Chapter 10: Agriculture

The Cultural Landscape:
An Introduction to Human Geography

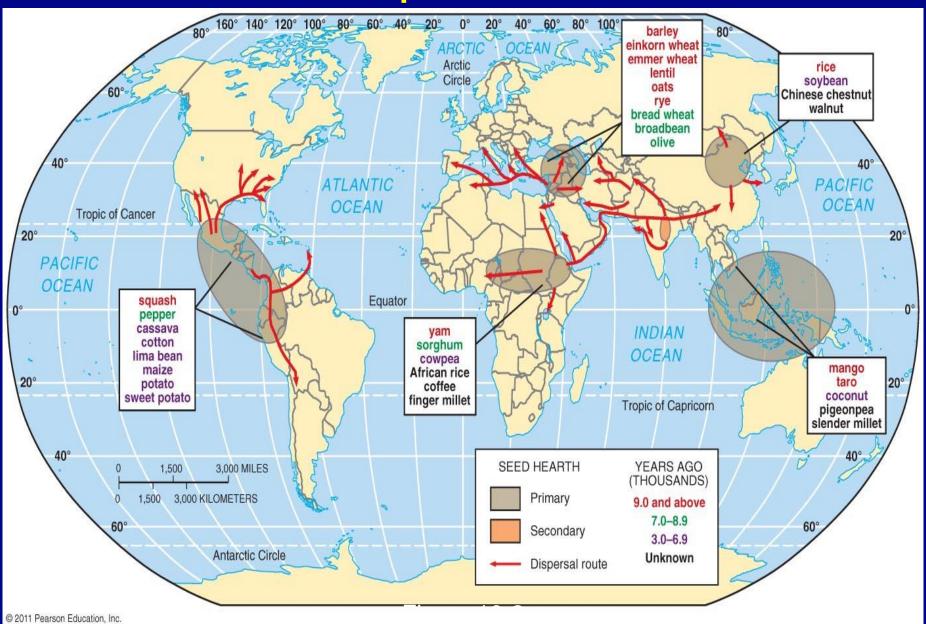
Where Did Agriculture Originate?

- Origins of agriculture
 - Agriculture = deliberate modification of Earth's surface through the cultivation of plants and/or rearing of animals
 - Cultivate = "to care for"
 - Crop = any plant cultivated by people

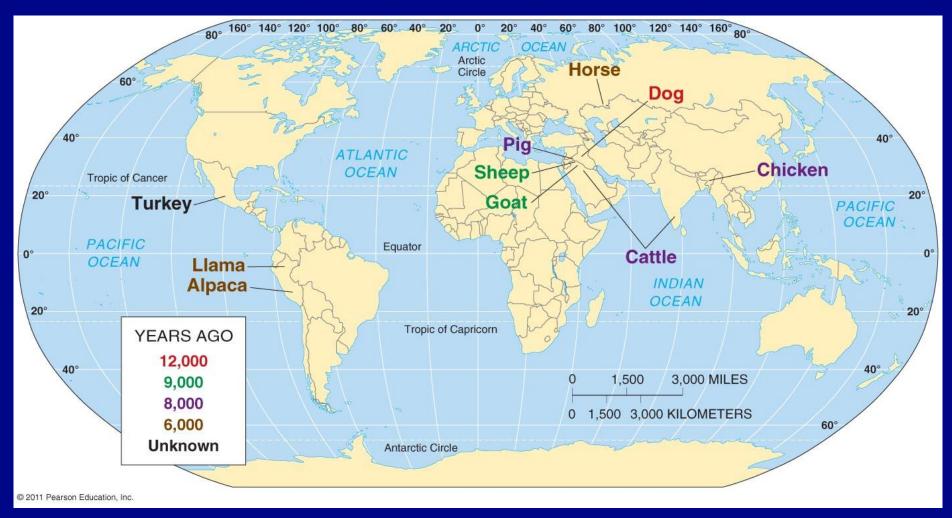
Where Did Agriculture Originate?

