Lesson B7–2

Understanding Futures Contracts and Governmental Programs

Unit B. Animal Science and the Industry

Problem Area 7. Understanding Animal Production

Lesson 2. Understanding Futures Contracts and Governmental Programs

New Mexico Content Standard:

Pathway Strand: Agribusiness Systems

Standard: **VI:** Use sales and marketing principles to accomplish an AFNR business objective.

Benchmark: **VI-A.** Conduct market research.

Performance Standard: **1.** Evaluate methods of marketing products and services. **2.** Apply economic principles to marketing (e.g., supply and demand). **3.** Research products and service design(s).

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

1. Describe the futures market.
2. Describe hedging.
3. Explain margin calls and option contracts.

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:

Price, David E., et al. *Modern Agriculture Science, Finance, Production and Economics.* University Park, New Mexico: SWI Publishing. 1989

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

Newman, Michael E. and Walter J. Wills. *Agribusiness Management and Entrepreneurship.* 3rd Edition. Danville, Illinois: Interstate Publishers, Inc. 1994

List of Equipment, Tools, Supplies, and Facilities

Writing surface
Overhead projector
Transparencies from attached master

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

Basis
Futures price
Hedging
Margin
Put

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.

Tell students that you will give them one point for each extra credit assignment they turn in today. Next, tell them you might give them three points for each extra credit assignment they turn in next week, but they have to do them today. Ask the students which they would prefer, one point today or maybe three points next week. Is it worth hurrying to get them done if you only get one point instead of three? Relate this to the lesson and continue with objective one.

Summary of Content and Teaching Strategies

Objective 1: Describe the futures market.

Anticipated Problem: What is the futures market?

I. The futures market is the complex system of selling commodities using forward pricing. The futures market uses futures prices in trading commodities. A ***futures price*** is the quoted price for a commodity to be delivered in a pre-determined month. However, this does not guarantee the actual price of the commodity at the future date, it is only an estimate. The actual price of the commodity will be based on a number of factors present in the future.

Refer back to the interest approach. Ask students to reconsider what they'd do if each extra credit sheet was now worth $20.00. Do any of the responses change? Why or why not? Use TM B7–2A to highlight each of the terms covered in this lesson.

Objective 2: Describe hedging.

Anticipated Problem: What is hedging?

II. ***Hedging*** is the use of the futures market to set a price for future commodities. In order to set the selling price, the producer has to sell a futures contract ensuring the delivery of their commodity at a specific time.

   A. A true hedge involves the producer selling their commodity on the cash market and buying back the futures contract at the same time. The ***basis*** is the difference in price between these two transactions. The difference is commonly the cost of transportation. Because transportation costs for livestock are fairly high, the basis for livestock is negative.

   B. Basis risk occurs when the basis is higher than the anticipated basis. In order to prevent loss, the producer can follow through with the original futures contract. However, the producer has to be sure that the product meets the contract specifications.

Refer to TM B7–2A to highlight the terms covered in this lesson.

Objective 3: Explain margin calls and option contracts.

Anticipated Problem: What are margin calls and option contracts?

III. A margin call occurs when the contract holder has to put up a margin. A ***margin*** is a minimal amount of money paid towards a futures contract. Margin calls can be troublesome because they require a large sum of money on short notice.

   A. Before placing a hedge it is important to know the cost of producing the product and have extra money available to meet any unexpected margin calls.

B. There are options available to help eliminate margin calls. One option is called a put. A ***put*** is a contract that allows the producer to back out of the trade. This option is similar to an insurance policy for the seller; they are guaranteed the price they want to sell at.
C. Another option available is the call option. With a call option, the buyer has the right to force the seller to sell on demand. This is like an insurance policy for the buyer; they are guaranteed the price they want to buy at.

To reinforce this objective, ask students to think about buying a car. Suppose the car is available now but they don't have enough money. Compare this situation with a put option and call option. Who would benefit in the car deal in each of these situations. Use TM B7–2A to review the terms highlighted in this lesson.

Review/Summary. Summarize the lesson by asking students to explain the content of each objective. Reinforce the key terms and concepts.

Application. Students can apply the information learned in this lesson to classroom discussion and future lessons related to agriculture business management.

Evaluation. Student comprehension of these objectives can be measured with the attached test.

Answers to Sample Test:

Part One: Matching

1 = b, 2 = a, 3 = c

Part Two: Completion

1. Hedging
2. futures price

Part Three: Short Answer

Know the cost of producing the product and have enough money to meet a margin call.

Sample Test Name_____

Test

Lesson B7–2: Understanding Futures Contracts and Governmental Programs

Part One: Matching

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

a. Put b. Margin c. Basis

_____ 1. A minimal amount of money paid towards a futures contract.

_____ 2. A contract that allows the producer to back out of the trade.

_____ 3. The difference in prices between selling a commodity on the cash market and buying back the futures contract.

Part Two: Completion

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

1. _____ is the use of the futures market to set a price for commodities.
2. A _____ _____ is the quoted price for a commodity to be delivered I a pre-determined month.

Part Three: Short Answer

Instructions. Provide information to answer the following question.

What should a producer do before placing a hedge?

TM: B7–2A

UNDERSTANDING TERMS

Discuss the meaning of the following terms:

- **Futures contract**
- **Hedging**
- **Basis**
- **Margin**
- **Put**