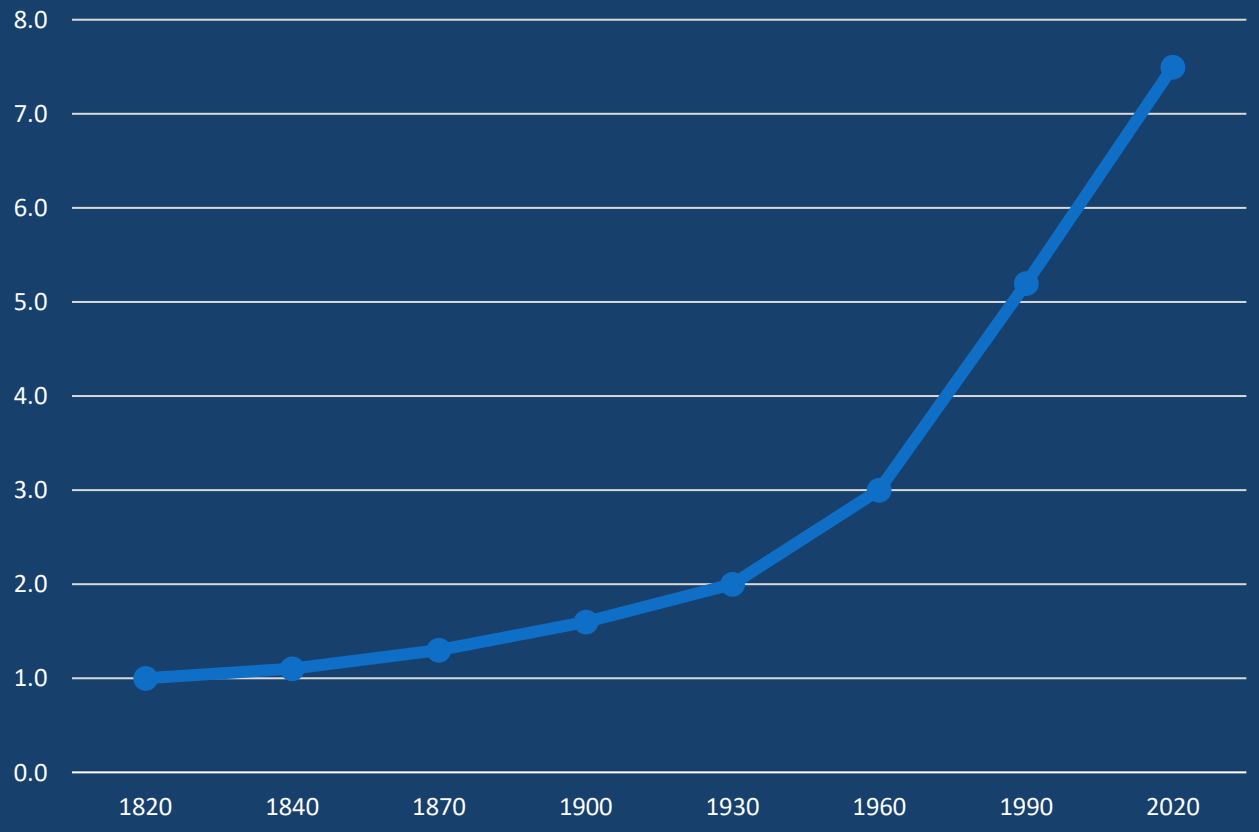
EE463 Globalization and International Development

World Population, 1820-2020

World population in 1820 was 1 billion; in 2020 it was 7.6 billion. Milestones:

- 2 billion in 1930 (110 years)
- 3 billion in 1960 (30 years)
- 4 billion in 1975 (15 years)
- 5 billion in 1987 (12 years)
- 6 billion in 1999 (12 years)
- 7 billion in 2011 (12 years)

In 200 years, world population increased by 7.5 fold



Explanations for rapid population growth

Since the industrial revolution (early 1800s):

- growth in food supply worldwide
- improvements in health
- technological progress

These have led to the following outcomes:

- decrease in death rates and infant mortality
- increase in life expectancy
- increased population growth

On the other hand:

War, famine, natural disasters and pandemics at times have slowed population growth

Milestones in population growth

Industrial revolution
innovations in transportation and agriculture in Western Europe

expanded population carrying capacity in the core countries and their colonies

Milestones in population growth

Post World War II
reconstruction, political stability and disease control

significant decrease in death rates and increase in population growth

1960s onwards
rapid population growth in developing countries

improvements in food supply (green revolution) and technological innovations

THE DEMOGRAPHIC TRANSITION

Phases of demographic transition

Stage 1

High birth rate, high death rate; no net population increase

Stage 2

Death rate declines more than birth rate; improved nutrition and food availability; net population increase

Phases of demographic transition

Stage 3

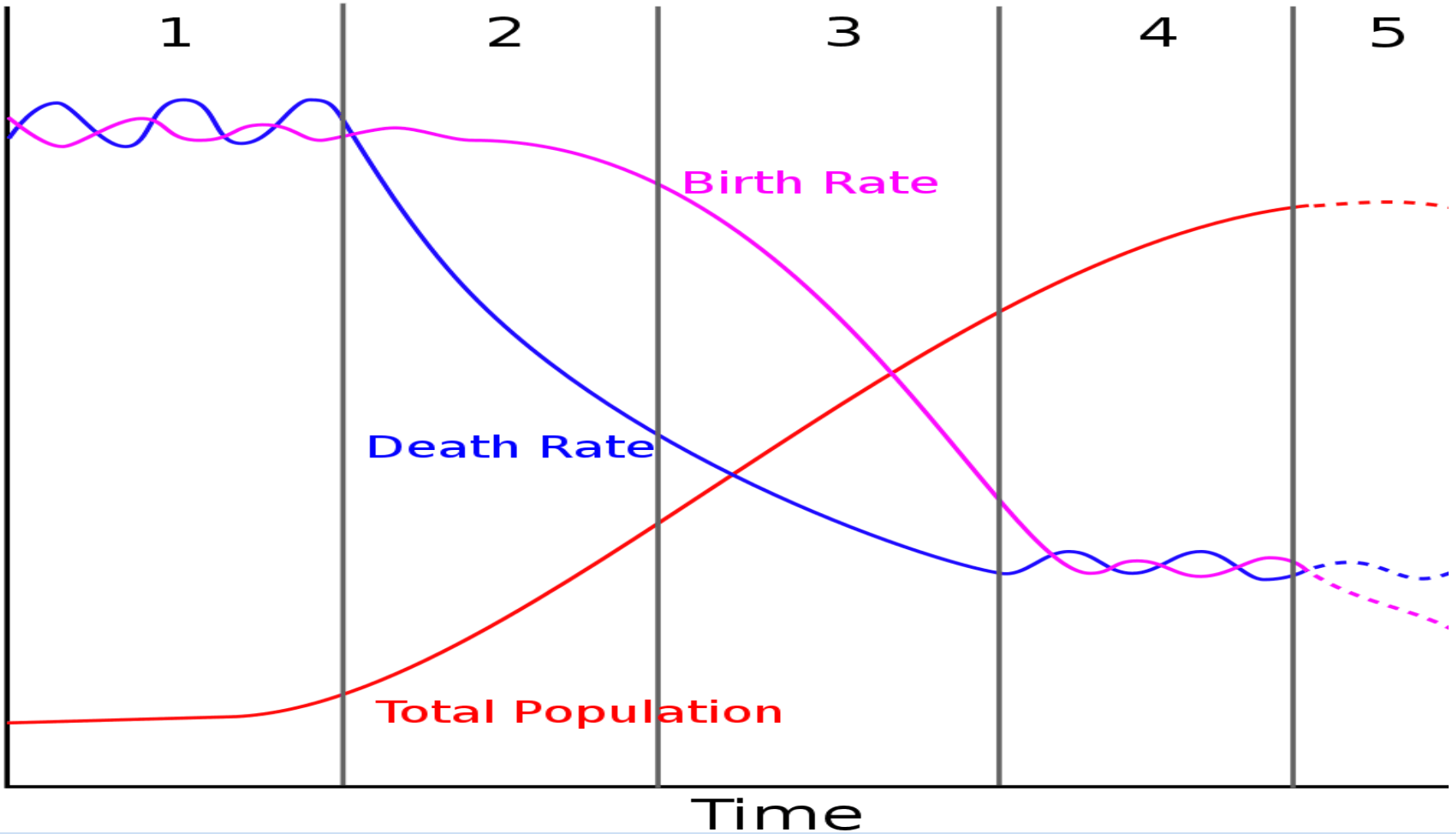
Declining birth rate and declining death rate: small net population increase