- Origins of agriculture
 - Hunter-gatherers
 - Perhaps 250,000 remaining today
 - Invention of agriculture
 - When it began = unclear
 - Diffused from many hearths

Crop Hearths



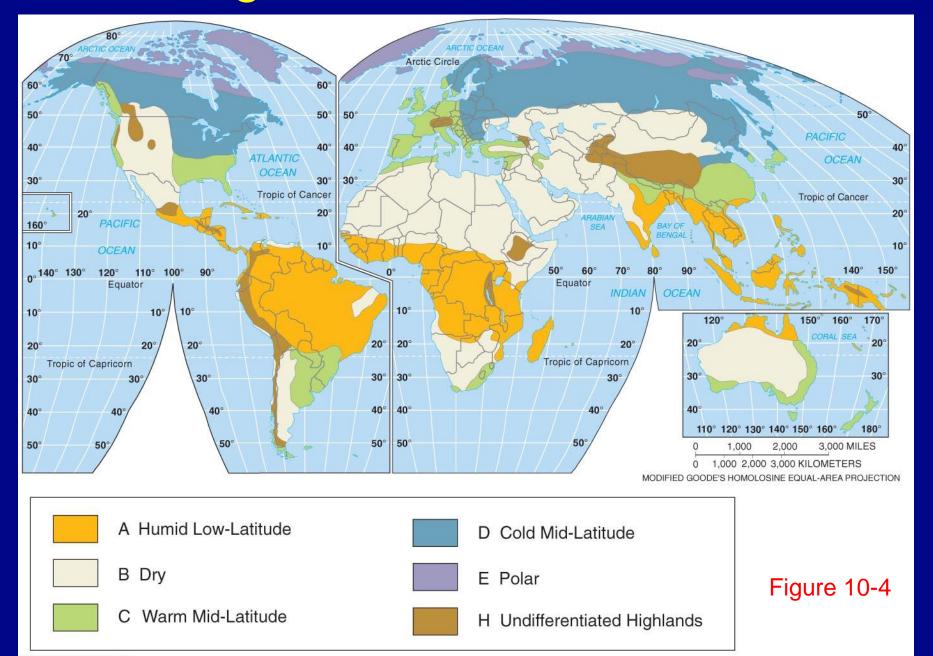
Animal Hearths



Where Did Agriculture Originate?

- Commercial and subsistence agriculture
 - Subsistence = produced mainly for the farm family's survival
 - Most common in LDCs
 - Commercial = produced mainly for sale off the farm
 - Most common in MDCs

