Food for Thought: The Globalization of Agriculture

ACTIVITY 1: AGRICULTURAL LANDSCAPES AND PRODUCTION METHODS

If you have driven around North America, you are probably accustomed to seeing cows or wheat or vegetables produced in a particular way, and you could form the mistaken impression that it is the only way to produce them. In fact, we think you'll be much surprised at the many different ways that the same product is grown or raised in different places. In this activity, you will match strikingly different photographs of agricultural landscapes for the same crops to some of the key geographical terms you learned in this chapter. Then, once you have categorized the landscapes, you will match the photos to different regions of the world with the help of thematic map layers for various physical and human factors. If you get a wrong answer, don't worry; the animation will steer you in the right direction!

A. To start your activity, click on the Student Companion Site at www.wiley.com/college/kuby. (For students using WileyPlus, log on to your class Web site, select the Assignment tab, locate and click on this assignment, and follow all instructions.)

B. Select this chapter from the drop-down list and then click on Computerized Chapter Activities.

C. Click on Activity 1: Agricultural Landscapes and Production Methods.

D. In the right margin you will see your choices of livestock and agriculture. Click on Cattle to begin.

E. You will see several photographs of different methods of raising cattle from around the world, each with a different label. Above that you will see text that describes one of the methods using the key terms from the Introduction. Match the written description to the correct photo by clicking on the photo. If your answer is wrong, the computer will give you feedback on why it is wrong; read it and click Try Again. If your answer is correct, read the description of this landscape and production method and then click Continue.

F. When you have successfully matched all of the cattle-raising landscape descriptions to the proper photo, the screen will automatically change to a world map.

On the map you will see highlighted several regions that specialize in cattle, with a star showing the location where the photo was taken. The regions are darker in the center and lighter-colored around the edges to indicate a "core region" (see Chapter 2) where this type of agriculture is commonplace and a "fringe region" where it is also found but is not necessarily dominant. (Note: In some cases, the photo was taken in the fringe.) It is important to recognize that these regions are not the only areas on Earth where these crops are grown with these methods. The colors
simply delimit a region around where each photo was taken; they do not show all similar places around the world. For instance, cattle are grazed on the open range not only in the region shown but also in Australia and Argentina.

G. Your task is to match the photos to the regions and report several characteristics about the regions. Several thematic maps can be layered on the world maps. Click on Population to see a dot map of population density. Click on Mountains to see the mountainous areas of the world. Click on Climate to see the climate regions of the world. Click on Precipitation to see a map of rainfall plus the rain-equivalent amount of snowfall. Click on Agriculture to see a division of the world into broadly homogeneous agricultural regions. Click on Development to see the World Bank’s grouping of countries into low-, lower-middle-, upper-middle-, and high-income countries. Click on Subsistence to see regions of primarily subsistence livelihoods (keeping in mind that many other areas practice a mix of subsistence and commercial agriculture). These are some of the leading factors under which traditional and modern agricultural systems have evolved. You can use these overlay maps as clues to figuring out where each photo was taken, and you will have to record certain data from these maps for each location. Click on Photo Location to return to the map of the crop in question.

H. If you wish, you can click Enlarge Maps to bring up a larger window. Close the larger map window with the “X” in the upper right window to return to the main map page.

I. Click on the star where you think this photograph was taken. If you get a wrong answer, use the computer’s feedback and the thematic map overlays to guide you to a better answer. (We can’t stop you from using trial and error, but we simply point out that random guessing won’t help you prepare for the inevitable exam!) When you choose correctly, answer the following questions for that location (note that the animation automatically advances to the next photo after you correctly select each location). You can always click the back arrow to return to a previous photo.

**CATTLE**

A capital-intensive, commercial, intensive land-use system in which cattle are raised in feedlots with automatic feeding, watering, and ventilation systems.

- **Location:**
- **Population:**

An extensive commercial system in which cattle are raised on the open range using natural grasslands as pasture.

- **Location:**
- **Population:**

An extensive subsistence system in arid regions in which cattle are herded nomadically among different locations of water and natural pastures.

- **Location:**
- **Population:**
An extensive commercial system in humid tropical regions in which settlers clear patches of rain forest, plant grass, and graze cattle.

Location: ________________________

Population: _______________________

J. After you have located all photos for cattle, the program automatically moves on to the next agricultural product. Complete the same steps and answer the questions for the other products. You can return to any product by clicking on its name in the right margin (Cattle, Wheat, Rice, Bananas, Vegetables, Seafood, Hogs). When asked to record a value from thematic map layers, check the map legend. Record your answers as before.

