

Rainfall Index - Annual Forage Insurance

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The Rainfall Index—Annual Forage (RI-AF) Insurance plan is a risk policy designed to provide livestock producers the ability to buy protection against losses due to a lack of moisture. While it is similar to Pasture Range and Forage (PRF) Insurance, the difference lies in the type of commodity covered. PRF encompasses perennial grasses such as pasture and hay, while RI-AF is strictly for annual forage crops. These include but are not limited to winter small grains (wheat, oats, rye, triticale, etc.) and spring plantings such as sudan, haygrazer, and millet.

Under both plans, payment is not determined by individual damages, but rather area losses based on a grid system. One major difference between the two policies is that while PRF allows producers to insure only a portion of their acreage, RI-AF requires coverage on all certified acres that are not intended for grain production.

Participants must also choose a **maximum** of three, two-month intervals per growing season per year. Insured acres are then spread between time periods, with no more than 40% of acres placed in any interval. **The sign-up deadline for RI-Annual Forage is July 15th for the fall growing season (Sept 1, 2014-March 31, 2015) and December 15th for the spring season (March 1, 2015-September 30, 2015). All premium payments are due by August 30, 2015.**

Coverage levels between 70 and 90 percent are available. Once coverage is selected, the producer chooses a productivity factor between 60 and 150 percent. Productivity factor is a percentage of the established county base value for annual forage. Base value is a standard rate published by the Risk Management Agency (RMA) for each county. For example, Hansford County's value is \$107.74.

The Rainfall Index determines RI-Annual Forage coverage. This model uses National Oceanic and Atmospheric (NOAA) Climate Prediction Center data and a 12 x 12 mile grid system. **Indemnities are calculated based on the deviation from normal precipitation within a grid for a specific period selected.**



Hansford County Example

County Base Value per Acre	\$107.74
Subsidy Level	51% to 59%
Maximum % of Value Index Interval	40%

Example: Joe Farmer has 500 acres of grazed wheat in Hansford County. If he chooses a 90% coverage level and 150% productivity factor, his coverage per acre is \$145.45 (\$107.74/acre X 0.90 X 1.50) for a total of \$72,725. He insures 40% of this value in the September/October interval, another 40% in the November/December interval, and the remaining 20% in the January/February interval.

In the face of continued dry conditions, insurance becomes a critical component in producers' risk management portfolios



Calculations: If rainfall in Sept/Oct was 50% of normal, the producer is paid as follows:

$$\begin{aligned}0.90 \text{ coverage} - 0.50 \text{ normal rainfall} &= 0.40 \\0.40 \times 1.50 \text{ productivity factor} &= 0.60 \\0.60 \times \$107.74 \text{ base value} &= \$64.64/\text{acre ins. payment} \\\$64.64/\text{acre} \times 200 \text{ acres} &= \$12,928.\end{aligned}$$

If rainfall in November/December was 20% of normal, the farmer is paid as follows:

$$\begin{aligned}0.90 \text{ coverage} - 0.20 \text{ normal rainfall} &= 0.70 \\0.70 \times 1.50 \text{ productivity factor} &= 1.05 \\1.05 \times \$107.74 \text{ base value} &= \$113.13/\text{acre ins. payment} \\\$113.13/\text{acre} \times 200 \text{ acres} &= \$22,626.\end{aligned}$$

Assuming rainfall in January/February was normal and no indemnity is collected, Joe Farmer's total annual payout is \$35,554, with an estimated producer-subsidized premium cost of \$11,000 (\$22/acre). Premium expenses vary by coverage levels and intervals selected.

More information on Rainfall Index –Annual Forage Insurance can be found at:

<http://www.rma.usda.gov/policies/ri-vi/annualforage.html>

To sign up for the program, contact your local crop insurance agent.