Agriculture and Climate

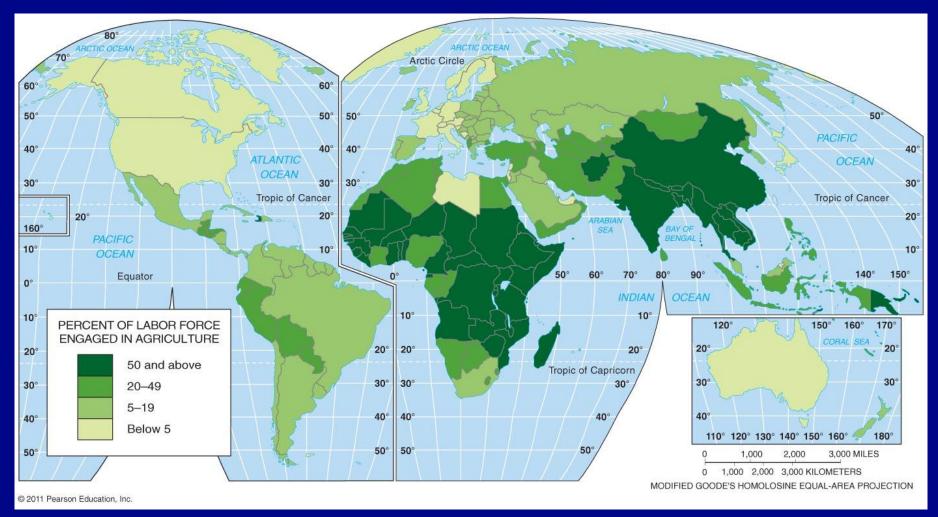


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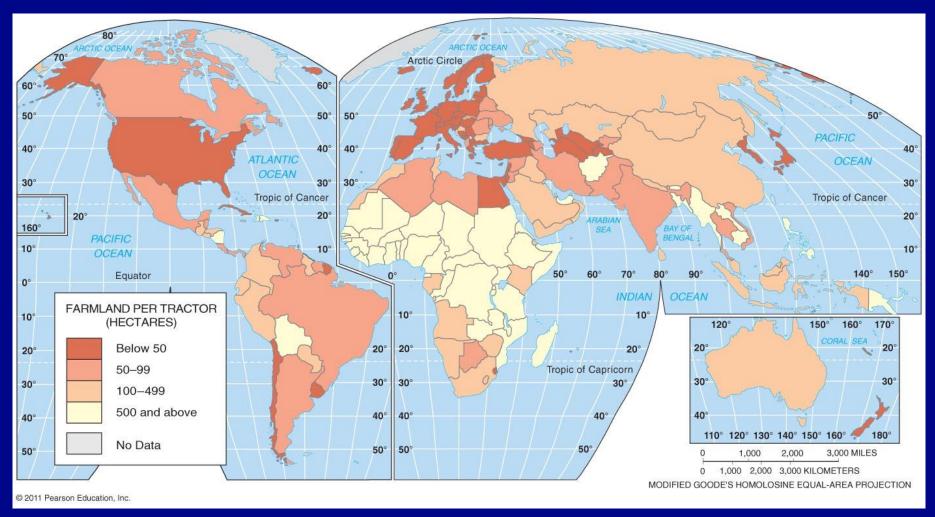
Where Did Agriculture Originate?

- Commercial and subsistence agriculture
 - Five characteristics distinguish commercial from subsistence agriculture
 - Purpose of farming
 - Percentage of farmers in the labor force
 - Use of machinery
 - Farm size
 - Relationship of farming to other businesses

Agricultural Workers



Area of Farmland Per Tractor

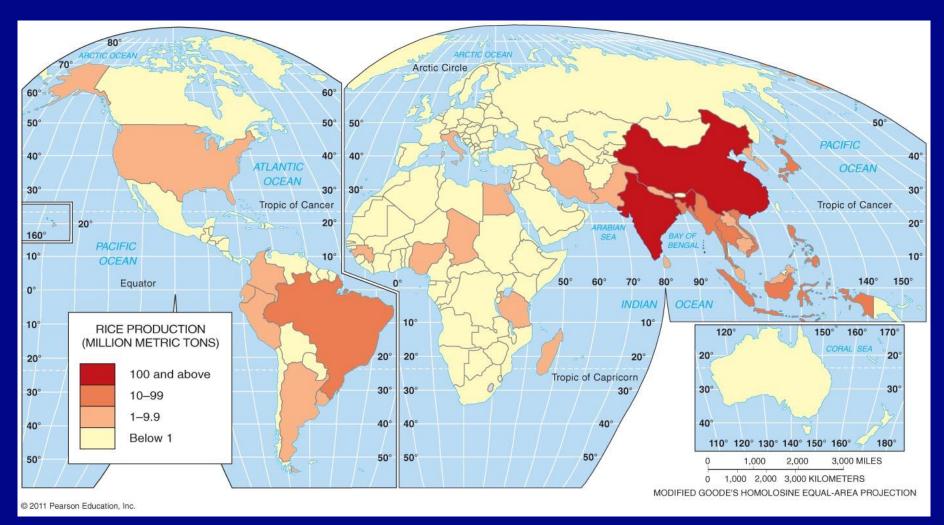


- Shifting cultivation
 - Most prevalent in low-latitude, A-type climates
 - Two features:
 - Land is cleared by slashing and burning debris
 - Slash-and-burn agriculture
 - Land is tended for only a few years at a time
 - Types of crops grown vary regionally
 - Traditionally, land is not owned individually

- Pastoral nomadism (herding domesticated animals)
 - Found primarily in arid and semiarid B-type climates
 - Animals are seldom eaten
 - The size of the herd indicates power and prestige
 - Type of animal depends on the region
 - For example, camels are favored in North Africa and Southwest Asia
 - Transhumance practiced by some pastoral nomads

- Intensive subsistence
 - Found in areas with high population and agricultural densities
 - Especially in East, South, and Southeast Asia
 - To maximize production, little to no land is wasted
 - Intensive with wet rice dominant
 - Intensive with wet rice <u>not</u> dominant

