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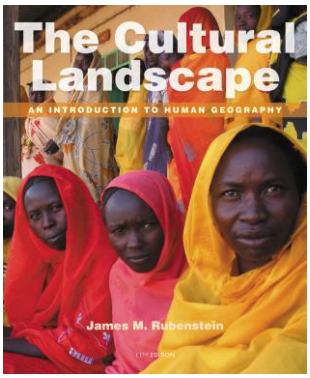
Chapter 2 Lecture

The Cultural Landscape

Eleventh Edition

Key Issue #2: Why is Global Population Increasing?



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Key Issues

Chapter 2 Key Issues:

- Where is the world population distributed?
- Why is global population increasing?
- Why does population growth vary among regions?
- Why do some regions face health threats?

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Learning Outcomes

- 2.2.1: Understand how to measure population growth through the nature increase rate.
- 2.2.2: Understand how to measure births and deaths through CBR and CDR.
- 2.2.3: Understand how to read a population pyramid.

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Why Is Global Population Increasing?

- Components of Population Growth
  - Geographers measure population change in a country or the world as a whole by using three measures:
    - **Crude Birth Rate (CBR)**
    - **Crude Death Rate (CDR)**
    - **Natural Increase Rate (NIR)**

Crude Birth Rate (CBR) – total number of live birth in a year for every 1,000 people alive in society.
Crude Death Rate (CDR) – total number of deaths in a year for every 1,000 people alive in society.
Natural Increase Rate (NIR) – *percentage* by which a population grows in a year.
Computation: CBR – CDR = NIR
Remember NIR is a percentage (*n* per 100, while CBR and CDR are expressed as *n* per 1,000)

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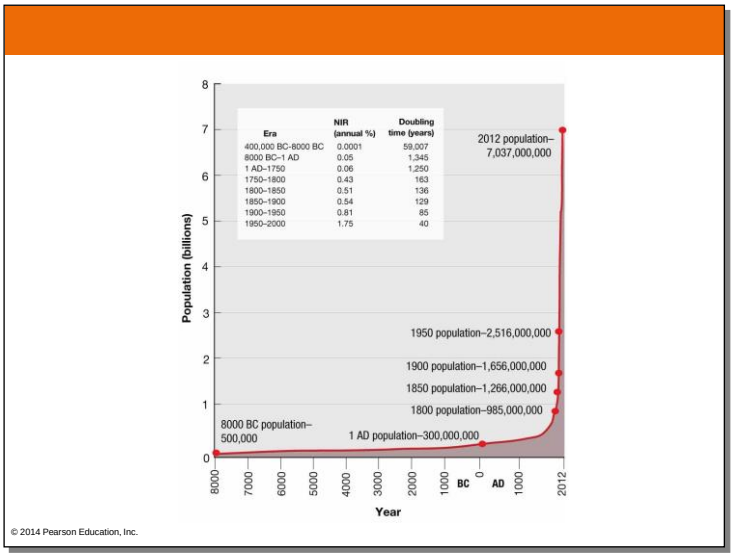
FIGURE 2-8 WORLD POPULATION THROUGH HISTORY Through most of human history population growth was virtually nil. Population increased rapidly beginning in the eighteenth century.



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Rate of natural increase affects the *doubling time*– number of years needed to double the population, assuming a constant rate of natural increase.

Twenty-First Century Rate (1.2 percent): 54 years
Global population in 2100 would reach 24 billion.
1963 (2.2): 35 years
Global population in 2010 would have been 10 billion instead of nearly 7 billion.

Why Is Global Population Increasing?

- Components of Population Growth
  - – Natural Increase
    - About 82 million people are added to the population of the world annually.
    - More than 95 percent of the natural increase is clustered in developing countries.

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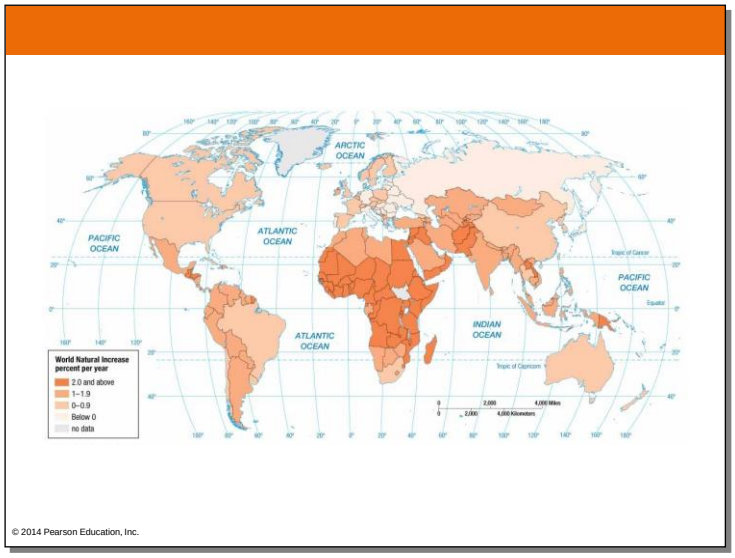
FIGURE 2-10 NATURAL INCREASE RATE The world average is currently about 1.2 percent. The countries with the highest NIRs are concentrated in Africa and Southwest Asia.



