The Scope and Importance of Agribusiness

Unit: Introduction to Agribusiness
Problem Area: Understanding the Scope of Agribusiness
Lesson: The Scope and Importance of Agribusiness

Student Learning Objectives. Instruction in this lesson should result in students achieving the following objectives:

1. Define agribusiness, and describe the sectors of agribusiness.
2. Determine the scope and the economic impact of the agriculture industry at the local, state, national, and international levels.
3. Determine the importance of the agriculture industry to society at the local, state, national, and international levels.

Resources. The following resources may be useful in teaching this lesson:

Corresponding E-unit(s). Danville, IL: CAERT, Inc. www.mycaert.com
Equipment, Tools, Supplies, and Facilities.

- Overhead or PowerPoint projector
- Visual(s) from accompanying master(s)
- Copies of sample test, lab sheet(s), and/or other items designed for duplication
- Materials listed on duplicated items
- Computers with printers and Internet access
- Classroom resource and reference materials

Key Terms. The following terms are presented in this lesson (shown in bold italics):

- agribusiness
- agribusiness input sector
- agribusiness output sector
- agriservice
- agriservices sector
- exports
- gross domestic product
- imports
- input
- marketing
- output
- private agriservices
- private sector
- production
- production agriculture
- production efficiency
- public agriservices
- public sector
- value-added products

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

Ask students to write about what agriculture means to them. Prompt them to think about what they have done today that relates to agriculture. Did they eat breakfast? Are they wearing clothes that contain wool or cotton? Did the vehicle they arrived at school in have ethanol in the fuel? Explain that without the enormous scope of agribusiness, they may not have the opportunity to eat a variety of foods. Without agribusiness and its many aspects, we would have less variety when it comes to fabrics, fuels, foods, and medicine.
Objective 1: Define agribusiness, and describe the sectors of agribusiness.

Anticipated Problem: What is agribusiness and how does it affect our society?

I. Agribusiness includes all the activities of the agricultural food and natural resource industry involved in the production of food and fiber. Individual agribusinesses may sell items to farmers for production; provide services to other agricultural businesses; or be engaged in the marketing, transportation, processing, and distribution of agricultural products. Agriservice is activities of value to the user or buyer. The activities are an intangible product. Marketing is providing the products and services that people want when and where they want them.

A. Agribusinesses process inputs into outputs. An input is a resource used in production, and an output is the result of the production process. Production is the act of making products, such as goods and services.

1. Without production agriculture, agribusiness would not exist. Production agriculture is the use of land to produce goods. There are approximately 2.3 billion acres of land in the United States. Of that land, 21 percent is used for crops, 25 percent is used for livestock production, and 30 percent is used for forestry purposes.

2. As a result of the advancements made in agriculture over the years, the American farmer now produces enough to feed and clothe 150 people. According to the USDA, expenditures on food (as a share of disposable personal income) have decreased from a high of 25.2 percent in 1933 to a low of 9.7 percent in 2004. Those figures grew slightly to 9.8 percent during 2005, 2006, and 2007.

B. Agribusiness provides people with food, clothing, and shelter. It also provides jobs for millions of people. These jobs are in science, research, engineering, education, advertisement, government agencies, trade organizations, and commodity organizations. Agribusiness pertains to the public and private sectors. The public sector is the economic and administrative functions of dealing with the delivery of goods and services by and for the government. The private sector is the part of the economy associated with private profit and is not controlled by government.

Lead the class in a discussion, during which agribusiness is defined and sectors are described. Use a PowerPoint presentation during the discussion to emphasize key points. Use an example of inputs and outputs (e.g., chocolate chip cookies) to reinforce concepts. What input materials are needed to make the cookies? The output would be the cookie.
Objective 2: Determine the scope and the economic impact of the agriculture industry at the local, state, national, and international levels.

Anticipated Problem: What are the scope and the economic impact of the agriculture industry at the local, state, national, and international levels?

II. It has been said many times that agriculture is the foundation of civilization. Domestication of plants and animals for agricultural purposes allowed humans to settle in villages. As societies have developed, agriculture has remained important on the local, state, national, and international levels.