Stage 4

Birth rates are declining faster than death rates: population growth close to 0

World population will continue to grow, but the rate of growth has slowed as fertility rates will decline in the future

Graph of demographic transition



Lessons from demographic transition

- Industrialized countries are mostly in stages 3 and 4 (mostly Western countries, Japan, South Korea and Taiwan)
- Fertility rates will continue to fall and with an aging population, the crude death rate is expected to rise.
- Therefore these countries will experience near zero or negative population growth in the future.
- Population growth if ever, will be attributable to immigration

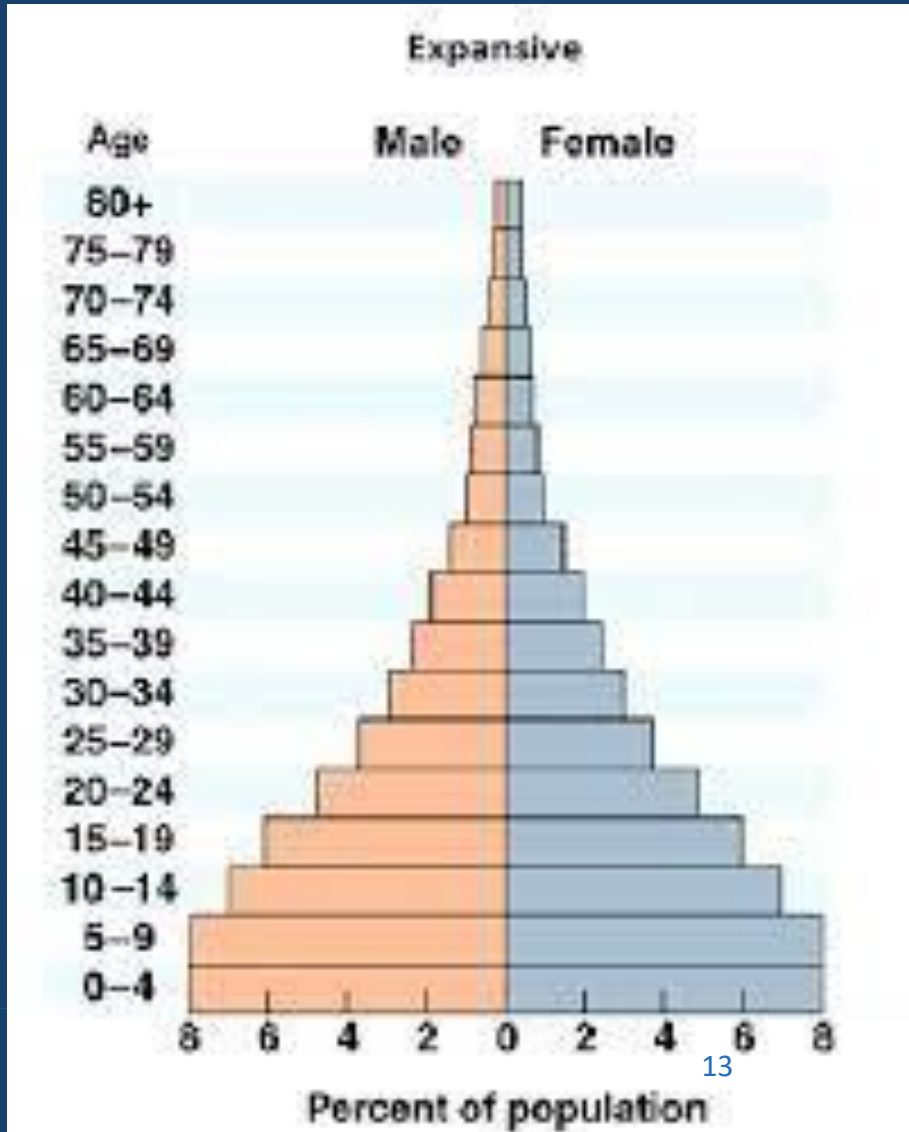
Lessons from demographic transition

