



Getting Started in Ag: Evaluating Risk Strategies

Defining Risk in Your Operation

Risk can be broadly defined as the uncertainty of outcomes. Even if you are new to production agriculture or just getting started, chances are you are already familiar with the concept. Weather and other natural disasters, unstable markets and prices, human resource issues, and other uncertainties all contribute to the overall risky nature of production agriculture. While most of these factors are outside a manager's control, how we prepare for—and subsequently deal with—risk is very much under our control.

A farmer or rancher has two choices when dealing with risk: ignore it and deal with the consequences, or select the risk(s) of greatest consequence and work to understand and manage those risks. Risk management is the process of developing strategies to increase the likelihood of positive outcomes and/or reduce the consequences of negative outcomes for the threats that matter most. Keep in mind, however, that the only thing certain in life is uncertainty; the better we plan for uncertainty, the better our outcomes should be.

Decision Trees

Developing a risk management strategy involves outlining the series of decisions that will be or could be completed as information is collected along the way. This process can be mapped out as a decision tree, where the main decision is listed along with the relevant courses of action based on the events and associated outcomes that are expected to result from the main decision. The main advantage of sketching a decision tree is that it forces the decision-maker to think through important elements like timing, chance events, decision points and outcomes.

A decision tree can be drafted for just about any production or marketing decision, and can be as simple or complex as desired.

To set up a decision tree, first identify the decision to be made, then list its potential outcomes. In between each set of potential outcomes is a point where a decision is made, e.g., if event A happens, then decision A is the choice.

When possible, include potential probabilities for each outcome, along with the expected result. The more details included in the form of estimated quantities, prices, and probabilities, the better prepared the decision-maker will be to address the threats.



Learn How to Estimate Risk in Your Operation

Evaluating Risk Strategies (ERS) is a self-paced online learning module designed by academic professionals at RightRisk.org for identifying and managing risk in agricultural operations.

The ERS course outlines the five sources of risk in agricultural operations: marketing, production, financial, institutional and human resource risk. Marketing risk, also called price risk, refers to the inherent uncertainty of prices for inputs and outputs. Production risk includes variables in the production process, including factors like weather, product quality differences, or sickness and disease in livestock. Financial risk results from borrowing outside capital. Institutional risk refers to rules, regulations and other

governmental policies that affect profitability. Finally, human resource risk comes from the human element of the business.

The ERS course uses a broad range of strategies to help managers identify risk and estimate its impact. Often the best way to do this is to project the probability of an expected outcome and its potential impact. The problem in using any one yield in budgeting or planning is that it is inherently uncertain. Using a “best guess” to estimate potential risk does not adequately account for the uncertainty within that guess. A better approach, as outlined in the ERS course, is to use a range of values and their associated probabilities to estimate possible outcomes.

The Risk Management Process

Risk management planning is cyclic by its very nature. The ERS course outlines a three-step process to effectively manage risk: 1) establish context, both internal and external, as well as objectives or risk criteria; 2) identify, analyze and evaluate risk; and 3) implement risk management strategies. This process allows for evaluation and review of all aspects of management, from the risk itself to the strategy employed to address that risk.

Risk Management Strategies

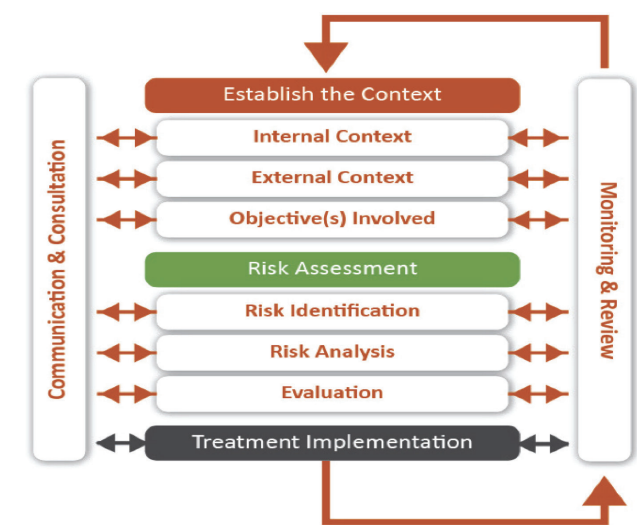
The first step in formulating an effective risk management strategy is to identify a concise set of goals for the direction of your business and determine what resources are required to achieve them. The subsequent risk management planning should include specific steps and a timeline for reaching those goals.

