AgWest FARM CREDIT

Risk management planning guide

Risk management planning steps.

Tip: Risk management is a comprehensive process and includes multiple tools and strategies. The goal is not to eliminate risk, but to manage it effectively through a comprehensive process.

In today's global agricultural economy, risks to producers, processors and marketers are expanding and surfacing in many ways – exposing all to more unfavorable circumstances and increasing uncertainty. Finding ways to manage risk and exposure given increasing uncertainties is critical for long-term business success. Developing a risk management plan helps business owners anticipate and mitigate risks.

The following guidelines provide basic steps for developing a risk management plan. Ultimately, the plan's details and execution depend on your industry and unique circumstances. The steps below can help you get started and are each outlined in the following sections:

1. **Define success**: Identify your business goals and objectives.
2. **Identify risks**: Conduct a SWOT analysis.
3. **Assess risks**: Complete a risk assessment and identify available tools.
4. **Manage margins**: Understand the costs, breakeven and sensitivity.
5. **Drive performance**: Execute, follow-through and evaluate.

Risk categories and tools.

Tip: Consider creating an advisory board or group of respected peers and outside professionals to evaluate your operation's risk.

Risk management is a broad term and the risks facing each business vary. While every operation is unique, risks for agricultural operations generally fall into the following categories. Consider each category as you identify risks specific to your business. Identifying and planning for these risks is key in the risk management process.

Category	Key risks	Risk management tools
Production	Weather, diseases, pests, technology, land and water.	Crop/product/service selections and mix, technology investment, yield insurance and production contracts.
Human resources	Management, labor supply, death, disability, divorce, business continuity, training, development, hiring the right people, systems, tools, compensation, benefits, immigration policy, partner disillusionment and retirement.	Defined roles and responsibilities, job descriptions, regular performance reviews, delegated authorities, succession planning and life/disability insurance.

(risk categories continued on page 2)

Category	Key risks	Risk management tools
Marketing/ Reputation	Market volatility (inputs and outputs), market access, consumer demand, trade restrictions, transportation, natural disasters, geopolitical environment, counterparty issues (relate to individuals/entities you do business with), disease or health scare, neighbor issues, input suppliers, and customer concentrations.	Marketing plans, contracts, revenue insurance, contract production, letters of credit, customer mix management, hedging sales prices and/or input costs, public engagement, customer communication, traceability and input supplier relations.
Operational	Priority-setting, execution, equipment management, facilities maintenance and repair, systems and processes.	Management systems and processes, effective day-to-day communications and decision making.
Financial	Profitability, liquidity, overall balance sheet position, cash management, access to capital, interest rates, credit obligations, funding growth, foreign exchange rates and accounting systems.	Record keeping, financial management knowledge, meaningful tools and reports, enterprise accounting, rate management, life insurance and family living costs.
Legal/ Regulatory	Entity structure, contract enforceability, business/personal liabilities, shifts in public policy, environmental regulation and urban encroachment.	Sound legal advice, up-to-date documents, contract management, property and casualty insurance, industry group participation and regulatory engagement.
Strategic	Communication, disagreement on business vision, asset control (lease vs. own), decision-making, ownership structure, family issues, identification of blind spots, estate planning and counterparty issues (relate to individuals/entities you do business with).	Written strategic planning, strategic planning process, transition and estate planning, decision-making protocol, estate plannin and landlord relationship plans.

Tip: Don't start identifying risk management solutions or options until you've completed the SWOT analysis.

Risk management planning steps.

Managing risk should be a priority for every operation, but is most important for businesses in volatile markets and/or with elevated debt levels where small shifts in markets or margins may cause crippling losses in a short period of time. The following steps can help you develop a risk management plan.

Step 1: Define success by identifying your business goals and objectives - Developing a risk management plan without first identifying business goals and objectives is like planning a trip with no destination in mind. Meet with your ownership, management and key players to define success and agreed-upon milestones along the way. With goals and objectives in place, prioritizing risks and risk tools will be much easier. Simply identify those risks that pose the greatest threat to your shared vision for the future.

Step 2: Identify risks by conducting a SWOT analysis - A SWOT analysis is an evaluation of the operations' Strengths, Weaknesses, Opportunities and Threats. This fundamental tool for strategic and risk management planning can help the team identify risks and blind spots in the operation.