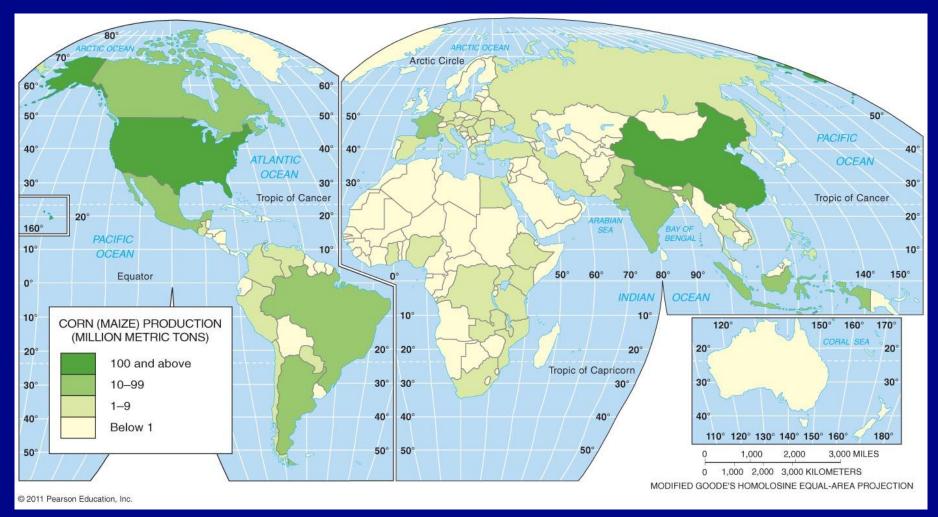
Rice Production



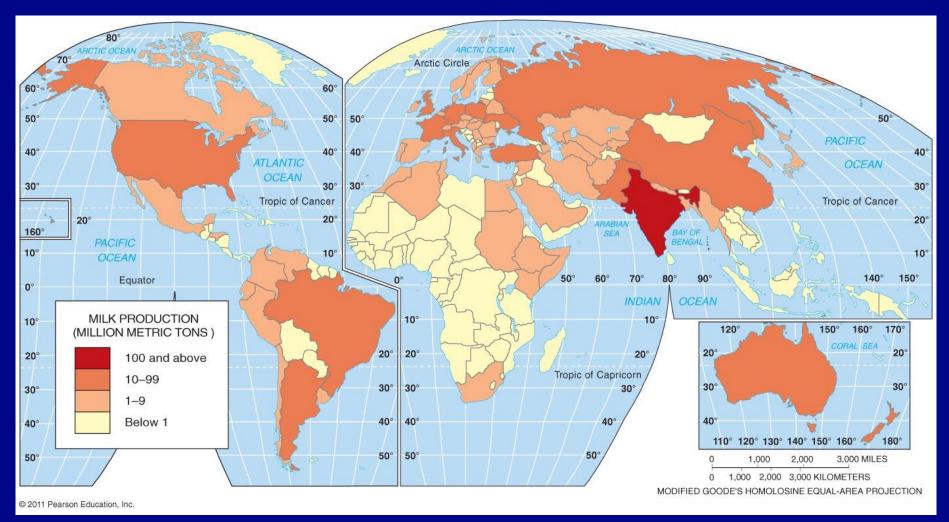
- Plantation farming
 - Found in Latin America, Africa, and Asia
 - Products are grown in LDCs but typically are sold to MDCs
 - Plantations specialize in one or two cash crops
 - Important crops = coffee, sugarcane, cotton, rubber, and tobacco
 - A large labor force is usually needed in sparsely settled regions

- Mixed crop and livestock farming
 - Most land = devoted to crops
 - Most profits = derive from the livestock
- Dairy farming
 - Regional distribution: the milkshed
 - Two primary challenges
 - Labor-intensive
 - Expense of winter feed

