
AP[®] Human Geography

Sample Student Responses and Scoring Commentary

Set 1

Inside:

Free-Response Question 1

- Scoring Guidelines**
- Student Samples**
- Scoring Commentary**

Question 1: No Stimuli**7 points**

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- (A)** Describe ONE way that labor costs influence the location of food processing facilities in more developed countries. **1 point**

Accept one of the following:

- A1. Food processing companies may locate in places (e.g., rural areas, small towns, small cities, areas of high unemployment, areas without unions) where labor costs are lower.
- A2. Food processing companies may prefer not to locate in places where labor costs are higher (e.g., urban areas, areas with higher payroll taxes, areas with strong union presence).
- A3. Food processing facilities may locate in places where they have access to workers who may be paid below market rates, at minimum wage, and/or with few benefits (e.g., migrant labor, female labor).

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- (B)** Describe ONE way that the development of large-scale commercial agriculture has affected the use of agricultural technology in the United States and Canada. **1 point**

Accept one of the following:

- B1. The development of large-scale commercial agriculture has led to size and/or cost increases in machinery (e.g., irrigation systems, tractors, combines).
 - B2. The development of large-scale commercial agriculture has driven efficiency increases in farm management and production with agricultural software (e.g., GPS systems or drones in precision agriculture, software for feed processing).
 - B3. The development of large-scale commercial agriculture has led to increasing use of biotechnology, such as genetic modification of crops and animals for diverse purposes (e.g., to increase yields, to improve pest resistance, to change taste and/or appearance).
 - B4. The development of large-scale commercial agriculture has led to increases in efficiency of farm management and production systems (e.g., in nutrition, feeding, pesticides, environmental management, control of pollution).
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- (C)** Explain how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada. **1 point**

Accept one of the following:

- C1. Food processing facilities that process grains, vegetables, and/or meat into food and/or fuel agglomerate in rural areas or towns in grain-growing areas to reduce costs associated with transportation, to take advantage of shared infrastructure, and/or to draw from a lower-paid labor pool than in urban areas.
- C2. Food-processing facilities that process perishable products (e.g., dairy, fruit) tend to locate in rural areas or towns in close proximity to urban areas to be close to consumers and/or limit food spoilage.

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- (D)** Explain a strength of using the concept of complex commodity chains to understand the production and consumption of ONE of the following: **1 point**

- orange juice
- hamburger

Accept one of the following:

- D1. Complex commodity chain analysis helps to understand the entire process of orange farming, harvesting, processing, packaging, shipping, and/or distribution of orange juice, or the husbandry, raising, feed production, transportation, slaughter, processing, packaging, and/or distribution of hamburger and/or beef.
 - D2. Complex commodity chain analysis helps producers maximize their profits by understanding costs and profits associated with processing, distribution, marketing, and/or retailing leading to the consumption of orange juice or hamburger.
 - D3. Complex commodity chain analysis helps distributors maximize profits by understanding costs and benefits associated with the entire commodity chain of orange juice or hamburger from production to consumption.
 - D4. Complex commodity chain analysis helps marketers better promote orange juice or hamburgers to national or regional consumers based on understanding the entire production to consumption process, from grower to consumer.
 - D5. Complex commodity chain analysis helps elucidate the entire process of production and consumption of orange juice or hamburger and all the related social and environmental costs and/or effects; this, in turn, may help effect change in the commodity chain to promote sustainability.
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- (E)** Explain ONE way that government policies banning genetically modified organisms may favor small family farms over large-scale commercial agriculture. **1 point**

Accept one of the following:

- E1. If large-scale commercial agriculture firms cannot use GMO technology to reduce costs, the products of small family farms may become more competitive in price with the products of large-scale commercial agriculture.
- E2. Small family farms may be favored over large-scale commercial agriculture in the production of non-genetically modified agriculture (e.g., organic agriculture), high value-added agriculture (e.g., specialty products), regional foods (e.g., foods with appellations like Parmigiano-Reggiano cheese, Jamon Ibérico), and/or heirloom varieties as many small family farms may already be engaged in this form of production.
- E3. These policies may reduce large-scale commercial agricultural firms' control over seed stock, allowing small family farms to diversify their products and better compete with large-scale commercial agriculture.
- E4. Ensuring non-GMO crops are healthy can be a more time-consuming process, which would not accommodate the economies of scale in large commercial farms and would favor the smaller family farms.