A. Agriculture is a substantial contributor to local economies. Economic output and value-added economic impacts can be substantial. Important non-traditional economic impacts of local agriculture are created through tourism, wildlife viewing, fisheries, hunting, and recreation. Many people are engaged in full-time employment tied directly or indirectly to agricultural activities. Agricultural land and agribusinesses provide taxes to support government services.

B. Agriculture is one of the largest industries in many states. The agriculture industry generates large cash receipts within most states and provides many jobs. In addition, agriculture has a large economic multiplier effect, so it contributes positively to other sectors of the economy.

C. U.S. agribusinesses produce a variety of exports (agricultural commodities shipped outside of the United States). Grains, tobacco, cotton, and vegetables are examples of agricultural exports. According to the USDA, the United States exported 115.45 billion dollars of agricultural products in 2008.

D. The United States also imports a variety of agricultural products. Imports are agricultural products brought into the United States from other countries. In 2008, the nation imported 79.32 billion dollars of agricultural products.

E. For much of the world’s population, agriculture is a subsistence activity. Roughly 90 percent of the food produced in the world is consumed in the country producing it.
   1. Trade of agricultural goods on a global basis has grown. Trade lowers costs of agricultural goods and widens choices.
   2. Trade, along with aid and technology, can enlarge agriculture’s role in the global economy. An enlarged role of agriculture in the global economy results in greater food security, economic development, and environmental sustainability.

Divide the students into four groups, and have them conduct research online regarding the economic impact of the agriculture industry at the local, state, national, and international levels. (Assign one level to each group.)

You may also want to invite an agricultural economist to speak to the class.
Objective 3: Determine the importance of the agriculture industry to society at the local, state, national, and international levels.

Anticipated Problem: What is the importance of the agriculture industry to society at the local, state, national, and international levels.

III. Agriculture accounts for 17 percent of the U.S. economic output, making it the largest industry. Globally, agribusiness employs approximately half of the earth’s population.

A. The gross domestic product is the value of goods and services our nation produces in a year. Agriculture accounts for 17 percent of the gross domestic product. Of this 17 percent, 13 percent comes from agriculture-related industries. Examples of agriculture-related industries include feed mills and biotechnology firms. These industries create value-added products (products improved through processing or manufacturing) from raw agricultural products.

B. Production efficiency is optimum output from an input. The production efficiency of U.S. production agriculture, as compared to other countries, is enormous. There are a number of ways to measure this efficiency. The most common method of measuring efficiency is to determine the number of people supplied with the farm products.

1. The average farm worker supplies 150 people with agricultural products. In the early 1950s, one farm worker supplied less than 20 people with agricultural products.

2. An increase in production efficiency has also helped the overall U.S. economy. Improved efficiency has allowed more people to leave the farm and find work in other industries.

C. Agribusiness can be divided into sectors. The major sectors are agribusiness input, agribusiness output, and agriservices.

1. The agribusiness input sector includes all resources involved in producing farm commodities. Examples of the agribusiness input sector include seed, fertilizer, machinery, fuel, and credit. Production efficiency can also be linked to improvements in these agricultural inputs.

2. The agribusiness output sector includes any agribusiness that affects an agricultural commodity between production and the consumer. Examples include transporting, selling, storing, and inspecting. Approximately 20 million people are employed in this sector.

3. The agriservices sector includes people who research new ways of producing and marketing food, protect food producers, and provide specialized services to all areas of agriculture. Both public and private agencies are responsible for the actions of the agriservices sector.

   a. Public agriservices are agricultural groups that provide services at the federal, state, and local levels. Public agriservices specialize in education, research, communication, and regulation. The United States Department of
Agriculture, Food and Drug Administration, and the Department of Commerce are examples.

b. **Private agriservices** are agriservices not governed at the federal, state, or local level. The three areas of private agriservices are financial services, trade associations, and agricultural cooperatives. Examples of private agriservices are the Farm Service Agency and the American Seed Trade Association.

