

Unit Three

The Impact of Disasters on the Livestock Industry

Overview

This unit discusses the impact of disasters on livestock producers, rural communities, agricultural markets, and animals. You will learn how disasters affect producers, a community's tax base, agricultural markets, and the well-being of animals.

Objectives

Upon completion of this unit, you should be able to:

- Give examples of how disasters affect livestock producers
- Describe the impact of disasters affecting livestock on rural communities
- Describe the impact of disasters affecting livestock on state agriculture markets
- Describe how disasters can cause severe business disruption.
- Describe how disasters adversely affect the well-being of animals.

Impact of Disasters

The livestock industry is large and encompasses production, selling feed, marketing, supplying accessories, and providing health services to animals. As we have seen in the previous unit, disasters affecting farms often have cascading effects on the allied industries.

Typical losses

We will look at the 1998 ice storms that affected the northeastern United States as an example of the multiple levels of impacts of disasters. These levels are local producers (farms), rural communities (counties), and states.

New York ice storm of January 1998

An example of how large-scale disasters affect all levels, from local to state, was the 1998 ice storms that affected the northeastern U.S. and southeastern Canada.

In January 1998, the northeastern U.S. and southeastern Canada were severely affected by an unusually large amount of freezing rain. From January 5–10, the total water equivalent of precipitation—mostly freezing rain and ice pellets—was more than 85 mm. Previous major ice storms in the region deposited 30–40 mm of ice. The heavy precipitation resulted in extensive damage in New York, Maine, New Hampshire, Ontario, and Quebec, resulting in downed power lines and impassable roads.

Effects on producers

Some producers projected a long-term drop in production of 30 percent or more.

The average costs per affected farmer in Clinton County were estimated to be:

☉ Dead / sick cows	\$11,000
☉ Dumped milk due to lack of refrigeration	\$ 4,725
☉ Unusable milk “in” cows	\$ 4,000
☉ General repairs to generator motors, etc.	\$ 1,000
☉ Treatment of sick cows (per cow)	\$ 750
☉ Fuel to keep generators running	\$ 600

Total Cost Per Farm
(Clinton County) \$20,000 to \$30,000

Before the storm, many New York dairy farmers were already struggling and on the edge of economic disaster due to low milk prices. Many farmers were unable to afford loans and requested grant assistance to survive.

Impact on rural communities

The economic impact on communities is exemplified by reports from two New York counties. In Clinton County, 181 farms were affected. In neighboring Franklin County, 240 farms were affected. Losses in the two counties were estimated at \$10 million, including the losses from discarded milk, animal illness and deaths, damage to property, and loss of business among allied industries. These losses represented considerable reduction in these counties’ tax revenues.

The impact of the ice storm on New York state

FEMA reported that approximately 1,400 of 1,800 dairy farms in the region affected in New York state were damaged by power outages and downed trees. The farms then faced a year of low milk production with sick or dying cows.

The New York Department of Agriculture & Markets estimated that 7 million pounds of milk were dumped in the area. The losses were estimated at \$1 million.

New York agriculture officials noted that overall milk production in a six-county area was estimated to have dropped by 50 percent (from 6 million to 3 million pounds per day). The overall milk production for New York state as a whole for January 1998 was down by 3 percent.

In Maine, nearly one-third of the state's 525 dairy farms suffered storm damage.

Animal well-being

The USDA Farm Services Agency estimated that over 1,200 of the 20,500 cows in the affected counties died. Of the remaining animals, more than 6,000 suffered from mastitis and required veterinary care.

Other reports of the consequences of the ice storm

The Ontario Ministry of Agriculture, Food and Rural Affairs provided several reports on the impact of the ice storms in Canada.

In 1996 there were 11,409 dairy farms in Quebec (46 percent of the total in Canada) and 8,195 in Ontario (33.3 percent of the total in Canada). Within the affected region, there were approximately 274,000 cows, which produced over 25 percent of Canada's domestic supply of milk. Also, nearly 20 percent of Canada's hogs were raised in the affected region, as were over 40,000 sheep (including lambs).

The loss of power resulted in an inability to chill and store the milk, and ice on the roads and obstructions prevented milk trucks from collecting milk. As a result, over 3 million gallons of milk had to be dumped during the storm and its cleanup.

Many of the cows could not be milked because modern dairy producers depend on mechanized milking. Many of the dairy cows that survived the power outages developed mastitis and never regained their pre-storm productivity.