Not all risk is worth managing. Some risks are too expensive or too unlikely to occur to justify the efforts needed to manage them. Avoiding risk typically involves not pursuing a strategy that makes those threats of concern possible outcomes. This approach can limit income potential and must be weighed against the potential benefits.

Transferring risk involves shifting the risk to a third party for a premium or fee. For most producers, this means purchasing insurance or contracting with another party. In these

Evaluating Decisions

1. A direction has been previously selected
2. Not all decisions are equal in nature
3. Involve some type of management decision after considering the alternatives



The Evaluating Risk Strategies course outlines key steps for risk management: establish context, assess risk, and implement treatment.

cases, the benefit of lowering potential downside risk comes in exchange for a premium or contract cost paid upfront.

Controlling risk involves taking one or more actions that make negative consequences less likely or reduce the consequences if they should occur. It is important to remember that the goal should be to manage risk to an acceptable level, not minimize risk. Accepting risk, sometimes referred to as self-insuring, is yet another management option.

Evaluation of Strategies

It is important to evaluate risk management strategies and decisions to properly gauge their effectiveness, as well as to make sure they align with the business goals. The ERS course discusses how to recognize strategic decisions—choices that will guide future direction. The course discusses different aspects of these decisions and how

to distinguish a decision from a strategy. Strategic decisions tend to be longer term and larger in scope.

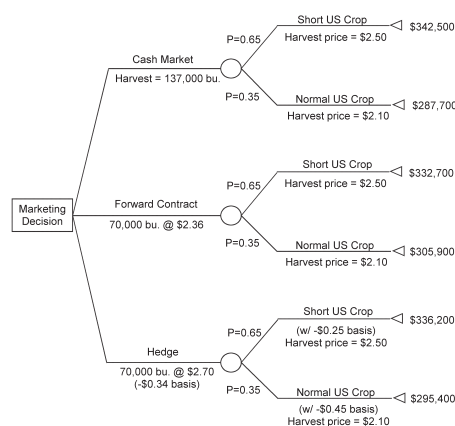
The ERS course also addresses how to measure progress and quantify variations in outcomes, a key part of evaluating a risk management strategy. Once these areas have been addressed, the overall success, or failure, can be assessed.

It is important to account for all aspects of a risk management strategy—resources, timing and goals—when evaluating overall effectiveness. Review of these strategies should be completed regularly, perhaps annually; each review should proactively consider the entire strategy and associated elements. This is especially important for new and beginning operators who may be more vulnerable to changes in markets or production conditions.

EVALUATING RISK STRATEGIES

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1. [Evaluating Risk Strategies self-study materials](#)
2. [Evaluating Risk Strategies webinar slides](#)
3. **Evaluating Risk Strategies webinar recording:**
[Introduction \(3 min\) | MP3 format](#)
[ERS module - Risk Strategies \(22 min\) | MP3 format](#)
[ERS module - Evaluating Risk Strategies \(26 min\) | MP3 format](#)
[Closing comments \(3 min\) | MP3 format](#)
4. [ENTIRE webinar in MP3 format \(37 min\)](#)
5. [Evaluating Risk Strategies eBook](#)



Example decision tree outlines possible outcomes for a crop marketing decision.

FOR MORE INFORMATION

It is important to regularly evaluate your risk management strategies, from the effectiveness of your current crop insurance policies to your marketing plan and overall business plan. For help getting started, visit the Evaluating Risk Strategies course page at RightRisk.org, which includes links to the course e-book, companion presentation and webinar. RightRisk.org offers numerous useful and insightful risk management courses covering topics such as budgeting and business planning, estate planning, financial management, management/succession and legacy planning, and more.