Ask local trade organizations to discuss their importance with the students by visiting your class or by using Skype, a teleconference, or an email (to you) that you can share with the class. Employees of local public and private agriservices may also be available for classroom discussion.

**Review/Summary.** Summarize the lesson by reviewing the learning objectives. The anticipated problems can be used as student review questions. Use the student responses to determine which areas need to be reviewed or taught from a different angle.

**Application.** Use the included visual masters and lab sheet to apply the information presented in the lesson.

**Evaluation.** Evaluation should be based on student comprehension of the learning objectives. A sample written test is provided.

**Answers to Sample Test:**

**Part One: Matching**

1. a  
2. e  
3. f  
4. c  
5. b  
6. d  
7. h  
8. i  
9. j  
10. g

**Part Two: Multiple Choice**

1. b  
2. c  
3. a  
4. d  
5. b
Part Three: Short Answer

1. The agribusiness input sector includes all resources involved in producing farm commodities. Examples include seed, fertilizer, machinery, fuel, and credit. The agribusiness output sector includes any agribusiness that affects an agricultural commodity between production and the consumer. Examples include transporting, selling, storing, and inspecting.

2. Public agriservices are agricultural groups that provide services at the federal, state, and local levels. Public agriservices specialize in education, research, communication, and regulation. Private agriservices are not governed at the federal, state, or local level. The three areas of private agriservices are financial services, trade associations, and agricultural cooperatives.
Part One: Matching

Instructions: Match the term with the correct definition.

a. import  
   b. agribusiness  
   c. input  
   d. export  
   e. output  
   f. value-added products  
   g. agriservice  
   h. production  
   i. marketing  
   j. public sector

1. An agricultural product brought to the United States from another country
2. The result of the production process
3. Products improved through processing or manufacturing
4. A resource used in production
5. Something that includes all the activities of the agricultural food and natural resource industry involved in the production of food and fiber
6. Agricultural commodities shipped outside of the United States
7. The act of making products, such as goods and services
8. The act of providing the products and services that people want when and where they want them
9. The economic and administrative functions of dealing with the delivery of goods and services by and for the government
10. Activities of value to the user or buyer
Part Two: Multiple Choice

Instructions: Write the letter of the correct answer.

_____ 1. The _____ is the part of the economy associated with private profit and is not controlled by government.
   a. entrepreneurship
   b. private sector
   c. public sector
   d. USDA

_____ 2. _____ refers to the use of land to produce goods.
   a. Aquaponics
   b. Natural resources
   c. Production agriculture
   d. Sustainable agriculture

_____ 3. In 2008, the United States _____.
   a. exported 115.45 billion dollars worth of agricultural products
   b. imported 150 billion dollars of agricultural products
   c. exported about $35 billion of agricultural products
   d. imported about $35 billion more than it exported

_____ 4. Production efficiency is _____.
   a. receiving minimum input from an output
   b. receiving minimum output from an input
   c. receiving optimum input from an output
   d. receiving optimum output from an input

_____ 5. The value of goods and services our nation produces in a year is the _____.
   a. genuine progress indicator
   b. gross domestic product
   c. gross national income
   d. human development index

Part Three: Short Answer

Instructions: Answer the following.

