

CHAPTER 20: COMMERCIALIZATION AND THE TRANSFORMATION OF THE RURAL SECTOR

CHAPTER OUTLINE

- I. Introduction
 - A. Roots of modern commercial agriculture
 1. Trace back to European colonial empires established during the eighteenth and nineteenth centuries
 2. Europe became a market for agricultural products from around the world
 3. Finished products made of imported raw materials were sold back to colonies that had produced the raw materials
 4. Effect of the evolution of a worldwide transport network
 5. Continued production of cash crops by poorer countries is perpetuated by loan and aid requirements imposed on former colonies
 - B. World agricultural (Figure 20-1)
- II. Global patterns of commercial agriculture
 - A. Introduction
 - B. Cash crops and plantation agriculture
 1. In the Caribbean region, whole national economies depend on sugar exports
 2. Producing countries are not in a good position to dictate the price of their product
 3. Importing countries fix tariffs and quotas
 4. Extent of importers' power can be seen in the case of Cuba
 5. Collective action is difficult
 - a) Wealthy importing countries can make deals with non-cartel countries
 - b) Withholding of produce in exporting countries may stimulate domestic production among importers
 - c) Example of cane sugar and sugar beets
 6. **Plantation agriculture**—when cash crops are grown on large estates
 - a) Colonial legacies that persist in poorer countries, primarily tropical countries
 - b) Many plantations in former colonies are still owned by European or American individuals
 - c) Multinational corporations tenaciously protected their economic interests in plantations
 - d) Case of the United Fruit Company in Guatemala is discussed
 7. Cotton and rubber
 - a) Cotton
 - (1) Production expanded during the Industrial Revolution
 - (2) Colonial powers pushed the production in their colonies
 - (3) Today, many former colonial countries have their own factories to produce finished goods for export
 - (4) Developed countries still buy cotton for their own factories, but much of it comes from the United States
 - b) Rubber
 - (1) Initially collected from rubber-producing trees that stood in equatorial rain forests, mainly in the Amazon Basin in northern South America
 - (2) Transported seedlings did very well on plantations in Southeast Asia
 - (3) Invention of the automobile was a tremendous boost to the rubber industry
 - (4) World War II stimulated the invention of synthetic rubber
 - (5) Expansion of rubber plantations relates directly to labor availability

- (6) Lately, efforts have been made to introduce plantation system along Amazon River in the heart of northern Brazil
 - 8. Luxury crops
 - a) Examples—tea, cacao, coffee, and tobacco
 - b) Coffee
 - (1) First domesticated in the region of present-day Ethiopia
 - (2) Annually the United States buys more than half of all coffee sold on world markets
 - (3) About 70 percent of the world's coffee harvest is grown in Central and South America
 - (4) After petroleum, coffee is now the second most valuable traded commodity in the world
 - (5) Many enormous plantations are foreign-owned
 - c) Tea
 - (1) Consumed in greater amounts in the areas where it is grown than coffee
 - (2) Tea was first grown in China perhaps 2000 years ago
 - (3) The British established large tea plantations in Asia during the colonial period
 - C. Commercial livestock, fruit, and grain agriculture (Figure 20-1)
 - 1. Largest areas of commercial agriculture lie outside the tropics
 - 2. **Dairying** is widespread at the northern margins of the mid-latitudes
 - 3. Mixed livestock and crop farming is widespread in the more humid parts of the mid-latitudes
 - 4. Commercial grain farming prevails in the drier parts of the mid-latitudes
 - 5. Livestock ranching
 - a) Wide distribution
 - b) You may see a von Thünen pattern with livestock ranching on the periphery
 - c) Refrigeration has overcome the problem of perishability
 - d) High volume has lowered the unit cost of transportation
 - D. Rice growing
 - 1. The United States is the world's leading exporter of rice followed by Thailand and Vietnam
 - 2. Grown on small plots and is labor-intensive in Southeast Asia
 - E. Mediterranean agriculture
 - 1. Mediterranean agriculture occurs only in areas with that type of climate
 - 2. Special combination of crops
 - 3. These crops tend to be popular and command a high price
 - F. Illegal drugs
 - 1. Farmers in poorer countries often find it more profitable to cultivate poppy, coca, or marijuana
 - 2. Now constitute an important source of revenue for parts of the global economic periphery
 - 3. Opium poppy plants are grown predominantly in Southeast and Southwest Asia
 - 4. Over 90 percent of illegal opium production comes from Afghanistan and Myanmar
- III. Environmental impacts of commercial agriculture
- A. Significant changes
 - 1. Mediterranean Europe has lost its forests
 - 2. Cleared land is more intensively used
 - 3. Impacts can be particularly severe when commercial agriculture expands into marginal environments
 - 4. Impact of fast-food chains
 - a) Deforestation to open up pastures for beef cattle in Central and South America
 - b) Erosion affects everything from water quality to wildlife habitat

- B. Looking Ahead box: Organic Agriculture
- IV. The Third Agriculture Revolution
 - A. Introduction
 - B. The Green Revolution
 - 1. Began in the 1960s
 - 2. Scientists created IR36—an “artificial” rice plant
 - 3. By 1992 IR36 was the most widely grown crop on Earth
 - 4. New high-yield hybrid varieties of wheat and corn were developed and diffused
 - 5. Disastrous famines of the past have been avoided
 - 6. Asia saw a two-thirds increase in rice production
 - 7. New hybrids required use of chemical fertilizers and pesticides
 - a) Can lead to reduction of organic matter in the soil
 - b) Many small-scale farmers lack resources to acquire these chemicals and the seed
 - 8. Need for capital from the West has led to a shift away from production for local consumers toward export agriculture
 - 9. Has had limited geographical impact
 - C. New genetically modified foods
 - 1. Work to create genetically modified “super rice”
 - 2. Research has already led to methods for producing high-yield cassava and sorghum
 - 3. Concern that gene manipulation could create health risks and produce environmental hazards
 - 4. Plants genetically modified to reduce susceptibility to disease can reduce use of toxic pesticides
 - 5. China is growing an increasing amount of genetically modified tomatoes, rice, and cotton
 - 6. Poorer countries do not have access to the necessary capital and technology
 - D. A Sense of Scale box: The Impact of Changing Agricultural Practices
- V. Agribusiness and the changing geography of agriculture
 - A. **Agribusiness**
 - 1. Transformed farms into corporate-like units
 - 2. Summary of David Lanegran’s about the raising of chickens in today’s world
 - 3. Is shaping the world distribution of commercial agricultural systems and their relationship to subsistence agriculture
 - 4. The role of history and tradition in agricultural systems
 - 5. Capacity of markets to influence the activities of farmers
 - 6. Global network of farm production is oriented to the one-fifth of the world’s population that is highly urbanized
 - 7. The colonial imprint remains strong in some parts of the world