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- (F)** Explain why farms in countries such as Italy, France, Spain, or Portugal often require seasonal agricultural workers from other countries. **1 point**

Accept one of the following:

- F1. When these populations went through the demographic transition, their dependency ratio changed and the relative size of the workforce decreased, resulting in a shortage of workers willing to do seasonal agricultural labor that is both strenuous and low paying.
 - F2. These countries have small family farm operations dependent upon a large temporary workforce at certain times in the agricultural calendar (e.g., harvests, planting, pruning) to fulfill the need for additional labor.
 - F3. Many crops grown in Mediterranean areas (e.g., olives, grapes, vegetables) are tended and picked by hand and thus require a large labor force; growers keep costs down by importing low-paid workers; the cultivation of many Mediterranean crops requires more labor.
 - F4. The majority of the workforce in these countries is employed in the secondary and tertiary sectors of the economy, resulting in a shortage of workers willing to do seasonal agricultural labor.
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- (G)** Explain the degree to which migration or border policies in the European Union affect the movement of agricultural laborers among its member countries **1 point**

Accept one of the following:

Statement or indication of a low degree

AND

Supported by one of the following:

- G1. EU open border policies (e.g., article 45 of the Treaty on the Functioning of the European Union, Maastricht Treaty, Schengen Agreement) allow both internal and immigrant workers from one EU country to move among EU member countries.
- G2. Illegal exploitation of farm workers (e.g., the *caporalato* system in Italy) includes trafficking of laborers or the restriction of free movement across borders.

OR

Statement or indication of a moderate or high degree

AND

Supported by one of the following:

- G3. EU open border policies encourage free movements among EU member countries without immigration controls or visa restrictions at most land border crossings.
- G4. EU member states enacted strict measures during the coronavirus pandemic that curtailed or eliminated the movement of agricultural laborers among member countries.
- G5. Periodic influxes of migrants or asylum seekers may cause some member states to temporarily close borders or increase border controls (e.g., police, immigration, coast guard, and/or customs officers stationed at crossings, military or police patrols of border or coastal areas, installation of fences).

Total for question 1: 7 points

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3

Begin your response to each question at the top of a new page. Do not skip lines.

A. Food processing facilities are located near cheap labor sources since they require large amounts of cheap laborers. Therefore, they locate in areas with loose labor laws.

B. Because of large-scale commercial agriculture, agricultural technology has advanced to suit growing demand. This has resulted in mechanization, chemicals, and the development of GMO's.

C. Because processing facilities benefit from being located near ~~commercial farms~~ sources of cheap, unskilled labor, they agglomerate near towns and rural areas to mutually benefit from the proximity.

D. Orange juice benefits from complex commodity chains to get the raw material, in this case oranges, to processing facilities where they are turned into juice and packaged, to a grocer or store, to consumers.

E. Typically, large-scale commercial farms implement GMO's in order to optimize their profits. They use GMO's so they can guarantee a large, healthy harvest. However, family farms generally use more traditional farming practices. Therefore, banning GMO's would affect family farms much less than large-scale commercial farms.

F. Because these countries are part of the developed core and are in the later stages of the DTM, they have smaller working age populations as well as high urbanization and tertiary sector jobs. Therefore, they need agricultural workers since they don't have many people working in the primary sector.

G. They affect travel to a small degree since the E.U.'s open border policy between member states allows workers to travel between member states with few obstacles.