1. Define and provide examples of the agribusiness input and output sectors.

2. Identify the two types of agriservice sectors.
DISPOSABLE INCOME SPENT ON FOOD

Food Expenditures:
Share of Disposable Income
1929 - 2007

Source: Dept. of Agriculture

(Courtesy, USDA)
# MAJOR COMMODITY EXPORTERS

<table>
<thead>
<tr>
<th>Country</th>
<th>Commodity</th>
<th>Value (U.S. Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. United Kingdom</td>
<td>Beverages dist alcoholic</td>
<td>7324475</td>
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<tr>
<td>2. Netherlands</td>
<td>Crude organic materials 29</td>
<td>7262576</td>
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<td>3. France</td>
<td>Wine</td>
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<tr>
<td>4. United States of America</td>
<td>Soybeans</td>
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<td>5. United States of America</td>
<td>Maize</td>
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<td>6. Malaysia</td>
<td>Oil of palm</td>
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<tr>
<td>7. Brazil</td>
<td>Soybeans</td>
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</tr>
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<td>Country</td>
<td>Commodity</td>
<td>Value (U.S. Dollars)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------------------</td>
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</tr>
<tr>
<td>8. United States of America</td>
<td>Wheat</td>
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<tr>
<td>9. United States of America</td>
<td>Cotton lint</td>
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<tr>
<td>10. Argentina</td>
<td>Cake of soya beans</td>
<td>3597953</td>
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<tr>
<td>11. Italy</td>
<td>Wine</td>
<td>3550372</td>
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<tr>
<td>12. Indonesia</td>
<td>Oil of palm</td>
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</tr>
<tr>
<td>13. Australia</td>
<td>Beef and veal, boneless</td>
<td>3296695</td>
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<tr>
<td>14. United States of America</td>
<td>Food prepared nes</td>
<td>3276786</td>
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<tr>
<td>15. Brazil</td>
<td>Cake of soya beans</td>
<td>3270889</td>
</tr>
<tr>
<td>16. Denmark</td>
<td>Pigmeat</td>
<td>3099468</td>
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<tr>
<td>17. Australia</td>
<td>Wheat</td>
<td>*3089044</td>
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<tr>
<td>18. Netherlands</td>
<td>Cigarettes</td>
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</tr>
<tr>
<td>19. France</td>
<td>Beverages dist alcoholic</td>
<td>2715993</td>
</tr>
<tr>
<td>20. Thailand</td>
<td>Rubber natural dry</td>
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* = Unofficial figure

(Courtesy, FAO)
# MAJOR COMMODITY IMPORTERS

<table>
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<tr>
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<th>Commodity</th>
<th>Value (U.S. Dollars)</th>
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</thead>
<tbody>
<tr>
<td>1. Japan</td>
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<td>2. United Kingdom</td>
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<td>3. United States of America</td>
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<td>4. United States of America</td>
<td>Wine</td>
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<tr>
<td>5. Germany</td>
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</tr>
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<td>6. United States of America</td>
<td>Crude organic materials 29</td>
<td>3376793</td>
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<tr>
<td>7. United States of America</td>
<td>Beef and veal, boneless</td>
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</tr>
<tr>
<td>Country</td>
<td>Commodity</td>
<td>Value (U.S. Dollars)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>8. United States of America</td>
<td>Beer of barley</td>
<td>2993125</td>
</tr>
<tr>
<td>9. Japan</td>
<td>Maize</td>
<td>2931852</td>
</tr>
<tr>
<td>10. Germany</td>
<td>Cheese (whole cow milk)</td>
<td>2491065</td>
</tr>
<tr>
<td>11. Japan</td>
<td>Cigarettes</td>
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</tr>
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<td>12. Germany</td>
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<td>13. France</td>
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<td>15. United States of America</td>
<td>Food prepared nes</td>
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<tr>
<td>16. Italy</td>
<td>Oil of olive</td>
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<td>17. United States of America</td>
<td>Coffee, green</td>
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<td>18. Germany</td>
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<td>19. Italy</td>
<td>Cigarettes</td>
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</tr>
<tr>
<td>20. Japan</td>
<td>Beef and veal, boneless</td>
<td>1824993</td>
</tr>
</tbody>
</table>

(Courtesy, FAO)
Objective:
Identify the following agricultural products, services, and businesses as inputs or outputs.

Materials:
♦ writing utensil
♦ paper (if your instructor does not want you to write on the lab sheet)

Procedure:
Mark an I on the line for inputs and an O on the line for outputs.

1. _____ chemicals
2. _____ fuel
3. _____ transportation
4. _____ insurance
5. _____ regulations
6. _____ grocery stores
7. _____ seed
8. _____ fertilizer
9. _____ credit
10. _____ packaging
Agricultural Inputs and Outputs

1. I
2. I
3. O
4. O
5. O
6. O
7. I
8. I
9. I
10. O