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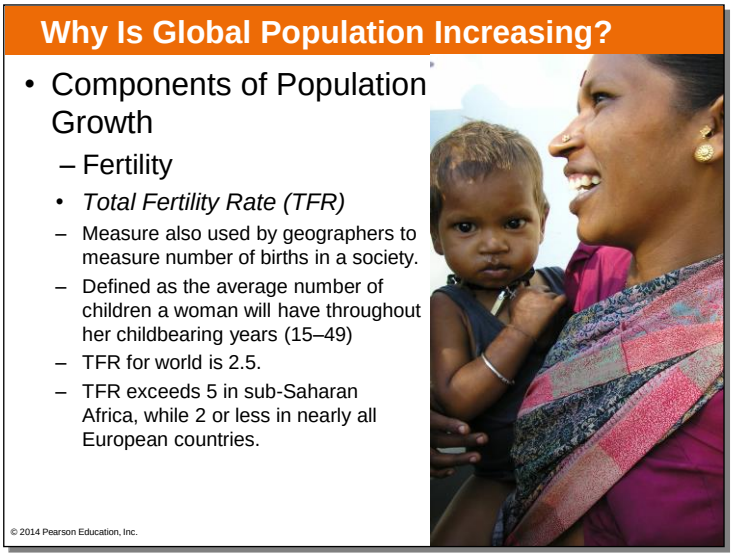

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Why Is Global Population Increasing?

- Components of Population Growth
  - Mortality
    - *Infant Mortality Rate (IMR)*
      - Measure used by geographers to better understand death rates in a society
      - Defined as the annual number of deaths of infants under one year of age, compared with total live births
      - Usually expressed per 1,000 births rather than a percentage
      - IMR is 5 in developed countries and 80 in sub-Saharan Africa.

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FIGURE 2-11 CRUDE BIRTH RATE (CBR) The global distribution of CBRs parallels that of NIRs. The countries with the highest CBRs are concentrated in Africa and Southwest Asia.

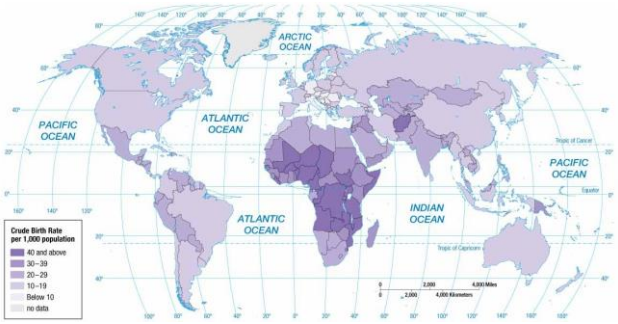

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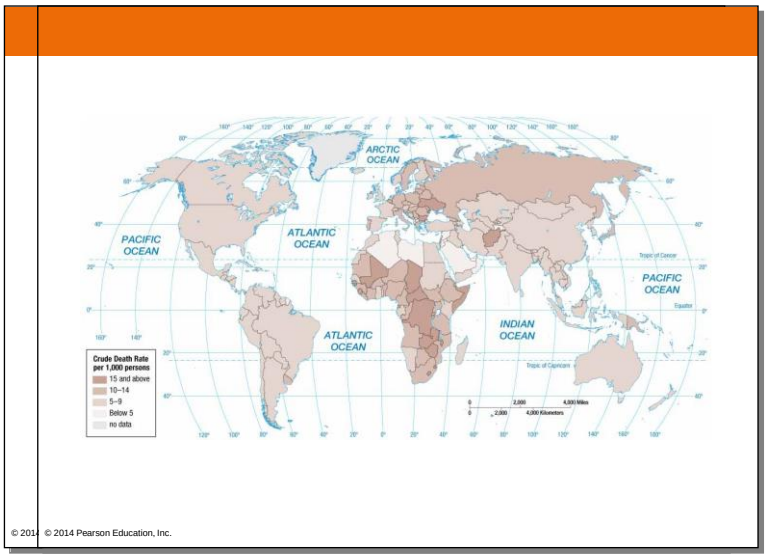
FIGURE 2-12 TOTAL FERTILITY RATE (TFR) As with NIRs and CBRs, the countries with the highest TFRs are concentrated in Africa and Southwest Asia.