On poultry farms, birds died or stopped growing. Egg production was also reduced and some birds went into molt.

Other examples of the impact of disasters on the livestock industry

Texas heat wave and drought (1998)

Because of a lack of feed, the drought forced many cattle farmers to sell off much of their herds. Ranchers sold 30 percent more cattle than in previous years. Texas State Agriculture Commission officials said some auction houses sold cattle at 10 times the previous year's rate.

According to the Commerce Department, farm income for the first 3 months of the year was less than 30 percent of the \$27.2 billion farmers earned in the first quarters of both 1996 and 1997.

Florida wildfires (1998 and 1999)

The Florida State Department of Agriculture and Consumer Services reported that fires burned more than 496,000 acres and caused an estimated \$626.5 million in damages to Florida's crops, livestock, and forests. This figure includes losses of \$140 million to crops and pastureland and \$43.5 million to livestock.

Hurricane Floyd (1999)

Damages from Hurricane Floyd for crop and livestock losses were estimated at \$64 million throughout North Carolina. Of these costs, \$7.1 million was for damage to farm structures and equipment in the region affected by the hurricane. An estimated 28,000 hogs and 2.1 million chickens and turkeys drowned in the floodwaters.

Business Disruption

Disasters are always costly. Frequently, people think of highly popularized large-scale disasters seen on television as the costliest disasters. However, the costs associated with “everyday” disasters are by far the greatest disaster-related costs every year in the U.S.

When disasters strike agricultural communities, we should remember that not only are farms affected, but also small businesses, such as feed and accessory suppliers, and veterinary practices. These small, local businesses are particularly vulnerable to disasters, because the cost of disaster mitigation, insurance, and recovery is relatively higher than for large national chains. Small businesses have, on average, fewer resources to pay for recovery from disasters.

The impact of disasters on small businesses can be very damaging and occur relatively commonly. For example, every day in the U.S. over 200 fires destroy businesses, including agricultural businesses.

Several studies have addressed the effects of large-scale disasters on small businesses. Catastrophic disasters often have the worst impact on unprepared businesses. This compares with Small Business Administration (SBA) studies indicating that only 9.7 percent of small businesses close every year. Businesses affected by a disaster should check to see if they are eligible for SBA’s Economic Injury Disaster Loan Program (<http://www.sba.gov>). Businesses with resumption plans are usually operational sooner than businesses without plans.

Of all businesses that survive for 1 year after a disaster, the small businesses are in the worst economic shape. Almost half (40 percent) of businesses affected by a disaster are out of business within a year of the disaster, and an additional 29 percent go out of business within 2 years of the disaster.



Learning Check

Directions: Determine if the following statements are true or false based on the material presented in the unit. When you have finished, check your answers on page 3-8.

1. The livestock industry includes farmers, producers, and the allied industries, such as feed mills, service and supply vendors, and veterinary practices.

True or False?

2. Disasters that strike farms also affect small businesses.

True or False?

3. Business resumption plans do not make a difference in how quickly a farm returns to operation.

True or False?

4. Examples of the cost of disasters affecting farmers include animal deaths and lost production.

True or False?

5. Although farmers are affected by disasters, there usually are no cascading effects on others.

True or False?

6. When disasters affect many farms in a county, there may be a significant loss to the county's tax base.

True or False?



Learning Check

7. Large-scale disasters have no serious implications for state revenues.

True or False?

8. Most popularized disasters are large-scale; however, the greatest cumulative losses from disasters in the U.S. are local and do not receive much media attention.

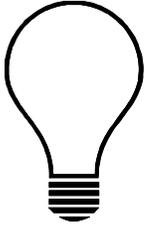
True or False?

9. Pre-existing economic difficulties can exacerbate the impact of disasters.

True or False?

10. Disasters are a threat to animal well-being.

True or False?



Answers

For every question that you answered incorrectly, review the page listed next to the answer to find out why your answer was incorrect.

1. True.....3-5
2. True.....3-5
3. False.....3-5
4. True.....3-2
3-4
5. False.....3-2
6. True.....3-3
7. False.....3-3
8. True.....3-5
9. True.....3-3
10. True.....3-4

Summary

The impact of disasters on the livestock industry can be devastating at many levels, ranging from the farm to the county and state. Animal well-being is also threatened in disasters. Many causes of disasters cannot be prevented; however, it is possible to mitigate the consequences of most disasters. Individuals, industry, and public officials all have a role to play in developing disaster preparedness plans.