Lesson A1–2

Understanding the Scope and Importance of Agribusiness

Unit A. Introduction to Agribusiness

Problem Area 1. Concepts of Agribusiness

Lesson 2. Understanding the Scope and Importance of Agribusiness

New Mexico Content Standard:

Pathway Strand: Agribusiness Systems

Standard: I: Employ leadership skills to accomplish goals and objectives in an AFNR business environment.

Benchmark: I-C: Apply management skills to accomplish general business activities from production to public relations.

Performance Standard: 1. Identify management types. 2. Identify organizational structures. 3. Identify time management techniques. 4. Make business agreements. 5. Follow local, state, and federal regulations and appreciate the consequences of not following them. 6. Recruit, train and evaluate human resources. 7. Make business presentation.

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

1. Define agribusiness and explain its effect on our society.
2. Identify successes in agribusiness in America.
3. Explain the size and importance of production agriculture.
4. Explain the size and importance of the agribusiness sectors.
List of Resources. The following resources may be useful in teaching this lesson:

Recommended Resources. One of the following resources should be selected to accompany the lesson:


Other Resources. The following resources will be useful to students and teachers:


List of Equipment, Tools, Supplies, and Facilities

- Writing surface
- Overhead projector
- Transparencies from attached masters
- Copies of student lab sheet

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

- Agribusiness
- Agribusiness input sector
- Agribusiness output sector
- Agriservices sector
- Export
- Gross domestic product
- Import
- Input
- Output
- Private agriservices
- Production agriculture
- Production efficiency
- Public agriservices
- Value-added
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 think about what agriculture means to them. Prompt them to think about what they’ve 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 the variety of food they do. Without agribusiness and its many aspects, we would have less variety when it comes to fabrics, fuels, foods, and medicine.

Summary of Content and Teaching Strategies

Objective 1: Define agribusiness and explain its affect on our society.

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

I. An agribusiness is a business that sells items to farmers for production; provides services to other agricultural businesses; or is any business that is engaged in the marketing, transportation, processing, and distribution of agricultural products.

A. Agribusinesses process inputs into outputs. An input is a resource used in production. An output is the result of the production process.

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.

Examples or displays of inputs and outputs may be needed for additional review of this objective. Chocolate chip cookies could be used as a hands-on example of inputs and outputs. What kinds of items would you need to make your cookies? Butter, sugar, flour, eggs, vanilla, chocolate chips, etc. The output would be the actual cookie. This can be a fun and flavorful activity for students to participate in. Use TM: A1–2A Agribusiness and our Society to review the terminology presented in this objective. Assign readings in the recommended texts to help students in fully comprehending this objective.

Objective 2: Identify successes in agribusiness in America.

Anticipated Problem: How have agribusinesses been successful in America?

II. Before agriculture, early man hunted and gathered for their food. Early developments in agriculture included the domestication of animals and crops for food use. As time passed, man began to use tools to cultivate, learned about crop rotations, became aware of selective breeding, began to use animals for draft purposes, and learned to use organic fertilizers. Agriculture advanced as the industrial revolution came about.
A. Several agriculturally related events occurred in the 1800’s. Results of the agricultural revolution include the invention of crop rotation by Charles Townsend, achievements in livestock breeding by Robert Bakewell, invention of the seed drill by Jethro Tull, invention of the first mechanical reaper by Cyrus McCormick, invention of the steel plow by John Deere, introduction of barbed wire, the building of the first gasoline powered tractor, and Gregor Mendel began working with genetics in plants.

B. In the 1900’s more money and more machines became available for use. Examples of agricultural improvements in the 1900’s include the formation of the U.S. Bureau of Forestry, vaccines were developed to improve animal health, the Smith-Hughes Act established vocational agriculture courses in the high schools, the Cooperative Extension Service was developed, Federal Land Banks began giving credit to farmers, hybrid plants were developed, the Soil Conservation Service was established, the Future Farmers of America was started, and methods to prevent erosion were developed.

C. Since World War II, agriculture has made many advances. Artificial insemination has become popular; futures trading has become profitable; computers have become widely used in agricultural applications; and biotechnology has become mainstream.

D. As a result of the advancements made in agriculture over the years, the American farmer now produces enough to feed and clothe 150 people. Americans also spend the least amount of their disposable income on food, only 9%. Agribusinesses in America produce a variety of exports, or agricultural commodities shipped outside of the United States. Grains, tobacco, cotton, and vegetables are examples of agricultural exports. The United States also imports a variety of agricultural products. An import is an agricultural product brought into the U.S. from another country.

This objective may best be reviewed using a timeline. Additional information on each of these agencies or activities may be found in the recommended reading, on the Internet, or through local guest speakers. Many students may not be aware of the Cooperative Extension Service for example. This might be an ideal time to invite your local CES agent into the classroom for a visit. Use TM: A1–2B Agricultural Events to review this objective. Assigned readings in the recommended texts will also be valuable in reinforcing those concepts.