SWOT Analysis	
Strengths Weaknesses	Internal factors within management's control.
Opportunities Threats	External factors outside management's control.

While many business owners have a "gut feel" for strengths and weaknesses of their operation, gathering input from others and formalizing findings is a key component of understanding risk exposure.

Strengths and weaknesses (internal and controllable) may include business planning, succession planning, financial management, human resource practices, core competencies, financial or operational positioning. Opportunities and threats (external and out of management control) may include adverse weather, government regulation, marketplace volatility, shifts in consumer demand or a publicized event in the industry.

Tip: It is easy to focus on weaknesses when completing your risk assessment. Don't forget about leveraging your strengths too – these can be powerful risk mitigation tools.

Strengths	Weaknesses
Production: • Strong historical yields and quality. • Productive relationship with field man.	**Production:** • No crop plan in place. • Heavy concentration in single crop.
Human resources: • Next generation ready to manage production. • Market-based compensation in-place.	**Human resources:** • Next generation not ready for financial management. • Conflict surrounding roles and responsibilites.
Marketing/Reputation: • Positive reputation in the community. • Solid relationships with customers.	**Marketing/Reputation:** • No marketing plan in place. • Unmanaged exposure to commodity prices.
Operational: • New field equipment line. • Effective harvest plan in place.	**Operational:** • Conflicts arise surrounding daily priorities. • No equipment maintenance/repair plan in place.
Financial: • Good CPA. • Strong liquidity position.	**Financial:** • Budget not used in decision making. • Financials not understood by all owners.
Legal/Regulatory: • Entity structure aligned with estate plan. • Life and disability insurance in place.	**Legal/Regulatory:** • No buy-sell agreement in place. • No written agreements with largest landlord.
Strategic: • Owners agree on future vision. • Written strategic plan in place.	**Strategic:** • Owners disagree about dividend policy. • No formal process for decision-making.
Opportunities	**Threats**
• Expiration of CRP/potential new leases. • New genetics/crop technology. • New production technology. • Global demand for food/fiber/fuel. • Niche product markets. • Commodity volatility.	• Weather events/disaster. • Increasing production costs. • Labor cost/availablity. • Loss of off-farm income. • Water scarcity. • Death, disability, disease or divorce.

Tip: Ask your AgWest Relationship Manager for Peer Financial Benchmarks to help you measure your operation's financial performance, efficiency and profitability compared to similar operations.

Monitoring opportunities and threats regularly assures that contingency plans can be implemented quickly when the landscape changes. Think about the best management practices used in your industry as you evaluate your operation's strengths and weaknesses.

To begin, review each of the risk categories on page 2 and categorize your strengths, weaknesses, opportunities and threats in each category. Below is a simplified sample SWOT analysis.

Step 3: Assess Risks: Complete a risk assessment and identify available tools - Using the SWOT analysis, you can now identify key threats to achieving your strategic goals and objectives. Completing a risk assessment helps to assure key players understand risks facing the operation and helps prioritize tools and options to mitigate risks.

A	B	C	D	E
Risk Event	Probability Rating (see table)	Impact Rating (see table)	Total Risk Score Probability and Impact (see table)	Strategy
Example risk	3	6	9	Develop a crop rotation plan. Add a crop nutrition regimen.

Probability within three-years	Rating
0 to 10%	0
11 to 20%	1
21 to 50%	2
Greater than 50%	3

Operational impact description	Rating
Minimal impact. Short-term nuisance work.	0
Moderate profitability impact or operational disruption. Short-term implications.	3
Significant short-term/long-term impact. Survivable, but serious disruption/loss.	6
Severe or catastrophic hardship and/or loss. Continued operation will be difficult.	9

Total risk score (probability rating + impact rating)	Score
No action required.	0 to 2
Not critical. May want to explore low-cost mitigation options.	3 to 4
May be critical. Explore effective mitigation options.	5 to 6
Action required. Implement mitigation options in the near-term.	7 to 8
Urgent action required! Implement mitigation options immediately!	9 to 12

Risk Assessment Process*:

The following section outlines one approach to assessing risk. Whatever process you use, it should help you to identify, prioritize and assess options to address the risks facing your operation. This process prioritizes risks based on the likelihood that some risk event will occur, and the operational or financial impact if it does occur.

Using your SWOT, create a spreadsheet or document with the following columns.

Column A - Risk Event: Using the SWOT, list the key risks facing your operation.

