



# Virginia Cooperative Extension

Virginia Tech • Virginia State University

## Graduate Extension Scholars Program

Understanding Business Structures, Markets, and Risk Management Strategies Handout 4.3 \_\_\_\_\_ Publication ALCE-177-I

### Lesson 4 Cooperative Simulations Calculations

#### Round 1:

1. Because of the size of your cooperative, you are able to make a deal with a major feed company. They have offered you two deals; circle the option your cooperative chose:
  - a. If you all choose to feed the same formulation, your variable costs will drop by \$20 per head.
  - b. If you all choose to go with this company for feeding needs, you will receive a free supplement that will increase your market weight by 1%.
2. Since you have such a large amount of cattle, you can choose two routes to market; circle the option your cooperative chose:
  - a. One processor is willing to pay \$1,510 per head.
  - b. The other processor will buy all the cooperative's cattle at \$125/cwt.

Based on your decisions, calculate the profit of the cooperative.

How much will the co-op retain for next year? How much will be paid out in dividends?

How much did you make as an individual producer? Was this a better call than selling as one producer?

[www.ext.vt.edu](http://www.ext.vt.edu)

Produced by Virginia Cooperative Extension, Virginia Tech, 2019

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

VT/0319/ALCE-177

## Lesson 4 Cooperative Simulation Calculations (cont.)

### Round 2:

1. Because of the size of your cooperative, you are able to make a deal with a major feed company. They have offered you two deals; the cooperative can choose one:
  - a. If you all choose to feed the same formulation, your variable costs will drop by \$20 per head.
  - b. If you all choose to go with this company for feeding needs, you will receive a free supplement that will increase your market weight by 1%.
2. An opportunity has come up where the cooperative can purchase a slaughterhouse for \$500,000. Running the slaughterhouse will cost \$100,000 a harvest, but you have a grocery store willing to pay \$1.55/lb. on average if they can get the beef from the cooperative directly.
  - a. Do you all decide to buy the slaughterhouse and process your own meat?
  - b. Or, do you sell to a processor willing to purchase your cattle at \$123/cwt?

Based on your decisions, calculate the profit of the cooperative.

How much will the co-op retain for next year? How much will be paid out in dividends?

How much did you make as an individual producer? Was this a better call than selling as one producer?

[www.ext.vt.edu](http://www.ext.vt.edu)

Produced by Virginia Cooperative Extension, Virginia Tech, 2019

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

VT/0319/ALCE-177

## Lesson 4 Cooperative Simulation Calculations (cont.)

### Round 3:

1. Your cooperative must decide whether or not to go organic. This decision is based on the following information:
  - a. A few members have noticed that the organic prices for beef are substantially higher. This is because processors are willing to pay \$175/cwt and retailers are willing to pay \$2.25/lb., depending on if you bought the slaughterhouse in Round 2.
  - b. However, your feed costs will double to feed organic.
  - c. Because of the strict regulations with organic and the limited supply of organic grains, the whole cooperative must switch to organic or not at all.

*Does the cooperative decide to go organic?*

Based on your decisions, calculate the profit of the cooperative.

How much will the co-op retain for next year? How much will be paid out in dividends?

How much did you make as an individual producer? Was this a better call than selling as one producer?

[www.ext.vt.edu](http://www.ext.vt.edu)

Produced by Virginia Cooperative Extension, Virginia Tech, 2019

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

VT/0319/ALCE-177