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 Sanpete 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 Sanpete 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>Forage Production</td>
<td>49</td>
<td>559</td>
<td>$88,411</td>
<td>$5,973</td>
<td>$2,198</td>
<td>$13,390</td>
<td>2.24</td>
</tr>
<tr>
<td>Barley</td>
<td>6</td>
<td>228</td>
<td>$21,008</td>
<td>$2,566</td>
<td>$831</td>
<td>$1,665</td>
<td>0.65</td>
</tr>
<tr>
<td>Corn</td>
<td>5</td>
<td>218</td>
<td>$36,906</td>
<td>$2,756</td>
<td>$258</td>
<td>$0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>1005</td>
<td>$146,325</td>
<td>$11,295</td>
<td>$3,287</td>
<td>$15,055</td>
<td>1.33</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, the loss ratio for forage production was 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 higher than premiums paid by farmers for both forage production and barley in 2007. The discussion below considers these and other factors relating to risk management for specific commodities grown in Sanpete County.

**Forage Production**

Forage production insurance policies accounted for nearly 82% of total crop insurance policies sold, almost 53% of total premiums, and 89% of total indemnity payments in Sanpete County in 2007. 559 acres were insured in Sanpete County, a 67% decrease in insured acreage compared to 2006. Along with the decrease in insured acreage, the number of policies sold last year decreased by 25% respective to the previous year.

Nearly 70% policies purchased in 2007 were APH policies at the 50% coverage level, with 12 of the remaining policies at the 65% coverage level. The decrease in policy numbers was a result of decreases at the 50% level; policies at all other coverage levels remained constant. The decrease in insured acres also stemmed mainly from decreases at the 50% coverage level, with a smaller decrease at the 65% level. Congruent with decreases in policy numbers and insured acreage, liabilities and premiums were lower in 2007. Indemnity payments, however, increased significantly, as shown in Figure 1. While indemnity payments have not exceeded premiums paid by farmers before 2007, last year indemnity payments were over six times the amount farmers paid toward premiums. Similarly, the loss ratio increased significantly in 2007 when compared to the previous years, suggesting increased risks associated with forage production in Sanpete County.

**Barley**

10% of crop insurance policies sold in 2007 were for barley, accounting for 23% of total premiums and 11% of total indemnities last year. While the number of barley policies purchased in Sanpete County decreased 25% in 2007, insured acreage increased over 55%.

Of the six barley policies purchased in 2007, four were at the 50% coverage level and the other two at the 65% level. Decreases in policy numbers occurred at both coverage levels, and the increase in insured...
acres stemmed from an increase at the 65% level. The increase in insured acres contributed to an increase in liabilities, as well as premiums as shown in Figure 2. Indemnity payments also increased in 2007 but the loss ratio declined. Figure 2 shows that indemnity payments have exceeded premiums paid by farmers three of the past eight years, suggesting relatively low risk associated with barley production in Sanpete County, though the higher indemnity payments in recent years indicate that risk may be increasing.

**Corn**

Corn policies accounted for 8% of total policies sold, 24% of total premiums, and 0% of total indemnity payments in Sanpete County during 2007. 218 corn acres were insured in 2007, almost a 60% increase in insured acres relative to 2006 despite a 17% decrease in policy numbers.

Of the five corn policies purchased in 2007, three were at the 50% coverage level with the others at the 65% and 75% coverage levels. The decrease in policy numbers occurred at the 50% coverage level, but the increase in insured acres also stemmed entirely from an increase at the 50% level. Liabilities and premiums increased in 2007, but no indemnity payments were made. Figure 3 shows that indemnity payments have exceeded premiums paid by farmers only three of the past eight years. With the exception of 2004, loss ratios and indemnity payments have been relatively low, even zero for five of the past eight years, suggesting that the corn producers in Sanpete County face relatively lower risk of production loss than other crops in the area.

The information provided in this publication is general information for Sanpete County. It is intended to provide Sanpete 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.
All Utah and Sanpete County crop insurance information presented in this publication is taken or developed from Risk Management Agency crop insurance data available through their website: www.rma.usda.gov.

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