



UW Cooperative Extension Service



Profitable & Sustainable Agricultural Systems

Tips offered on selecting the right crop insurance for an operation

By James Sedman, Sedman Economics, and John Hewlett, University of Wyoming, Cooperative Extension Service

Risk is an inherent factor in production agriculture. Managing risk can mean the difference between successfully overcoming pitfalls and facing financial ruin. Crop insurance can play a major part in mitigating risk in a producer's operation, but before a producer can determine what crop insurance is best for an individual operation, several steps need to be taken.

Determine the operation's goals and plan accordingly

First, it must be determined if the farm or ranch has enough cash reserves to cover unexpected production losses. If it does, crop insurance may not be necessary. If it does not, the next step is to decide on the minimum level of income the operation needs to meet its obligations. Planning for the production year should begin well before the production seasons are underway. This planning should include budgeting for operating and fixed costs. Enterprise budgeting can help determine the costs and revenues expected. Once these are accurately projected, a level of necessary protection can be established.



Equally important is examining what the crop risks are for an area. One can look at important factors such as average rainfall, drought monitors, and the frequency of catastrophic weather events. Some areas are more prone to such problems than others. In an area where hailstorms are expected in the summer, for example, crop insurance may be necessary.

Keep accurate records and start the process early

Good record keeping is important for success in production agriculture. Maintaining accurate production records on a per-field basis can help in making operating decisions. Several years' worth of production records can help show a typical production yield for a specific crop. Examining the number of times out of 10 that an operation's yields are below average can help show a frequency of below-average years and reveal a strong or weak need for insurance. Keeping solid

financial records is also a must. It is much easier to develop production budgets and make financial decisions for the coming year if an accurate history is kept. These help to monitor the financial direction of an operation. Good record keeping is especially important if the operation utilizes crop insurance. For producers to qualify for yield-based crop or yield- and revenue-based insurance policies, they must have accurate and up-to-date production records for the crops they are trying to insure. These records are necessary for calculating the actual production history.

It is also imperative for producers to begin the process of applying for crop insurance early. Crop revenue and yield-based insurance policies require application prior to a specified sales closing date. The two main sales closing dates are September 30 for fall-planted crops such as winter wheat and March 15 for spring-planted crops.

Determine risk preference

Determining risk preference is a step most producers tend to overlook, but it is important when deciding the amount of crop insurance to purchase. Risk-averse producers tend to try to avoid risk whenever possible, so more insurance would be advisable for these people. Risk-seekers tend to avoid

looking at the potential pitfalls involved in a decision and pay more attention to the potential payoff. In the context of crop insurance, the risk is typically a loss in production with the tradeoff being the premium cost of the insurance.

Determine level and type of income protection required

After adequately planning for the coming production year, a producer should have a good picture of revenues and expenses. These numbers, along with risk-preference information, should help determine the level of income from crop insurance that is required. A producer should be able to determine what percentage of the average yield will cover the necessary expenses for an operation. For example, a farmer determines from his budgeting and calculations that his total costs per acre will be \$200, and his current ability to meet cash obligations is approximately \$50 per acre. Therefore, he determines that he needs insurance so that he can meet at least some or all the remaining \$150 per acre and that this level of revenue, at average prices, is 60 percent of his average yield. Crop insurance does not guarantee a profit per acre but may be able to prevent a loss on a per-acre basis.

As discussed before, crop insurance comes with tradeoffs in the form of premiums. Generally the higher the amount of coverage required, the higher the premiums cost. The amount of coverage in yield-based insurance policies is typically in the form of a percentage of a producer's average yield. In a disaster year, a farm's insurance indemnity is the difference between that average and actual production. If the insurance is not used, then the premium cost is simply a sunken cost. It is therefore important to determine how much coverage an operation needs.

Select from available options

A grower should contact a crop insurance sales representative to determine what crop insurance alternatives are offered. The cost of individual plans will vary by area. Using all of these steps should help determine the level of insurance necessary for an operation. The Farm Service Agency has a listing of crop insurance agents.

For more information on crop insurance and on general agricultural risk management, check the Western Risk Management Library at agecon.uwyo.edu/riskmgmt.

