



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

United States Department of Agriculture

Risk Management Agency

Revised December 1997

Introduction to Risk Management

Understanding Agricultural Risks:

Production

Marketing

Financial

Legal

Human Resources



CONTENTS

INTRODUCTION: IT'S A WHOLE NEW BALL GAME	3
UNDERSTANDING GOALS AND RISK TOLERANCE	4
UNDERSTANDING PRODUCTION RISKS	6
Enterprise Diversification	
Crop Insurance	
Contract Production	
Evaluating New Technologies	
UNDERSTANDING MARKETING RISKS	9
Personal Considerations in Marketing	
Developing a Marketing Plan	
Marketing Plan Discipline	
Marketing Tools	
UNDERSTANDING FINANCIAL RISK	13
Farm Records and Financial Analysis	
Interest Rate Risk	
Liquidity and Meeting Cash Flow Requirements	
Insurance	
Family Living Costs	
Legal Issues and Security	
LEGAL ISSUES ASSOCIATED WITH AGRICULTURE	16
Structural Issues	
Contract Arrangements	
Statutory Obligations	
Tort Liability	
Environmental Liability	
Summary	
HUMAN RESOURCE ISSUES	18
Managing People	
Estate Planning	

It's A Whole New Ball Game

Risk has always been a part of agriculture. But, farming in America is a ball game that has changed dramatically over the past few years. Increasingly, farmers and ranchers are learning that it is now a game with new rules, new stakes, and, most of all, new risks.

The nation's most successful farmers are now looking at a deliberate and knowledgeable approach to risk management as a vital part of their game plan. For them, risk management means farming with confidence in a rapidly changing world. It is the ability to deal with risks that come with new, attractive farming opportunities.

This handbook is part of a campaign to improve the risk management skills of American farmers and ranchers. The urgent need for this campaign stems from many changes in producers' business environment. In this environment, opportunities have increased, but so have the risks. Some of the more important changes affecting producers' risks include:

A changing governmental role. Increasingly, government policy makers are placing greater confidence in the ability of producers to make sound business decisions. They have passed market-oriented farm legislation and crop insurance reforms which allow producers to be more active in managing their profit opportunities and risks.

Outside forces. Many factors are forcing producers to make risky, but potentially profitable, decisions regarding their businesses. These factors include increased global competition, rapid changes in the structure of production agriculture, changes in the marketing of agricultural products in the farm supply sector, new technology, and more volatile weather patterns.

Risk connections. Increasingly, decisions in certain risk areas are affecting the riskiness and profitability of other aspects of farming. For instance, more lenders are now requiring sound business plans before approving credit. Thus, good management of marketing risks can lower borrowing costs and result in long-run financial stability. As farmers become more aware of the many such connections between their risks, the need for effective risk management will increase.

A broad array of established risk management tools are there, ready to be used. At the same time, a growing interest in

agricultural risk management is encouraging the development of exciting new tools and services. By learning about and using these tools, U.S. farmers and ranchers can build the confidence they need to deal with both the risks and the exciting opportunities of the future.

How To Use This Handbook

How can you better manage risk? Well, for starters, you can assess your risk management skills by conducting an annual Risk Management Checkup—one that identifies the interactions between one source of risk and another and causes you to take action.

We have identified five primary sources of risk: Production, Marketing, Finance, Legal, and Human Resources.

Since risk management should be driven by your goals, this handbook first reviews goal setting and risk tolerance. Succeeding chapters will then give you insights into the benefits of improved risk management in each specific area. As you review these chapters, look for instances of the connections between the various areas of risk. Also, consider questions to ask yourself or the professionals whose help you may need.

Remember, you are not competing by yourself. You have a whole team of professional players prepared to help you win. Who are your teammates? They are grain elevator operators, commodity brokers, crop insurance agents, loan officers, extension educators, commodity organizations, cooperatives, lawyers, accountants, and the people in local USDA offices.

Your teammates are currently mastering new skills, identifying new opportunities, and learning how to play as a team. Remember, it's a new ball game for them, too. But, each of them has unique strengths, skills, and experiences. The most effective way for you to use them is to make them part of your team. Share your game plan with them. Then, use their strengths to help your plan succeed.