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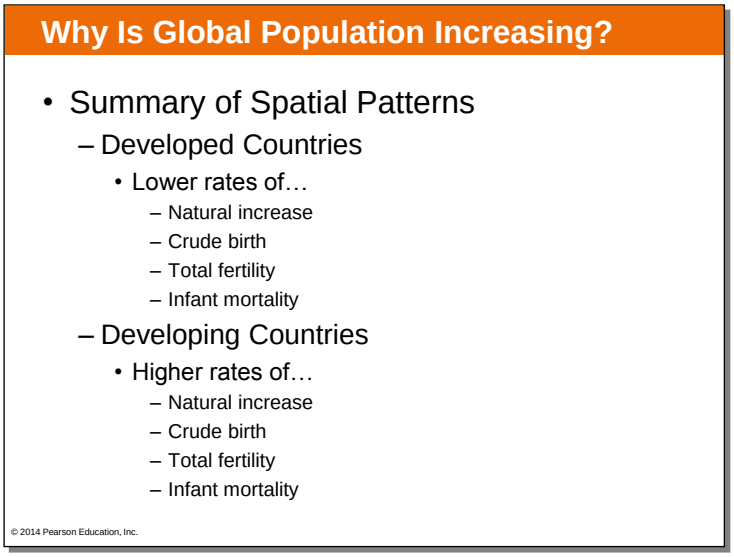

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FIGURE 2-13 CRUDE DEATH RATE (CDR) The global pattern of CDRs varies from those for the other demographic variables already mapped in this chapter. The demographic transition helps to explain the distinctive distribution of CDRs.

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X-axis
Percent male displayed to the left of zero
Percent female displayed to the right of zero
Y-axis
Age cohorts typically grouped in 5-year intervals
Youngest displayed at bottom and oldest at top

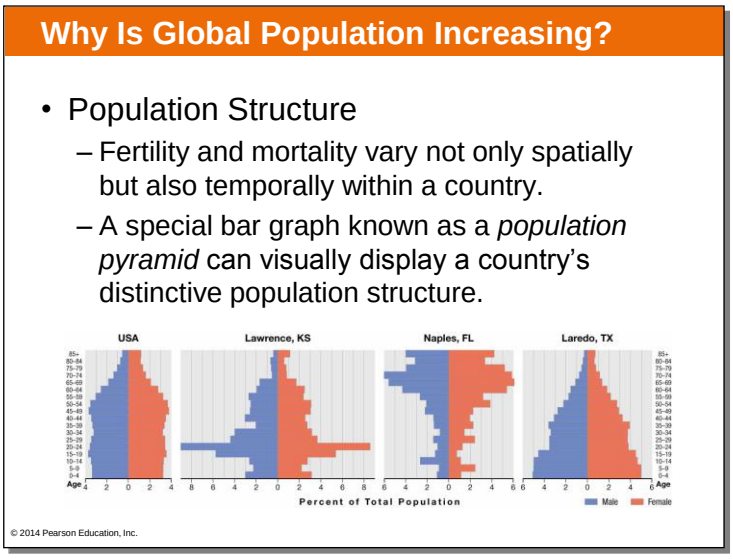

FIGURE 2-14 POPULATION PYRAMIDS FOR THE UNITED STATES AND SELECTED U.S. COMMUNITIES Laredo has a broad pyramid, indicating higher percentages of young people and fertility rates. Lawrence has a high percentage of people in their twenties because it is the home of the University of Kansas. Naples has a high percentage of elderly people, especially women, so its pyramid is upside down.

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People aged 0 to 14 and over 65 years old are considered dependents.
Larger dependency ratios imply greater financial burden on the working class.
85 percent in sub-Saharan Africa, while 47 percent in Europe.

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Why Is Global Population Increasing?

- Population Structure
  - Sex Ratio
    - Defined as the number of males per 100 females in the population
      - Developed countries have more females than males, because they tend to live 7 years longer.

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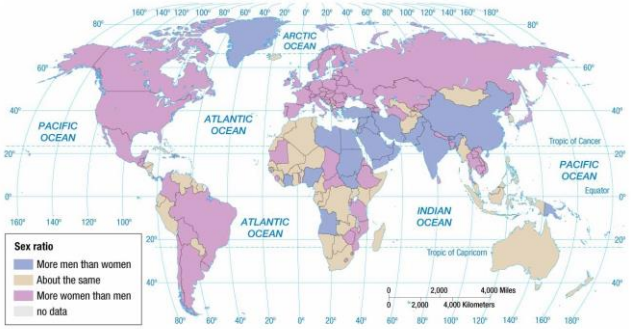
FIGURE 2-16 SEX RATIO A map of the percentage of people over age 65 would show a reverse pattern, with the highest percentages in Europe and the lowest in Africa and Southwest Asia.



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Summary

- Global population is concentrated in a few places that are not too wet, too dry, too cold, or too mountainous.
- Nearly all NIR is concentrated in developing countries.
- Developed countries have a stable population, if not slightly declining.
- Population growth varies among regions, because not all countries are in the same stage of the demographic transition model.

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Learning Outcomes

Review your notes and write out your answers to the following prompts:

- Understand how to measure population growth through the nature increase rate.
- Understand how to measure births and deaths through CBR and CDR.
- Understand how to read a population pyramid.