Column B - Probability Rating: Assign a rating based on the probability that risk events will happen within the next three years. Use the following table to assign ratings.

Probability within three-years	Rating
0 to 10%	0
11 to 20%	1
21 to 50%	2
Greater than 50%	3

Column C - Impact Rating: Assign a rating based on the potential impact to your goals, objectives and/or profitability. Use the following table to assign ratings.

Operational impact description	Rating
Minimal impact. Short-term nuisance work.	0
Moderate profitability impact or operational disruption. Short-term implications.	3
Significant short-term/long-term impact. Survivable, but serious disruption/loss.	6
Severe or catastrophic hardship and/or loss. Continued operation will be difficult.	9

Column D - Total Risk Score: Calculate the total score for each risk by adding the Probability (Column B) and Impact (Column C) Ratings. Assess the calculated total relative to other risks and using the table below.

Column E - Strategy: List options for addressing the identified risk.

Total risk score (probability rating + impact rating)	Score
No action required.	0 to 2
Not critical. May want to explore low-cost mitigation options.	3 to 4
May be critical. Explore effective mitigation options.	5 to 6
Action required. Implement mitigation options in the near-term.	7 to 8
Urgent action required! Implement mitigation options immediately!	9 to 12

**Adapted model from the Center for Dairy Profitability; University of Wisconsin Extension.*

Tip: To help identify potential opportunities and threats in the market, the AgWest Business Management Center offers Market Snapshots and Industry Perspectives.

Tip: AgWest offers tools to help evaluate your operation. For example, our Best Management Practices Assessment allows you to compare your management practices to peers. Email: BMC@AgWestFC.com to learn more.

Step 4: Manage margins: Understand costs, breakeven and sensitivity - Volatile commodity markets and the competitive global landscape mean managing profit margins is more difficult and more important than ever before. Knowing your operation's break even costs on a crop-by-crop or product-by-product basis is critical to business success, and without this information, risk management tools – especially marketing strategies – can be ineffective.

Know your costs: To know your breakeven, you have to know your costs. This means having a financial management system to track inputs and processes to ensure you're capturing operational data and information accurately. It also means distinguishing between fixed versus variable costs and allocating costs appropriately among enterprises.

Know your breakeven: Once your team understands its costs, you can calculate the breakeven point. There are many ways to calculate breakeven and even different types of breakeven calculations, but the most effective measures include the following items over a specified period.

Cost type	Definition and examples
Fixed costs	**Costs that remain constant, regardless of production levels.** *Examples:* General overhead (benefits, administrative salaries, etc.) Land rent/lease Living expenses Interest expenses Depreciation General expenses (repairs, utilities, etc.)
Variable costs	**Costs tied directly to production levels.** *Examples:* Harvest expenses Raw product purchases Packaging materials (bailing twine, potato sacks, wine bottles) Processing and marketing charges Freight

- Average sales price for each commodity or product.
- Assignment of fixed and variable costs to each commodity or enterprise.
- Production volume (especially important for any processing / packaging operations).

After you establish the items above (historical or projected), you can complete a breakeven analysis that is meaningful for your operation.

Assess balance sheet risk: The key to managing margins is to know your breakeven points and how much risk your balance sheet can handle. For production agriculture operations, two key measures of the balance sheet's short-term risk bearing capacity include working capital and working capital as a percentage of annual expenses. These measures indicate how much of the operation's expenses can be funded with cash in the coming year (approximately). The safe or target level is different for each business and commodity, and is influenced by the amount of production and price risk the operation is subject to.