Start now to think about risk management as a key element of the new ball game of agriculture—a game that you can win. Learn the fundamentals, use your teammates, then act on what you learn. Make risk management an important part of your game plan!

UNDERSTANDING GOALS

While no two people share the same goals in life, all of the people involved in a family business must share *some* common goals. Identifying those shared goals, involving everyone in the goal-setting process, and then acting together to achieve those goals should be a serious effort that focuses both the individual and the organization. After all, a family business cannot be successful if it does not help fulfill the individual dreams of everyone involved.

Many times, the hardest thing about setting risk management goals is reconciling different views about risk. People have different answers for the same fundamental questions.... What are my risks? What are our risks? What is an acceptable level of risk? What should we do about the risks? Recognizing and acting on *opportunities* as well as trying to *minimize losses* can help shape agreement on fundamental risk management goals.

Benefits of Goal Setting:

- Reflects your values, interests, resources and capabilities. An honest goal-setting session for yourself, your family, and your business will cause you to take inventory of those things.
- Provides a basis for your decisions and a focal point for everyone involved. Well-understood organizational goals allow every individual in the organization to set realistic personal goals.



- Establishes priorities for the allocation of scarce resources. What things will you do today and what things will you do in the future? For example, what priorities have you established for using net farm income? Buy land, pay for college, pay down debt?
- Provides a means for measuring progress. Which decisions made progress toward your goals and which decisions need to be reevaluated?

Some Questions for Your Risk Management Check-up:

- Are my goals written, reasonable, and measurable?
- Are my goals attainable in my lifetime?
- Have I shared my goals with everyone involved in the business and have they shared their goals with me?

What Is Your Risk Tolerance?

Your risk tolerance is reflected in the ways you choose to manage risks. Understanding your choices and considering each of them may cause you to change your management style to more closely reflect your tolerance for risk.

Risks can be handled in one of five ways, or in certain combinations of the five:

1. Retain (With no protection from downside risk, as in holding an unpriced commodity.)
2. Shift (A contractual arrangement where someone else takes on some of the chance of a negative occurrence in exchange for a premium. The more risk you shift, the higher the cost.)
3. Reduce (Keeping fences in good repair to keep livestock off the highway and a marketing plan that locks in some level of guaranteed return are examples of reducing risk.)

4. Self-insure (Emergency reserves funded from previous years' profits.)

5. Avoid (Not selecting a particular enterprise...not pushing either end of planting windows...not increasing your debt-to-asset ratio beyond your comfort level.)

Any risk must be evaluated for its frequency of occurrence and its possible negative consequences. As a general rule, formal insurance strategies are available for risks with low occurrences but with severe negative consequences. Examples include disability insurance, health insurance, crop insurance and life insurance.

Benefits of Identifying Your Risk Tolerance and Assessing Your Risks:

- Allows you to identify and exclude those alternatives which expose you to unacceptable risks.
- Helps guide providers of risk management services to the best options for you.
- Ensure that your insurance dollars will be spent wisely.
- Increases the likelihood that you will select the best combination of risk management strategies.



Some Questions for Your Risk Management Check-up:

- Have I identified my risk management tolerance?
- Have I communicated my tolerance for risk to the professionals who provide me with risk management services?
- Which risks can keep me from attaining my goals?
- Which risks am I comfortable retaining and managing with my own resources? Which risks will I shift to others? Which will I avoid?
- When was my last insurance check-up for health, life casualty, property, disability, long-term care, Medicare/Medicaid and crop insurance?
- Have I established a confident relationship with my risk management advisers, so that they can help me assess my business and personal risk exposure?



UNDERSTANDING PRODUCTION RISKS

Agricultural production implies an expected outcome or yield. Variability in outcomes from those which are expected poses risks to your ability to achieve financial goals.

The major sources of production risks are weather, pests, diseases, the interaction of technology with other farm and management characteristics, genetics, machinery efficiency, and the quality of inputs. Following are some risk management strategies you can consider to lower production risks.

Enterprise Diversification

Diversification is an effective way of reducing income variability. It is the combining of different production processes. For instance, diversification can include different crops, combinations of crops and livestock, different end points in the same production process (such as different selling weights), or different types of the same crop (such as yellow, white, waxy or high-protein corns). Diversification can also be achieved through different income sources, such as off-farm employment for smaller farms.

