

An Overview of Risk Management Planning¹

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The Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) is part of a Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH) Agricultural Health and Safety Initiative. SCCAHS explores and addresses the occupational safety and health needs of people working in agriculture, fishing, and forestry in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, the U.S. Virgin Islands, and Puerto Rico.

The University of Florida is the lead institution of this Center, partnering with the University of South Florida (USF), Florida State University (FSU), Florida A&M University (FAMU), Emory University, and the University of the Virgin Islands. These universities are working together on a range of interdisciplinary research and educational projects designed to promote occupational health and safety among the 240,000 farms—estimated by the U.S. Department of Agriculture—to be operating in the region, their operators, families, employees, and contractors, as well as those in the forestry and fishery industries.

Introduction

As risks evolve and diversify, today's approaches to conducting business require a targeted focus on risk management, particularly in agriculture. Risk is inherent to conducting business, regardless of the type of business, the industry, the location, the leadership, and the like. However, depending on any of these factors, risk may manifest itself differently. Therefore, specific risks require specific management strategies. "Risk is what makes it possible to make a profit. If there was no risk, there would be no return to

the ability to successfully manage it" (Crane, Gantz, Isaacs, Jose, & Sharp, 2013). Therefore, it is extremely important to assess all risks associated with a business so that appropriate and adequate management strategies can be put in place to help businesses succeed.

Risk management means anticipating the best alternative tools to face future uncertainties. Risk management varies based on farmers' attitudes toward risk and abilities to address risky situations (USDA Economic Research Service, 2018a). This document explores risk in agriculture, the need to understand risk, formation of strategies to manage risk, and government programs that exist to help growers and producers manage risk.

Understanding Risk

Identifying sources of uncertainty helps farmers and others adopt the most effective strategies to mitigate risk, and can aid in the avoidance of extreme outcomes, such as bankruptcy (USDA Economic Research Service, 2018b).

Risk Management Planning

A risk management plan consists of nine steps: 1) Identify risks; 2) Measure risks; 3) Assess risk bearing capacity; 4) Evaluate risk tolerance or preferences; 5) Set risk management goals; 6) Identify effective risk management tools; 7) Select and hire risk management professional(s); 8) Decide on and implement the plan; and 9) Evaluate the results (USDA Risk Management Agency, 2008).

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1. **Identify risks.** Risk identification is the starting point for risk management planning because solution identification begins with knowledge of the problem. Five main types of risk should be evaluated: production risk; price or market risk; financial risk; legal risk; and human risk.
2. **Measure risks.** Measuring risks includes assessing the probabilities of the possible outcomes and the impact of each outcome. “The probabilities of outcomes translate into the financial impact of those various possible outcomes” (Crane et al., 2013).
3. **Assess risk bearing capacity.** Assessing risk bearing capacity is important when evaluating risk management strategies. Cash flow needs, such as cash costs, taxes, loan repayment, and family living expenses, should be considered. Historical data provide a wealth of information when planning.
4. **Evaluate risk tolerance or preferences.** Individuals are generally categorized into one of three broad types of risk tolerance: risk-averse, risk-neutral, or risk-preferring. Risk-averse individuals tend to be more cautious and are generally willing to sacrifice income to avoid risk. Risk-neutral means accepting some risk but weighing each situation. Risk-preferring operators willingly accept risk, often viewing it as a challenge.
5. **Set risk management goals.** Developing a SMART risk management goal plan means tying these features back to the SMART Goal: Specific, Measurable, Attainable, Realistic, and Timely. SMART Goals are a reflection of self and provide the foundation for the way we operate. SMART Goals are used to keep us on track and measure progress.
6. **Identify effective risk management tools.** This step includes developing comprehensive strategies to deal with multiple sources of risk.
7. **Select and hire risk management professional(s).** Selecting risk management professionals entails researching agriculture professionals in your area. Ask for references and verify credentials.
8. **Decide on and implement the plan.**
9. **Evaluate the results.** This step allows you to measure progress. Adjust as needed and plan for the future.

Government Programs

The government programs listed below can help farm professionals manage their risks.

- **Price Loss Coverage (PLC) program** provides support when market prices drop below the commodity reference price. Note: cotton is no longer considered a covered commodity.
- **Agricultural Risk Coverage (ARC) program** provides revenue assistance for crop losses that are typically not covered by crop insurance (shallow loss program), and it is available either as an area-based program or at the individual level. Note: cotton is no longer considered a covered commodity.
- **Supplemental Coverage Option (SCO)** provides area-based coverage for a portion of the deductible of a producer’s underlying crop insurance policy. SCO covers either yield or revenue, depending on the underlying individual producer’s crop insurance policy.
- **The Stacked Income Protection (STAX) program** provides shallow loss protection similar to that of SCO (although an underlying crop insurance policy is not required) but is only available to cotton producers.
- **Disaster programs**
 - **Livestock Forage Disaster Program (LFP)** compensates eligible livestock producers who suffer grazing losses due to drought or fire.
 - **Livestock Indemnity Program (LIP)** compensates producers for above normal livestock losses due to adverse weather.
 - **Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish** provides assistance for losses caused by disease, adverse weather, or other conditions not covered by LFP or LIP.
 - **Tree Assistance Program** provides benefits to producers who suffer tree losses due to natural disasters.
 - **Loan deficiency payments** protect producers of major commodities against low prices.
 - **Noninsured Assistance Program (NAP)** covers crops for which crop insurance is unavailable.
 - **Emergency loans**
 - **Emergency haying and grazing assistance**
 - **The Emergency Conservation Program** is intended for farmlands damaged by natural disasters.

Conclusion

Risk management is essential to conducting business because risk, whether production risk, price or market risk, financial risk, legal risk, or human risk, can hinder success. One size does not fit all for risk management strategy; it takes a complex combination to minimize or eliminate the effects of risk. This document emphasizes the need to understand risk because uncertainties lie in everything we undertake. It presents the steps for risk management planning. Farmers should identify the risks to reach manageable and effective solutions and include a risk management plan as part of their business plan. Different government programs exist to help farm professionals manage their risks.

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