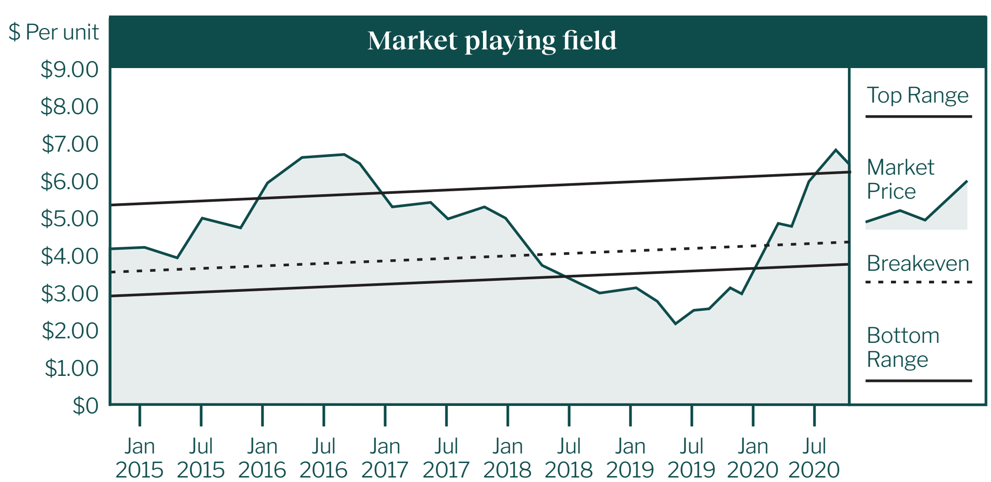
Breakeven	Definition and calculation
Price	The sales price per unit to generate zero profit. *Calculation:* $\frac{\text{Sales: Net profit before tax (including non-farm or other income)}}{\text{Total units produced}}$
Cost	The total cost per unit excluding non-farm/other income. *Calculation:* $\frac{\text{Variable costs + fixed costs (excluding non-farm or other income)}}{\text{Total units produced}}$
Throughput *(volume)*	The number of units sold to generate zero profit. *Calculation:* $\frac{\text{Total fixed costs}}{\text{Gross profit per unit}}$
Cash Flow	The amount of cash inflow per unit needed to meet all cash flow obligations. *Calculation:* $\frac{\text{Fixed costs (–) depreciation (+) distributions (+) principal payments}}{\text{Gross profit per unit}}$

Tip: Set a bottom and top sales price range based on a certain percentage below and above your breakeven point.

Establish a price trigger: Sales prices and costs - may or may not move together. To manage risk effectively, decision-makers need to consider sales prices and costs simultaneously when making pricing decisions. One way to think about managing margins is to establish a “market playing field” to operate within from a price perspective.

After you understand your balance sheet risk, clearly identify your overall appetite for risk and set an acceptable price target range based on your breakeven calculations. With the pricing targets identified, you can evaluate using risk management tools like forward contracts and hedges on both revenue and input costs, enabling you to know when to ‘pull the trigger.’

Managers who use margin management acknowledge they ‘leave some earnings on the table’ in up markets. They also sleep better at night knowing they’ve locked in solid profit margins during times of volatility, knowing they’re protecting the balance sheet (and hard-earned net worth) from extreme market shocks. A systematic approach to marketing products and purchasing key inputs over the course of the year improve planning, communication and generally results in better business results over time.



Understand Before You Buy: Tools for managing market price and input costs include cash markets, forward contracts, futures contracts, options and mixed strategies. If you do not fully understand the options, get help from someone who does, especially when considering futures or options to hedge price risk. Using these tools haphazardly is closer to speculation than risk management. Contact your local AgWest representative for a list of risk management resources.

Generally speaking, limiting risks with tools like hedging is sound business. To help manage your exposure, consider a hedge line – a line of credit specifically designated for margin calls. When using leverage (credit) to fund your strategy, follow your risk management plan consistently and avoid speculation (e.g. "long positions" not matched with the underlying commodity). Execute risk management tools based on your plan and not emotion.

Step 5: Develop short-and long-term goals and action plans – The previous steps help you identify, prioritize and develop plans to manage your operation's risks.

Use your analysis to develop short-term goals (less than one year) and long-term goals (more than a year) for managing risks in your operation. Goals should be SMART – specific, measurable, attainable, realistic and time-based.

After identifying your goals, create an action plan for each goal. Action plans should identify who is ultimately responsible for achieving the goal, steps needed to accomplish the objective, who is responsible for each step and target dates for progress at each step.

Review goals and action plans periodically to ensure you're making progress. Keep in mind, you many need to adjust some goals to adapt to opportunities or threats that develop in the marketplace.

Risk Management as a Discipline

There is no single tool, strategy or silver bullet for managing risk. Rather, risk management is a comprehensive process and represents multiple tools and strategies. The ultimate goal is not to eliminate risk, but to manage it effectively through a comprehensive process. Market volatility reminds all of us in agriculture that what may seem like a positive on the surface can have dramatic impacts on other aspects of our business. Increased time and attention toward risk management planning will go a long way in positioning your business for long-term success.