



## Federal Natural Disaster Assistance Programs for Livestock Producers, 2008-16

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### What Is the Issue?

Harsh environmental conditions pose many risks to livestock producers. These risks can affect feed availability, animal health (including mortality rates), and production costs. For example, severe weather events such as drought, wildfire, blizzards, tornadoes, and hurricanes can destroy pasture (or “forage”). In addition, wild animal attacks and diseases such as pneumonia or cattle tick fever pose further mortality risks to livestock.

ERS researchers examine three USDA disaster assistance programs made permanent by the Agricultural Act of 2014 to better understand the timing, size, and geographic distribution of program payments to livestock producers. USDA’s indemnity programs are also considered; specifically, ERS researchers explore various economic incentives resulting from different payment structures to compensate producers for infectious disease damage or associated control efforts.

### What Did the Study Find?

A review of three USDA disaster assistance programs run by the Farm Service Agency (FSA)—the Livestock Forage Disaster Program (LFP), Livestock Indemnity Program (LIP), and Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP)—found that payments delivered to livestock producers show significant differences between States and counties, and annual outlays vary greatly by year and by program. Many of these differences can be traced to regional differences in the frequency and severity of natural disasters.

- LFP, the largest of the three programs, provides payments to eligible producers when the grazing capacity of their land has been reduced by qualifying drought or wildfire. For losses experienced from January 2008 through December 2016, LFP distributed approximately \$6.77 billion nationwide—with the largest payment concentration in Oklahoma and Texas and substantial payments also going to Kansas and Nebraska. Between 2012 and 2014, widespread drought caused a nationwide surge in LFP payments.
- LIP provides payments for livestock deaths that exceed normal mortality as a direct result of an eligible loss condition, including extreme or abnormal damaging weather, disease promoted by such weather, and attacks by animals reintroduced into the wild by the Federal Government or protected by Federal law (e.g., wolves and avian predators). From 2008 to 2016, South Dakota received the most LIP payments, and Kentucky, North Dakota, and Texas also received substantial payments. Two severe blizzards—in

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2009 and 2013—were the two largest causes of livestock losses. LIP payments between 2008 and 2016 totaled approximately \$313 million.

- ELAP, with a \$20 million annual payment cap, is the smallest of the three programs. It provided total payments of approximately \$130 million from January 2008 through September 2016. This program covers some gaps in the assistance provided by LFP and LIP, as well as assistance to honey beekeepers (the main beneficiaries) and producers of farm-raised fish. Because of colony collapse disorder (CCD—sudden mass disappearances of the majority of worker bees in a colony), honey beekeepers have been the main beneficiaries of ELAP, with CCD affecting between 20 percent and 35 percent of colonies annually. Three-fourths of the managed honey bee colonies in the United States operate in California, with the next highest share operating in Florida. California and Florida received the largest share of ELAP payments—presumably because of their large number of operating beekeepers—while South Dakota also received significant payments.

Payments authorized by the Animal Health Protection Act of 2002 compensate producers for losses from disease outbreaks, support disease-control efforts, and contribute to production recovery. Payment-triggering events (primarily, outbreaks of economically significant infectious diseases) rarely occur, and USDA's Animal and Plant Health Inspection Service (APHIS) designs payment schemes to reduce underreporting by facilities with infected animals and underinvestment in disease prevention. Program design provisions encouraged producers to report suspected cases of infectious diseases through payments for animals and equipment seized during disease control. During some recent outbreaks, APHIS has explored the use of tiered payments based on the level of investment in equipment or practices that help control the spread of disease.

### **How Was the Study Conducted?**

Data from several sources were collected from January 2008 through December 2016 and examined through basic statistical measures and visual representations. Data sources included the USDA Farm Service Agency's county-level claims and payments from LFP, LIP, and ELAP; the U.S. Drought Monitor Service's county-level measurements of drought severity; and the USDA Agricultural Research Service's national rates of colony collapse disorder.