WHEAT

A capital-intensive, commercial, extensive production system for growing and harvesting wheat.

Location: ________________________

Precipitation per year: ________________________

A capital-intensive, commercial, extensive system for irrigating wheat fields.

Location: ________________________

Precipitation per year: ________________________

A labor-intensive subsistence/commercial system for growing and harvesting wheat.

Location: ________________________

Precipitation per year: ________________________

A labor-intensive subsistence system for irrigating wheat fields.

Location: ________________________

Precipitation per year: ________________________

RICE

A labor-intensive, subsistence/commercial, intensive land-use system in which rice is cultivated in rice paddy fields on flat land.

Location: ________________________

Development level: ________________________

A labor-intensive, subsistence/commercial, intensive land-use system in which rice is cultivated in terraced hillside rice paddies.

Location: ________________________

Development level: ________________________

A capital-intensive, commercial, extensive land-use system for cultivating and harvesting rice.

Location: ________________________

Development level: ________________________

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A somewhat capital-intensive, commercial, highly intensive land-use system for cultivating and harvesting rice.
Location: ____________________________
Development level: ____________________________

A labor-intensive, extensive, subsistence system in humid tropical regions in which settlers slash and burn patches of rain forest and plant rice.
Location: ____________________________
Development level: ____________________________

**BANANAS**

A labor-intensive, commercial, intensive land-use system in which bananas are grown in corporate plantations.
Location: ____________________________
Climate: ____________________________

A subsistence system in which banana trees are grown in villages as supplemental food sources.
Location: ____________________________
Climate: ____________________________

A capital-intensive commercial system in which bananas are grown in geothermally heated greenhouses.
Location: ____________________________
Climate: ____________________________

**VEGETABLES**

A commercial, intensive land-use system in which seasonal vegetables are grown on "truck farms" for nearby cities.
Location: ____________________________
Agriculture: ____________________________

A capital-intensive, commercial, intensive land-use system in which vegetables are cultivated hydroponically in soilless containers in greenhouses.
Location: ____________________________
Agriculture: ____________________________

A large-scale, labor-intensive, commercial, intensive land-use system for cultivating and harvesting vegetables using migrant workers.
Location: ____________________________
Agriculture: ____________________________

A labor-intensive, subsistence/commercial, intensive land-use system for vegetables in small, backyard, urban plots.
Location: ____________________________
Agriculture: ____________________________
A labor-intensive, subsistence, intensive land-use system for growing vegetables in desert oases.
Location: ____________________
Agriculture: ____________________

> SEAFOOD

A capital-intensive commercial system in which fish are caught in a trawl net, processed, and frozen aboard a “factory ship.”
Location: ____________________
Development level: ____________________

A capital-intensive commercial aquaculture system in which fish are raised in tanks.
Location: ____________________
Development level: ____________________

A commercial system in which a moderate amount of capital and labor are used to catch lobsters in traps using medium-sized boats.
Location: ____________________
Development level: ____________________

A labor-intensive subsistence/commercial system in which fish are caught in small canoes.
Location: ____________________
Development level: ____________________

> HOGS

A capital-intensive, large-scale, commercial, intensive land-use, agribusiness system in which hogs are raised in feedlots with mechanized feeding, watering, and ventilation systems.
Location: ____________________
Subsistence: ____________________

An extensive subsistence system of hunting wild boars.
Location: ____________________
Subsistence: ____________________

A subsistence production system in which village food waste is fed to domesticated “free-range” hogs.
Location: ____________________
Subsistence: ____________________

A medium-scale, commercial, mixed production system in which family farmers grow corn and use some of it to feed hogs.
Location: ____________________
Subsistence: ____________________
1.2. By now you may have noticed several common themes across the different agricultural products. List three examples of agricultural production systems that share some of the same characteristics. Fill in the blanks for the product and the location:

a. Labor-intensive agricultural systems:

production in

production in

production in

b. Capital-intensive agricultural systems:

production in

production in

production in

c. Intensive agricultural systems:

production in

production in

production in

d. Extensive agricultural systems:

production in

production in

production in

e. Commercial agricultural systems:

production in

production in

production in

f. Subsistence agricultural systems:

production in

production in

production in

g. Irrigated agricultural systems:

production in

production in

production in

K. When you have finished, close all browser windows.