Agricultural Landscapes and Production Methods

DIRECTIONS: Click on the website listed below. Under “Computerized Chapter Activities” please select 8.1 Agricultural Landscapes and Production Methods.

http://bcs.wiley.com/he-bcs/Books?action=resource&bcsId=5267&itemId=0470484799&resourceId=18408

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 the thematic map layers for various physical and human factors. If you get the wrong answer, the website will steer you in the right direction!

1) In the right margin you will see your choices of livestock and agriculture. Click on CATTLE to begin.

2) You will see several different 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 you answered wrong, the computer will give you feedback on why it is wrong; read it and click TRY AGAIN. If you answer correct, read the description of this landscape and production method, and then click CONTINUE.

3) 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.

4) 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” where this type of agriculture is commonplace and a “fringe region” where it is also found but is not necessarily dominant. 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.

5) Your task is to match the photos to the regions and report several characteristics about the regions. Several thematic maps can be layers 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.
6) 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.

7) 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. When you choose correctly, answer the following questions for that location, and then click the forward arrow. You can always click the back arrow to return to a previous photo.

8) After you successfully match the photo to a region, you are asked to record the photo location and a value for one of the thematic layers at that location. For cattle, you are asked about population. The population map is a dot map, so you’ll have to do your best to estimate the density as “dense,” “medium,” or “sparse.”

**CATTLE:**

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

LOCATION: _______________________________________________________

POPULATION: ______________________________________________________

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

LOCATION: _______________________________________________________

POPULATION: ______________________________________________________

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

LOCATION: _______________________________________________________

POPULATION: ______________________________________________________

4) An extensive commercial systems in humid tropical regions in which settlers clear patches of rain forest, plant grass, and graze cattle.

LOCATION: _______________________________________________________

POPULATION: ______________________________________________________

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 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:

1) A capital-intensive, commercial, extensive production system for growing and harvesting wheat.
   LOCATION: _________________________________
   Precipitation per year: _________________________________

2) A capital-intensive, commercial, extensive system for irrigating wheat fields.
   LOCATION: _________________________________
   Precipitation per year: _________________________________

3) A labor-intensive subsistence/commercial system for growing & harvesting wheat
   LOCATION: _________________________________
   Precipitation per year: _________________________________

4) A labor-intensive subsistence for irrigating wheat fields
   LOCATION: _________________________________
   Precipitation per year: _________________________________

RICE:

5) Labor-intensive, subsistence/commercial, intensive land use system in which rice is cultivated in rice
   paddy fields on flat land.
   LOCATION: _________________________________
   Development Level: _________________________________

6) A labor-intensive, subsistence/commercial, intensive land use on terraced hillside rice paddies
   LOCATION: _________________________________
   Development Level: _________________________________

7) Capital-intensive, commercial, extensive land use system for cultivating & harvesting rice
   LOCATION: _________________________________
   Development Level: _________________________________

8) Somewhat capital-intensive, commercial, highly intensive land use system for cultivating & harvesting rice
   LOCATION: _________________________________
   Development Level: _________________________________

9) Labor-intensive, extensive, subsistence system in humid tropical regions settlers’ slash-and-burn
   LOCATION: _________________________________
   Development Level: _________________________________
**BANANAS:**

10) A labor-intensive, commercial, intensive land use system in which bananas are grown in corporate plantations.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

11) A subsistence system in which banana trees are grown in villages as supplemental food sources.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

12) A capital-intensive commercial system in which bananas are grown in exothermally heated greenhouses.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

**VEGETABLES:**

13) A commercial, intensive land use system in which seasonal vegetables are grown on “truck farms” for nearby cities.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

14) A capital-intensive, commercial, intensive land use system in which vegetables are cultivated hydroponically in soilless containers in greenhouses.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

15) A large-scale, labor-intensive, commercial, intensive land use system for cultivating & harvesting vegetables using migrant workers.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

16) A labor-intensive, subsistence/commercial, intensive land use system for vegetables in small, backyard, urban plots
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________

17) A labor-intensive, subsistence, intensive land use system for growing vegetables in desert oases.
   LOCATION: ____________________________________________________________
   CLIMATE: _____________________________________________________________
**SEAFOOD:**

18) A capital-intensive commercial system in which fish are caught in a trawl net, processed, and frozen aboard a “factory ship.”

LOCATION: ____________________________________________________________

Development Level: ____________________________________________________

19) A capital-intensive commercial aquaculture system in which fish are raised in tanks.

LOCATION: ____________________________________________________________

Development Level: ____________________________________________________

20) 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: ____________________________________________________

21) A labor-intensive subsistence/commercial system in which fish are caught in small canoes.

LOCATION: ____________________________________________________________

Development Level: ____________________________________________________

**HOGS:**

22) 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: ____________________________________________________________

23) An extensive subsistence system of hunting wild boars.

LOCATION: ____________________________________________________________

Subsistence: ____________________________________________________________

24) A subsistence production system in which village food waste is fed to domesticated “free-range” hogs.

LOCATION: ____________________________________________________________

Subsistence: ____________________________________________________________

25) A medium-scale, commercial, mixed production system in which family farmers grow corn & use some of it to feed hogs.

LOCATION: ____________________________________________________________

Subsistence: ____________________________________________________________
By now you have noticed several common themes across the different agricultural products. List 3 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