All agricultural producers face recurring risks, significant among them being production risk. Many factors contribute to production risk, including adverse weather conditions such as drought or floods, fires, insects or pests, and disease. These events can devastate a crop, significantly reducing yield and revenue. Since the only way to completely avoid all production risks is to stop producing, successful farmers will seek for ways to mitigate these risks through various management techniques. One risk management tool available to crop producers is the purchase of crop insurance.

Crop insurance policies may be purchased from USDA’s Farm Service Agency (NAP policies) or from a commercial firm. A list of sales representatives and policy information is found on the Utah State University Agribusiness webpage (http://extension.usu.edu). NAP policies are not available for crops that are insured by a commercial insurance company. This publication provides an evaluation of commercial policies sold in Morgan County.

Crop insurance programs allow farmers to mitigate some of their production risk by shifting it to a third party, the crop insurer. In effect, crop insurance relieves the farmer of total responsibility if he suffers a production loss. In the event of a loss, the producer would receive an indemnity payment from the insurer based upon the type and level of crop insurance coverage.

It is important to understand that crop insurance is a risk management tool, not an investment. Indemnity payments are not designed to always “pay,” and they only occur when something bad happens. When large losses occur, indemnity payments are made to lower the magnitude of the loss to farmers.

Details about past crop policies in a specific area can help producers in that area better understand the level of the risks they face. For example, if indemnity payments were relatively high for a certain crop in the past, this would suggest the risk associated with growing that crop was high. Past information can also help farmers decide if the cost of the premium is worth the lowered risk from buying a crop insurance policy. The following consists of information concerning crop insurance policies for Morgan County designed to aid producers in risk management decisions.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Policies Sold</th>
<th>Insured Acres</th>
<th>Liabilities</th>
<th>Total Premium</th>
<th>Premium paid by Farmers</th>
<th>Indemnity</th>
<th>Loss Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>3</td>
<td>535</td>
<td>$39,340</td>
<td>$2,498</td>
<td>$267</td>
<td>$1,097</td>
<td>0.44</td>
</tr>
<tr>
<td>Wheat</td>
<td>2</td>
<td>19</td>
<td>$1,533</td>
<td>$139</td>
<td>$139</td>
<td>$0</td>
<td>0.00</td>
</tr>
<tr>
<td>Corn</td>
<td>1</td>
<td>105</td>
<td>$58,999</td>
<td>$2,457</td>
<td>$1,450</td>
<td>$0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>659</strong></td>
<td><strong>$99,872</strong></td>
<td><strong>$5,094</strong></td>
<td><strong>$1,856</strong></td>
<td><strong>$1,097</strong></td>
<td><strong>0.22</strong></td>
</tr>
</tbody>
</table>
Table 1 provides information specific to each crop including the number of policies purchased by farmers and the total premiums paid. The federal government has numerous subsidy programs, to help agricultural producers, including for the purchase of crop insurance. The amount a policy is subsidized depends on the type and level of coverage. Of particular interest is the loss ratio. It represents the value of the loss, or the indemnity payment value compared to the total premium value. Ratios above 1.0 indicate that the value of indemnity payments made to farmers exceeded the total value of premiums paid for crop insurance. As outlined in Table 1, no loss ratios for any commodity were greater than 1.0 in 2007. Another important relationship, however, is that between indemnity payments and the portion of premiums paid by farmers. A comparison of these two factors shows that indemnity payments were greater than premiums paid by farmers for barley in 2007. The discussion below considers these and other factors relating to risk management for specific commodities grown in Morgan County.

**Barley**

43% of crop insurance policies sold in 2007 were for barley, accounting for 49% of total premiums and 100% of total indemnities last year. The number of barley policies purchased remained the same in 2007, but insured acreage decreased about 5%.

Of the three barley policies purchased in 2007, two were at the 50% coverage level and one was at the 65% level. The decrease in insured acres was caused entirely by a decrease at the 50% level; insured acres increased slightly at the 65% level. Liabilities and premiums increased in 2007, despite overall fewer insured acres. Figure 1 shows that indemnity payments also increased in 2007, but was associated with the 65% coverage policy. This has not been the trend historically, however, as most indemnity payments in 2001 and 2002 were associated with 50% coverage level policies. Figure 1 also shows that indemnity payments have exceeded premiums paid by farmers four of the past eight years. Loss ratios have also been quite volatile, reaching a high of 5.90 in 2001 compared to a low of 0.0 in four other years. This volatility combined with high indemnity payments in some years suggest the risk associated with barley production in Morgan County is high and crop insurance policies should be considered to help mitigate some of that risk.

**Wheat**

Wheat policies accounted for another 43% of the policies purchased in Morgan County, making up only about 3% of the total premiums, and received no indemnity payments in 2007. 19 wheat acres were insured last year, a 49% decrease from the previous year. The number of total policies sold also decreased in 2007.

Both policies purchased were at the 50% coverage level and the decrease in both policy numbers and insured acres occurred at this coverage level. Liabilities and premiums increased last year, despite the decrease in insured acres and policy numbers.
Indemnity payments, however, remained at zero, continuing the five-year trend depicted in Figure 2. The figure also shows that wheat policies have been 100% subsidized in Morgan County over the past eight years. With the exception of high indemnity payments and loss ratios in 2001 and 2002, loss ratios have remained at zero for all other years. The indemnity payments in 2001 and 2002 were quite high, however, and the loss ratio reached 11.06 in 2002, indicating relatively high risk associated with wheat production in Morgan County.

**Corn**

Corn has been insured since 2003 in Morgan County. One policy was purchased last year, accounting for 48% of total premiums in 2007. Like wheat, no indemnity payment was made. While policy numbers remained unchanged from the previous year, insured acres under that policy increased almost 20%.

The corn insurance policy purchased last year was at the 65% coverage level, the same as the previous year. Liabilities and premiums increased with the increase in insured acreage. No indemnity payments were received last year and Figure 3 shows that no indemnity payments have been received in any year. Loss ratios have been consistently zero, suggesting relatively low risk associated with the small production of corn in Morgan County.

The information provided in this publication is general information for Morgan County. It is intended to provide Morgan County crop producers with general indicators concerning risk and the use of crop insurance to mitigate risk in the area. To better evaluate individual levels of risk and need for crop insurance, each producer should also consider personal experience with crop loss, ability to bear risk, and risk aversion.

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