Objective 3: Explain the size and importance of production agriculture.

Anticipated Problem: How is production agriculture important?

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

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

B. Production efficiency refers to receiving optimum output from an input. The production efficiency of production agriculture in the United States 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 whom farm workers supply with products.

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

Refer back to the interest approach and have students think about the agricultural products they've come in contact with today. Were they raw agricultural products? Were they value-added agricultural products? How do they know? Lead the students in discussion regarding these issues. Refer to TM: A1–2C Production Agriculture for further review of the terms given in this unit. Assign readings in the recommended texts to help in reinforcing the content of this objective.

Objective 4: Explain the size and importance of the agribusiness sectors.

Anticipated Problem: How are the agribusiness sectors important?

IV. Agriculture accounts for 17% of the United States’ economic output, making it America's largest industry. Globally, agribusiness employs approximately half of the earth’s population.

A. 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.

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

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

D. 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 of public agriservices.

E. Private agriservices are those 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 American Seed Trade Association.

TM: A1–2D Agribusiness Sectors reviews the different sectors reviewed in this objective. The Agribusiness Sectors section in Chapter 1 of Gibson’s Agribusiness text contains excellent information on this topic. Guest speakers or written information from a variety of these sectors is available for use in the classroom. Write to local trade organizations or invite local representatives to your class to discuss their importance with the students. Employees of local public and private agriservices may also be available for classroom discussion. LS: A1–2A Agricultural Inputs and Outputs can be used to review this objective.

**Review/Summary.** Summarize the lesson by reviewing the students learning objectives. The anticipated problems can be used as student review questions. Chapter reviews from the books listed on the resource list may also be useful.

**Application.** The following student activity can be used to apply the student learning objectives:

LS: A1–2A Agricultural Inputs and Outputs

**Evaluation.** Evaluation should be based on student comprehension of the learning objectives. This can be determined using the attached sample written test.

**Answers to Sample Test:**

**Part One: Matching**

1. a
2. e
3. f
4. c
5. b
6. d

**Part Two: Completion**

1. Production agriculture
2. Production efficiency
3. Gross domestic product

**Part Three: Short Answer**

1. Refer to objective four
2. Public agriservices, private agriservices
Lesson A1–2: Understanding the Scope and Importance of Agribusiness

Part One: Matching

*Instructions.* Match the term with the correct response. Write the letter of the term by the definition.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Import</td>
<td>An agricultural product brought to the U.S. from another country.</td>
</tr>
<tr>
<td>b. Agribusiness</td>
<td>A business that sells items to farmers or provides services to agribusinesses.</td>
</tr>
<tr>
<td>c. Input</td>
<td>The result of the production process.</td>
</tr>
<tr>
<td>d. Export</td>
<td>Agricultural commodities shipped outside the U.S.</td>
</tr>
<tr>
<td>e. Output</td>
<td>Products improved through processing or manufacturing.</td>
</tr>
<tr>
<td>f. Value added</td>
<td>A resource used in production.</td>
</tr>
</tbody>
</table>

Part Two: Completion

*Instructions.* Provide the word or words to complete the following statements.

1. ___________ ___________ refers to the use of land to produce goods.
2. ___________ ___________ refers to receiving optimum output from an input.
3. The ___________ ___________ ___________ is the value of goods and services America produces in a year.

Part Three: Short Answer

*Instructions.* Provide information to answer the following questions.

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

2. Identify the two types of agriservice sectors.
AGRIBUSINESS AND OUR SOCIETY PROVIDES

✓ Food
✓ Clothing
✓ Shelter
✓ Jobs
✓ Input: a resource used in production
✓ Output: the result of the production process
AGRICULTURAL EVENTS

1800’s

⭐ Crop rotation
⭐ Mechanical reaper
⭐ Steel plow

1900’s

⭐ Vaccines
⭐ Smith-Hughes Act
⭐ Cooperative Extension Service

Today

⭐ Artificial insemination
⭐ Futures trading
⭐ Biotechnology
PRODUCTION
AGRICULTURE

➤ Gross domestic product
➤ Value-added
➤ Production efficiency
AGRIBUSINESS SECTORS

Input

★ seed
★ fertilizer

Output

★ transportation
★ storage

Agriservices

★ public
★ private
Lab Sheet

Agricultural Inputs and Outputs

Instructions: Identify the following agricultural products, services, and businesses as inputs or outputs. Mark an I on the line for inputs and 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
<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th></th>
<th>O</th>
<th></th>
<th>I</th>
<th></th>
<th>I</th>
<th></th>
<th>I</th>
<th></th>
<th>O</th>
</tr>
</thead>
</table>