Managing your risk: Weather and climate impacts on crop insurance





USDA Climate Hubs

U.S. DEPARTMENT OF AGRICULTURE

A fact sheet produced by the USDA Southwest Climate Hub using publicly available crop insurance data from the USDA Risk Management Agency for Montana, North Dakota, South Dakota, Wyoming, Colorado, and Nebraska.

How do farmers manage risk?

The federal crop insurance program is an important safety net for American farmers and ranchers during times of diminished crop yields or declines in prices. Administered through the U.S. Department of Agriculture (USDA) Risk Management Agency (RMA), agricultural producers may insure their crops against natural perils and price declines. Various levels of coverage and types of programs are offered for different types of crops with premiums typically subsidized by the federal government (on average around 60%). Natural perils and price declines can negatively affect crop production triggering indemnities, insurance contract payments, which help mitigate financial losses.

What can historic crop loss tell us?

Past crop losses are mostly attributed to weather - and climate-related causes of loss (COL), such as drought, excess moisture, hail, and heat, to name a few. These events trigger indemnities for those insured. Trends in indemnities by COL over space and time may indicate areas more vulnerable to extreme weather events and/or foci for future adaptation efforts. The end goal is to provide accessible and discoverable data to agricultural producers to help manage their risk.

Resources

USDA Risk Management Agency

https://www.rma.usda.gov/

RMA Insurance agent locator

https://www.rma.usda.gov/tools/agent.html

Crop policies and pilots

https://www.rma.usda.gov/policies/2018policy.html

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https://www.climatehubs.oce.usda.gov/

\$71.3 billion



Value of insured crops for the 6-state region through the federal crop insurance program from 2001 to 2016

TOP 5 CAUSES OF LOSS

Drought, excess moisture, hail, heat, & cold wet weather



2010

Peak year of indemnities totaling \$11.2 billion mostly due to excess moisture and hail (91%)



\$18.8 billion

Amount of indemnities for the top five causes of loss from 2001 to 2016, representing nearly 90% of total indemnities

1,850,488

Number of policies receiving an indemnity due to drought from 2001 to 2016



Average percent of indemnities attributed to drought, excess moisture, and hail.

The **AgRiskViewer** is a web-based, interactive tool to explore indemnities by causes of loss over space and time. -> https://swclimatehub.info/rma/

AgRisk Viewer

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