Solutions Manual for Farm Management 10th Edition by Kay, Edwards, Duffy

ISBN: 9781264532643

AGRICULTURE IN THE 21ST CENTURY

The objectives of this exercise are:
(1) to analyze how a farm has responded to recent trends occurring in agriculture.
(2) to understand the decision-making process that farmers must go through.

Responding to the 21st Century

Farmers in the 21st century must adapt to changing conditions in order to be successful. These changing conditions include trends such as:

- advances in biotechnology
- changes in international trade rules
- changes in government farm program
- changes in environmental regulations
- changes in consumers' tastes

1. Find an article in a farm magazine, newspaper or other publication, or an article on an agricultural Internet site, that describes a farm's response to a particular trend or change, either actual or potential. Possible sources include:

Alternative: write about an actual farm with which you are familiar. This could be the farm of a relative, neighbor or your own family.

2. List below (a) the title of the article, the name of your source and the date of publication, or (b) the name of the farm or farmer if you are writing about a farm with which you are familiar.

3. Describe the trend or change addressed by the farm in a few sentences.

4. What actions did the farm take to respond to this trend?

5. Which of the following farm types most closely describes this farm? Explain why.
    a. Large volume, narrow margin producer
    b. Small volume, wide margin producer
    c. Specialty product or service
    d. Part-time farming operation

6. Does this farm have any strategic alliances with other farms, processors or input suppliers? If so, describe them. Include such things as leasing agreements.

Decision Making

Give an example below of a management <u>decision</u> that a farm with which you are familiar has made recently or might have to make in the near future. Outline the steps they would go through to make and carry out this decision. Be specific.

1. Define the question or problem that requires a decision:
   (example: need to improve breeding stock)

2. Collect information (list at least 3 possible sources):
   (example: machinery dealer, bank, Extension office)

   a.

   b.

   c.

3. Identify alternative actions (list at least 3):
   (example: buy, lease, raise your own, AI)

   a.

   b.

   c.

4. Make a decision (choose one of the alternative actions from B3 above): Don't worry about justifying your choice at this point.

5. Take action (explain how you would carry out your decision):

6. Evaluation (what information would you collect to tell you if you made the right decision?):

Sample Answer

Responding the to the 21st Century

Farmers in the 21st century must adapt to changing conditions in order to be successful. These changing conditions include trends such as:

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1. Find an article in a farm magazine, newspaper or other publication, or an article on an agricultural Internet site, that describes a farm's response to a particular trend or change, either actual or potential. Possible sources include:

Alternative: write about an actual farm with which you are familiar. This could be the farm of a relative, neighbor or your own family.

2. List below (a) the title of the article, the name of your source and the date of publication, or (b) the name of the farm or farmer if you are writing about a farm with which you are familiar.

   "The Benefits of Diversification: One Family's Story of Success"

   Practical Farming, June 2011

3. Describe the trend or change addressed by the farm in a few sentences.

   Land to rent in the community where the Franzen family farms is very scarce, and recent high grain prices have caused cash rents to increase rapidly.

4. What actions did the farm take to respond to this trend?

   The Franzen family decided to diversify into other enterprises besides cash grain and hogs. Their new enterprises included tomatoes, ginger, greens, cut flowers, blueberries, strawberries and medicinal herbs. They erected a new greenhouse, and made contacts with local farmers' markets, hospitals, gift stores and florists. They experimented with products that could compete with imported produce, and gradually expanded their production.

2. Which of the following farm types most closely describes this farm? Explain why.
   a. Large volume, narrow margin producer
   b. Small volume, wide margin producer
   c. Specialty product or service
   d. Part-time farming operation

   Specialty product or service.

6. Does this farm have any strategic alliances with other farms, processors or input suppliers? If so, describe them. Include such things as leasing agreements.

   They have contracts to deliver flowers to gift shops and florists, and medicinal herbs and spices to natural food retailers. They joined *Practical Farmers of Iowa* to exchange ideas about growing new products and finding new markets.

Decision-making

Give an example below of a management <u>decision</u> that this farm has made recently or might have to make in the near future. Outline the steps they would go through to make and carry out this decision. Be specific.

1. Define the question or problem that requires a decision:
   (example: need to improve breeding stock)

   How can this family increase their profits from growing tomatoes?

2. Collect information (list at least 3 possible sources):
   (example: machinery dealer, bank, Extension office)

   a. Local farmer's markets and grocery produce buyers.

   b. Cooperative Extension Service specialists

   c. Seed and fertilizers suppliers

3. Identify alternative actions (list at least 3):
   (example: buy, lease, raise your own, AI)

   a. Continue to grow slicing tomatoes for local grocers and farmer's

markets.

b. **Switch to growing grape tomatoes and markets to distributors.**

c. **Discontinue growing tomatoes.**

4. Make a decision (choose one of the alternative actions from B3 above):
Don't worry about justifying your choice at this point.

Switch to growing grape tomatoes.

5. Take action (explain how you would carry out your decision):

Locate a source of seedlings for grape tomatoes. Research growing techniques and fertility needs. Talk to wholesale buyers in a 100-mile radius to establish a marketing contract. Talk to local restaurants to find out the quantity of product they need and when. Plant and care for the seedlings, harvest the grape tomatoes, and deliver to the buyers.

6. Evaluation (what information would you collect to tell you if you made the right decision?):

Record all production costs (seedlings, fertilizer, pesticides, containers). Estimate transportation costs. Keep a record of labor hours expended. Record all sales and product wasted. Estimate total profit per area planted and per hour of labor expended. Compare to past records for raising slicing tomatoes.

CHAPTER 1

ANSWERS TO END OF CHAPTER QUESTIONS

1. What forces have caused farms and ranches to become larger? Which of them are likely to continue? How can smaller businesses compete successfully?

Some forces that have affected the structure of U.S. agriculture include the availability of labor saving technology, higher labor costs, the desire for improved living standards by farm families, and technical and financial economies of scale. Most of these forces are likely to continue, so the trend toward fewer and larger farms will probably continue also. Managers can respond by becoming very efficient producers or by offering specialized products and services with higher profit margins.

2. How does quick access to more information help farm managers in the twenty-first century make better decisions?

A greater volume of information can be collected, information collected can be more accurate and more timely, and decisions can be based on more realistic assessments of current costs, production, and prices.

3. List two examples of specialty agricultural markets, and the changes a conventional producer might have to make to fill them.

Examples include organically grown produce, grass-fed meats, white corn, high-oil corn, grass seed, hydroponic tomatoes, and barley for malting. Most of these products require special attention to uniformity, purity, timely harvesting, or special breeding. Returns are typically higher, but production costs and risks are often higher, as well.

4. What agricultural products from other countries do you consume? Do any of these compete with products produced by farmers in your own country?

For a U.S. student, likely choices include tropical fruits and vegetables, fish, beverages, specialty livestock products and processed food items. They may compete with some similar products but not be identical to them.

5. List other new challenges not discussed in this chapter that you think farm and ranch managers may have to face in the future.

Some other possibilities include energy shortages, increased regulation of pesticides and animal health products, changing climatic conditions, adoption of genetically engineered plants and animals, negotiating production agreements with processors and suppliers, greater dependence on world markets, a shortage of experienced agricultural workers, co-existing with rural nonfarm residents, and finding the right mix of off-farm financing.