Cooperative Extension Service seeks new tools for crop producers

By Jim Gill, Washakie County University of Wyoming Cooperative Extension Service

Information about everything from sub-surface drip irrigation systems to risk management to remote sensing technology is being offered to producers by the University of Wyoming's Cooperative Extension Service (CES).

"We recognize the importance of helping our Wyoming farming communities to stay competitive on a global scale," says Jim Gill of the Washakie County CES office.

A CES crop issue team has introduced the concept of sub-surface drip irrigation systems into the framework of irrigated row crop production in the state. Helping has been Freddie Lamm, an irrigation specialist for Kansas State University. He worked with a group of farmers in the Big Horn Basin at an irrigation symposium in Powell. Lamm also consulted with scientists from the Powell Research and Extension Center to design a system for the station.

A series of programs called "RightRisk – What Risk Is Right for You?" has been offered throughout the state by CES specialists John Hewlett and Chris Bastian. The workshops utilize a computer module simulator that allows participants to change typical production factors like yields, weather, commodity prices, and other critical components for profitability.

Ramesh Sivanpillai, a UW remote sensing scientist, has been working to bring technology involving orbiting satellites to growers. The satellites collect data about crops that can help Wyoming farmers make critical decisions such as what part of a field to treat aggressively to ward off a given



Ramesh Sivanpillai, left, discusses what satellite images can reveal to producers with Bart Stevens, a soils specialist at the UW Powell Research and Extension Center.

insect or disease problem. According to Gill, this technology can detect plant stress before the human eye can.

Sivanpillai is the director of a new program created through the U.S. Geological Survey called "WyomingView." Gill and Sivanpillai are currently working with sugar beet growers in the Big Horn Basin in conjunction with the Wyoming Sugar Company and Western Sugar Company to introduce and explore the applicability of the technology to everyday management decisions. WyomingView is providing satellite images of the Worland and Powell valleys looking at crop sequences from the 2004 growing season.

"It brings a new technology for Wyoming crop producers to utilize to help minimize the use of major input resources like fungicides for disease control, insecticides, fertilizers, and other components and options," Gill says. "In the end, we hope to show how it can put additional dollars in the growers' pockets."

Keeping Wyoming's Agriculture Safe and Secure

By Ron Cunningham, Fremont County University of Wyoming Cooperative Extension Service

Agro-terrorism (terrorism on crop agriculture) agri-terrorism (terrorism on animal agriculture), and bioterrorism (terrorism using biological agents) are terms many in agriculture have not given much time planning for an outbreak or trying to prevent one from happening.

Attack on this nation's and state's agriculture could have extreme economic devastation, social upheaval, and even political instability, but the most damaging would be the loss of public confidence in the safety of America's food.

The U.S. Department of Agriculture has concluded that the nation's food supply could be the target of future raw or processed food contamination by terrorists. The food supply could be the target of a broad range of biological and chemical agents that could cause serious food-borne illnesses.

Threats and hoaxes are also effective in causing the public to lose confidence in the safety of the food supply.

Industries that could be affected are the producers, food processors, feed producers and suppliers, grain elevators, packers, meat retailers, local businesses, tourism and travel, livestock markets, investment companies, pharmaceuticals, banks, equipment dealers, pickup dealerships, and others.

Salmonella, *Escherichia coli* 0157:H7, and ricin pose significant threats to the safety of the food supply. Anthrax, smallpox, plague, brucellosis, botulism, mycotoxins, cholera, and tularemia are just some of the diseases that could be used as possible biological warfare agents.

As an example, the United Kingdom alone lost approximately \$25 billion with an outbreak of foot-and-mouth disease in livestock, and researchers say this contributed to the suicides of 85 producers.

Terrorism preparedness is a must in our world today, and agriculture must not be caught off guard. Prevention, early detection, and rapid intervention on the part of the agricultural industry will help avoid a disastrous hit on the industry. Producers must have their eyes open at all times and pay attention with what others are doing in their communities, neighborhoods, and farms and ranches. If someone sees or hears something out the ordinary or that is suspicious, they should contact local authorities immediately.

Persons interested in more information on agro- or agri-terrorism may contact their local University of Wyoming Cooperative Extension Service office.