Corn (Maize) Production

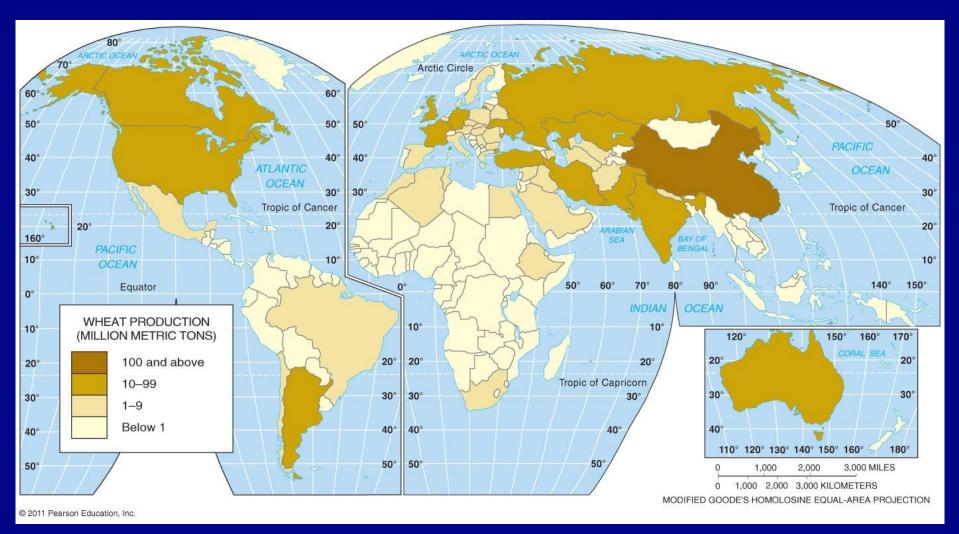


Milk Production

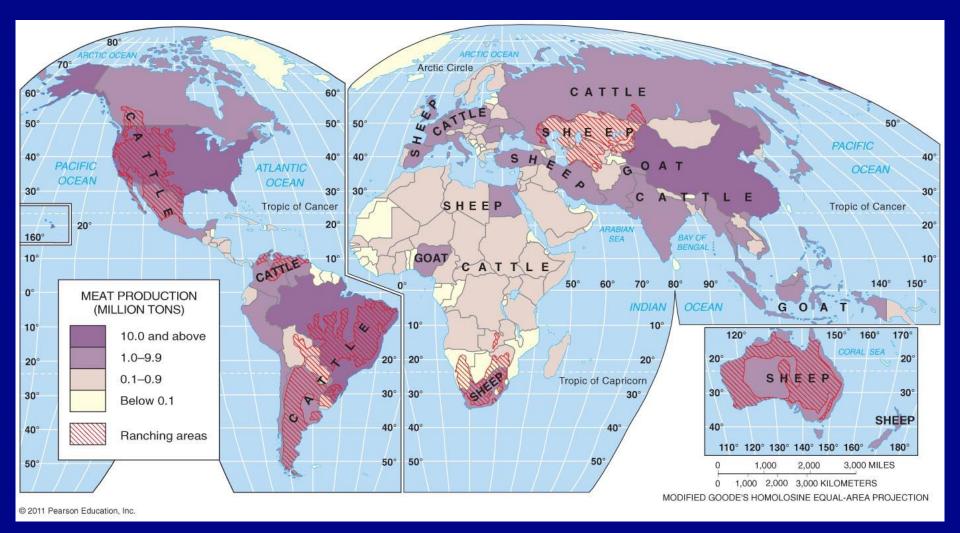


- Grain farming
 - The largest commercial producer of grain = the United States
- Livestock ranching
 - Practiced in marginal environments
- Mediterranean agriculture
 - Based on horticulture
- Commercial gardening and fruit farming
 - Truck farms

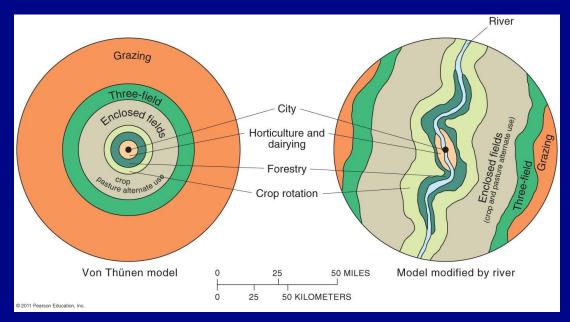
Wheat Production



Meat Production



- Challenges for commercial farmers
 - Access to markets is important
 - The von Thünen model (1826)
 - The choice of crop to grow is related to the proximity to the market



- Challenges for commercial farmers
 - Overproduction
 - Agricultural efficiencies have resulted in overproduction
 - Demand has remained relatively constant
 - As a consequence, incomes for farmers are low
 - Sustainable agriculture
 - Sensitive land management
 - Integrated crop and livestock

- Challenges for subsistence farmers
 - Population growth
 - International trade
 - Drug crops