- Developing countries are in stages 1 and 2. (mostly Africa, Latin America and Middle East). It is expected that fertility rates will remain high and death rates will continue to decline
- East Asia (China, Southeast Asia) is between stages 2 and 3
- With even modest population growth rates, the world population will continue to grow

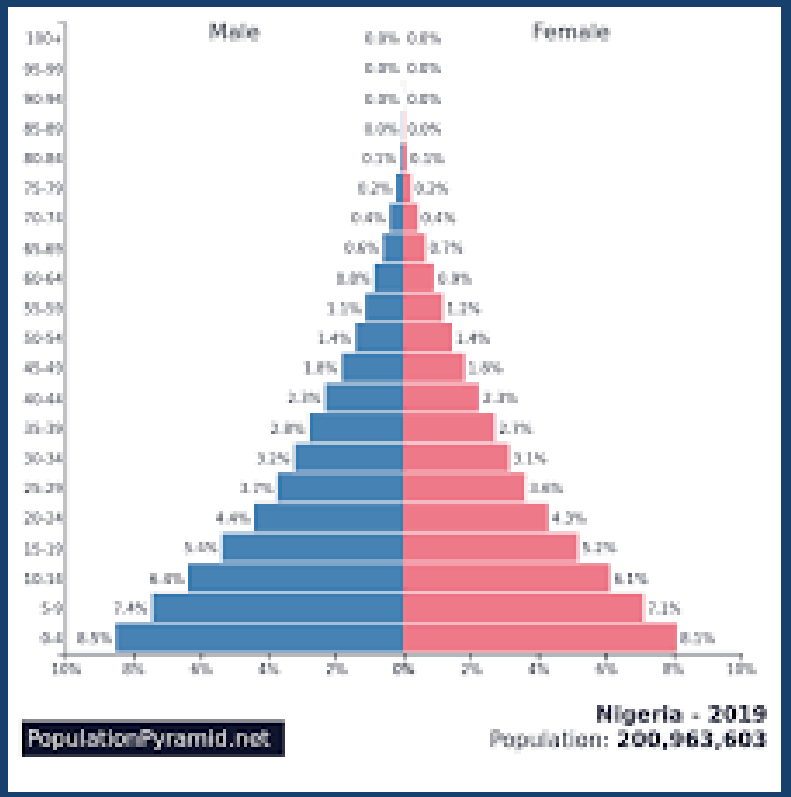
POPULATION PYRAMID

What is a population pyramid?

- A useful tool to understand the age and sex composition of a country at a given time
- Uses a paired bar chart showing the number of males and females in each age group
- Indicates whether the population is expanding, declining, or stationary
- Population pyramid can change over time