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Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

- 1-a.) In more developed countries, facilities such as food processing facilities are placed in locations with low labor costs - so that the owner can make the most profit possible.
- b.) In the U.S. and Canada there is a high demand for a variety of food, leading to the development of large-scale commercial agriculture to meet the high demands. In large scale agriculture, technology, such as tractors, have become much more popular in usage to create a less labor intensive job.
- c.) Large scale commercial agriculture has limited food processing facilities to be in more rural areas and then are transported to towns.
- d.) A complex commodity chain is how goods get from farm to consumer. In the case of orange juice, this starts on farms, most commonly in Florida. Then through the commodity chain the oranges are transported to juicing & packaging facilities where the juice is then shipped to stores for consumers to purchase.
- e.) Family farms tend to be smaller farms who produce for the community, which usually means they have access to less resources. The banning of GMOs would favor these small farms because they usually do not have the money

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or resources to spend on GMO's so they're usually organic. This leaves family farms unaffected and still able to make a profit.

f.) European countries such as Italy, France, Spain, & Portugal often require seasonal agricultural workers from other countries during the planting and harvesting season because it is more labor intensive and other countries have lower labor costs.

g.) countries within the European Union have a very easy border policy to travel to other countries within the EU. Under this allows inhabitants to travel to countries with better agricultural labor pay and ~~with~~ ^{better} benefits to improve income and therefore quality of life.

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Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page. Do not skip lines.

A.) Labor costs influence the food processing facilities because ~~in order to ship when~~ shipping something long distances to process them are costly procedures. If the facilities were already close to their destination, the labor costs would go down greatly.

B.) Large scale commercial agriculture has ~~led to the agglomeration of food processing facilities~~ affected the use of agricultural technology in U.S and Canada because due to the fact that its larger, you would need more people and workers to do the job, also resulting in less money for paying the workers. However with machines, it cuts the amount of workers down significantly, as well as saving money and getting the work done much faster.

C.) Large scale commercial agriculture has also led to the agglomeration of food processing facilities because large scale commercial agriculture creates much more crops, ~~than~~ meaning more crops for the food processing facilities to process.

D.) In order to make and deliver a ready to eat hamburger you have to go through a complex process. First you must gather the bread, lettuce, and other things like toppings. Then, you must get the meat from the cows from a slaughter house. From there it has to go through the facility that it gets processed, and then back to another facility to get cooked and prepared to be sent to...

Page 2

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Question 1

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a store or sent to be ready to be consumed.
 E.) government policies banning genetically modified organisms could help small family farms over larger commercial agriculture places because without gmo's, there's no reason for people to choose the larger companies, meaning they may choose the local businesses because the food is local, and they know what preparations were taken.

F.) Farms in Italy, France, Spain, or Portugal may need seasonal agriculture workers from other countries because they have more experience working with certain types of crops.

G.) Migration and border policies in European Union could affect the movement of agricultural laborers along member countries because not only may there be restrictions from letting them move, there would also be many who do not want to go through the hassle of the new policies.

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Question 1

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

Students were expected to know about the processes influencing large-scale commercial agriculture and how it relates to economic factors (such as agglomeration and commodity chains) and political factors (such as migration or border policies).

In part A students were expected to describe one way that labor costs influence the location of food processing facilities in more developed countries. While this part of the question seemed simple, many students were not able to make the connection between labor costs and where food processing facilities may be located.

In part B students were expected to demonstrate an understanding of how large-scale commercial agriculture has affected the use of agricultural technology in the United States and Canada. At its highest level, this question measured students' understanding of the types of agricultural technologies currently used by large-scale commercial agriculture.

In part C students were expected to explain how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada. In this part the student is expected to know the concept of agglomeration and apply it at the small town or rural scale. In part D students needed to explain a strength of using the concept of complex commodity chains by examining either orange juice or hamburger. A large majority of students did not seem to understand the concept of a commodity chain, and that it can be used to analyze the production, processing, distribution, marketing, and consumption of an agricultural product.

In part E students needed to explain one way that government policies banning genetically modified organisms may favor small family farms over large-scale commercial agriculture. In part F students were to explain why farms such as Italy, France, Spain, or Portugal would require seasonal agricultural workers from other countries. Part F focuses on the demographic or economic situations in these countries that would necessitate seasonal agricultural workers.

Finally, in part G students needed to explain the degree to which migration or border policies in the European Union would affect the movement of agricultural laborers among its member countries. To earn this point, students needed to state a degree to which this was true or not, using terms such as “highly likely,” “to a great degree,” “very little,” or “not at all” then support that with an explanation.