Drug Trade

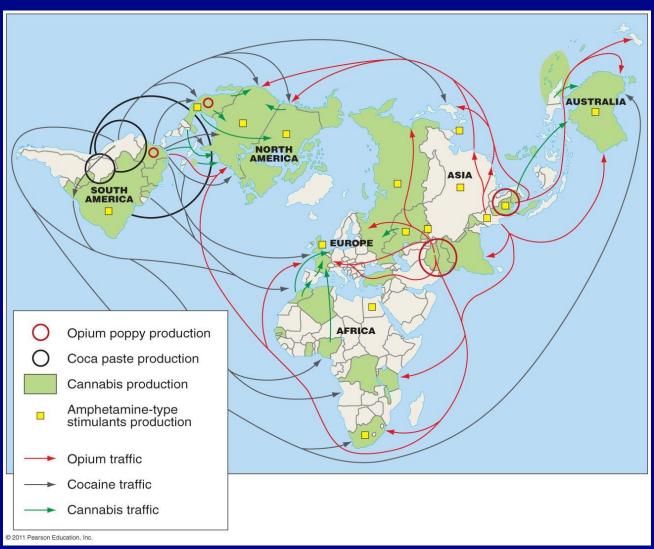
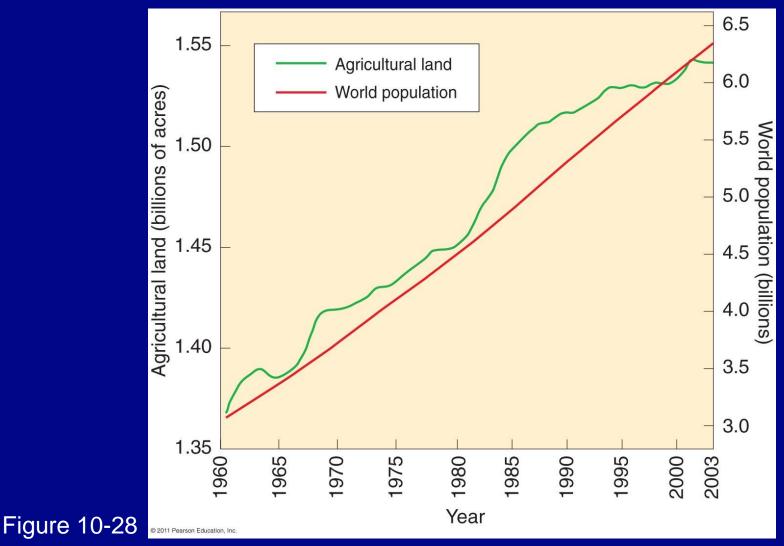


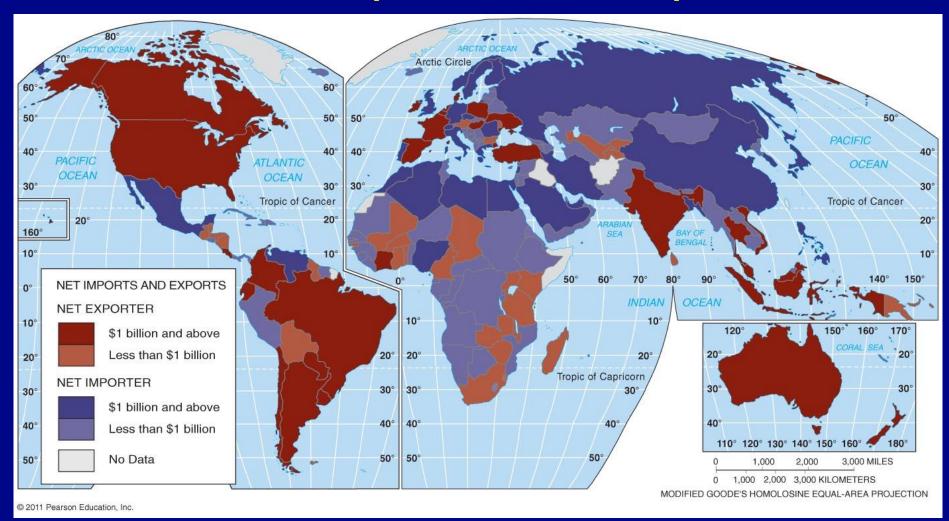
Figure 10-27

- Strategies to increase food supply
 - Expanding agricultural land
 - Desertification
 - Increasing productivity
 - The green revolution
 - Identifying new food sources
 - Cultivating oceans, developing higher-protein cereals, and improving palatability of foods
 - Increasing trade

Agricultural Land and Population



Grain Imports and Exports



The End.



Up next: Industry