Comparison across countries

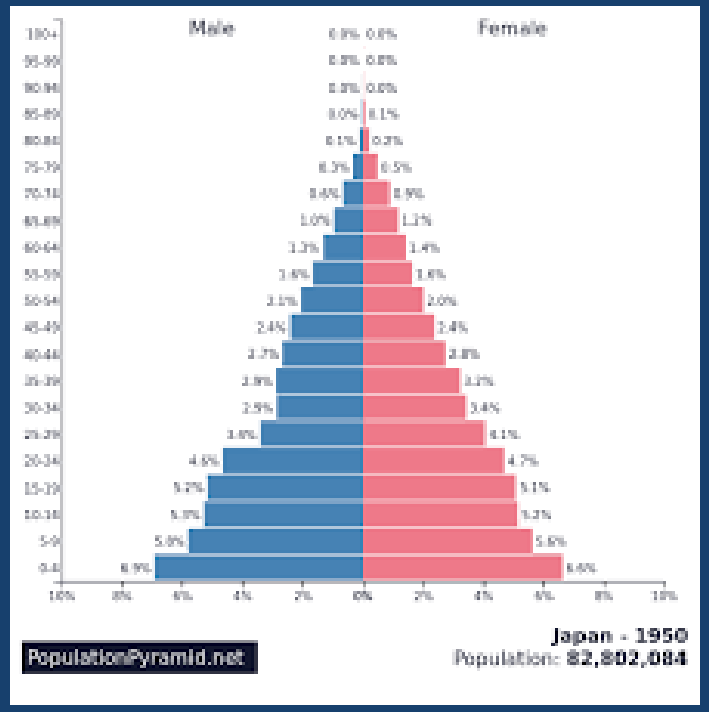


India

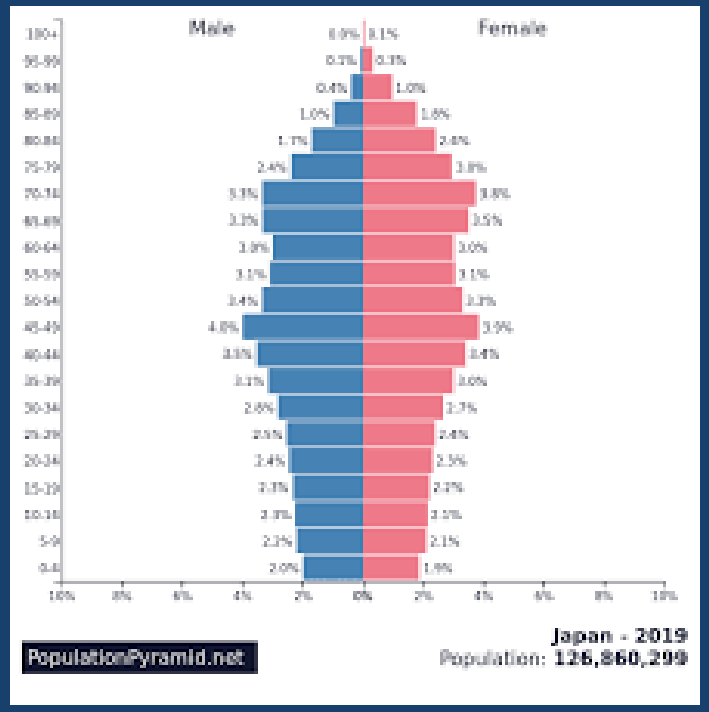
Japan

Nigeria

Comparison across time – Japan



1950



2019

POPULATION ISSUES

Population Growth

- Although the population growth rate worldwide is declining, the population is still growing
- It is expected that within the next 40 years, the world population will increase by another 2 billion, mostly in developing countries
- In countries where the birth rate is still high, the youth will struggle with issues of unemployment

Population Shift

- In Asia, 6.7 percent of the population were elderly (2010) in 2050 it is expected to increase to 17.3 percent
- In China, because of its one family-one child policy the elderly population is expected to increase from 8.3 percent (2010) to 23.3 percent in 2050

Intergenerational issues

- In countries where population growth rate is near zero or negative, financing pensions/retirement is becoming a serious problem, as there are less younger people are available to finance the pension of retirees
- With a higher percentage of the elderly, there is greater demand for elderly care

Conclusion

- The 20th century has witnessed a significant change in demographics, whereby the population grew from less than 2 billion to 6 billion people.
- The driving force behind population increases is the demographic transition, particularly in the developing countries. Improvements in nutrition, medical knowledge and public health has led to a decline in the death rate

Conclusion

- There has been significant variation across countries and regions. In advanced countries, population growth is near zero and some even have negative growth. This is because fertility rates have gone down
- Despite declining growth rate of the world population, the 21st century will still face challenges. In particular, the shift in the age composition will mean that there will be a greater percentage of the elderly population

THANK YOU!