Sample: 1A

Score: 7

The response to part A earned 1 point because it describes how labor costs influenced the location of food processing facilities in more developed countries with the example that food processing facilities may locate in places where labor costs are lower.

The response to part B earned 1 point because it describes how the development of large-scale commercial agriculture has affected the use of agricultural technology in the United States and

Question 1 (continued)

Canada with the example that large-scale commercial agriculture has led to increases in mechanization.

The response to part C earned 1 point because it explains how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada by indicating that processing facilities may agglomerate in rural towns or cities to take advantage of cheaper labor and other advantages of proximity.

The response to part D earned 1 point because it explains a strength of using the concept of complex commodity chains of orange juice production and consumption as processing raw materials into juice that is then packaged and delivered to stores and finally to consumers.

The response to part E earned 1 point because it explains how government policies banning genetically modified organisms may favor small family farms over large-scale farms by indicating large-scale farms may use GMO products to produce large amounts for increased profit, while family farms use more traditional practices. Thus, a ban on GMO products would not affect family farms as much.

The response to part F earned 1 point because it explains why farms in countries such as Italy, France, Spain, or Portugal often require seasonal agricultural workers from other countries by indicating a lack of workers needed to do agricultural work because developed countries are in the later stages of the demographic transition.

The response to part G earned 1 point because it identifies the low degree to which migration or border policies in the European Union affect the movement of agricultural laborers among its member countries by indicating workers are allowed to move freely among member states.

Sample: 1B

Score: 5

The response to part A earned 1 point because it describes how labor costs influenced the location of food processing facilities in more developed countries with the example that food processing facilities may locate in places where labor costs are lower.

The response to part B earned 1 point because it describes how the development of large-scale commercial agriculture has affected the use of agricultural technology in the United States and Canada with the example that large-scale commercial agriculture has led to size or cost increases in machinery.

The response to part C did not earn a point because it does not explain how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada.

The response to part D earned 1 point because it explains a strength of using the concept of complex commodity chains to understand the production and consumption of orange juice that is grown in Florida, transported to juicing and packaging facilities, delivered to stores and finally to consumers.

Question 1 (continued)

The response to part E earned 1 point because it explains how government policies banning genetically modified organisms may favor small family farms over large-scale farms by indicating family farms use fewer resources than large-scale farms. Thus, a ban on GMO products would not affect family farms as much.

The response to part F earned 1 point because it explains why farms in countries such as Italy, France, Spain, or Portugal often require seasonal agricultural workers from other countries by indicating Mediterranean agriculture is labor intensive and requires more workers. For example, many crops grown in Mediterranean areas are tended and picked by hand and, therefore, require a large labor force. The growers will keep costs down by importing low-paid workers.

The response to part G did not earn a point because it does not explain the degree to which migration or border policies in the European Union affect the movement of agricultural laborers among its member countries.

Sample: 1C

Score: 3

The response to part A did not earn a point because it does not describe a way that labor costs influence the location of food processing facilities in more developed countries.

The response to part B earned 1 point because it describes how the development of large-scale commercial agriculture has affected the use of agricultural technology in the United States and Canada with the example that large-scale commercial agriculture has led to size or cost increases in machinery.

The response to part C did not earn a point because it does not explain how the development of large-scale commercial agriculture has led to the agglomeration of food processing facilities in towns and rural areas of the United States and Canada.

The response to part D earned 1 point because it explains a strength of using the concept of complex commodity chains of hamburger, such as cattle being processed at a slaughter facility and then processed further before going to the consumer.

The response to part E earned 1 point because it explains how government policies banning genetically modified organisms may favor small family farms over large-scale farms by indicating a ban on GMO products would make family farm products competitive because GMOs would not be available to the consumer.

The response to part F did not earn a point because it does not explain why farms in countries such as Italy, France, Spain, or Portugal often require seasonal agricultural workers from other countries.

The response to part G did not earn a point because it does not explain the degree to which migration or border policies in the European Union affect the movement of agricultural laborers among its member countries.