Effective diversification occurs when low income from one enterprise is simultaneously offset by satisfactory or high incomes from other enterprises. It typically reduces large year-to-year variations in income. However, diversification is becoming increasingly costly, as capital investment requirements become greater. Diversification can ensure adequate cash flow for meeting production costs, debt obligations, and family living needs.

Some Questions for Your Risk Management Check-up:

- What knowledge and management capabilities do I need for an additional enterprise? Are they readily available? Do I have a serious commitment to a new enterprise?
- Which additional capital investments would I need to diversify?
- What are the added labor needs of a new enterprise?
- Where are new markets?
- What is the income relationship between a prospective new enterprise and my existing enterprise(s)? Will the new enterprise provide effective diversification?

Crop Insurance

Management of yield or price risk through the purchase of crop insurance transfers risk from you to others for a price which is stated as an insurance premium. Crop insurance is an example of a risk management tool that not only protects against losses but also offers the opportunity for more consistent gains. When used with a sound marketing program, crop insurance can stabilize revenues and potentially increase average annual profits.

Crop insurance provides two important benefits. It ensures a reliable level of cash flow and allows more flexibility in your marketing plans; if you can insure some part of your expected production, that level of production can be forward-priced with

greater certainty, creating a more predictable level of revenue.

With the elimination of ad hoc disaster payments and deficiency payments, crop producers will no longer receive government aid during years of crop disasters or price support payments during low price years. Crop insurance provides partial replacement for the Federal safety net.

Insurance companies offer a wide variety of crop insurance protection and coverage levels. The basic Multiple-Peril Crop Insurance (MPCI) program protects against yield shortfall by providing coverage against most natural disasters. The level of protection can be selected as a percentage of your historic yield.

Crop Revenue Coverage (CRC) protects against both yield and price losses. It is currently offered for corn, soybeans, grain sorghum, cotton, and wheat in selected states and counties. Its combined price and yield feature assures producers that they will earn a minimum revenue. The yield guarantee is set using each producer's Actual Production History (APH), just as it is in MPCI policies.

Group Risk Protection (GRP) is similar to the basic MPCI program, except that the yield guarantees and indemnity payments are based on county yields rather than on individual farm yields. This program is attractive to producers whose farm yields closely track county yields and where crop disasters, such as drought, affect a wide area.

Other programs are currently being offered on a pilot basis in limited geographical areas. These include Income Protection (IP) and Revenue Assurance

(RA). These revenue programs offer protection against those combinations of yields and prices which result in revenues which are below a guaranteed minimum.

The premiums for all of these crop insurance policies are subsidized by the Federal government. Subsidies tend to benefit those producers most who invest in higher levels of coverage.

Examples of private, non-subsidized crop insurance programs include crop-hail insurance, which offers protection for one specific peril (hail), and various products which supplement federally subsidized insurance.



Part of a crop damaged by hail might be less than the deductible on an MPCI policy. In this instance, crop-hail insurance can fill the coverage gap. An MPCI policy protects against losses severe enough to significantly drop the whole farm's yield average. Crop-hail insurance, on the other hand, gives supplemental, acre by acre protection that more accurately reflects the actual cash value of damage from hail.

Crop insurance is available only through private crop insurance agents. Coverage for a crop must be arranged before its sales closing date.

Catastrophic Risk Protection (CAT) is the lowest level of MPCI coverage. Premiums for the CAT portion of

all crop insurance policies are fully subsidized by the Federal government, although most farmers will pay an administrative fee. Farmers with limited resources may be eligible for a waiver of the fee for CAT coverage. Any crop insurance agent can assist producers in determining if they are eligible for a fee waiver.

Crop insurance is currently available on over 60 crops. For those crops which are not insurable, or for which insurance is not available in an area, producers can apply for the Noninsured Assistance Program (NAP). NAP provides coverage roughly similar to the CAT level of crop insurance. Although NAP requires no administrative fee, it must be applied for prior to planting. Producers should file an annual acreage and production report with the local USDA Farm Service Agency (FSA) office.

Some Questions for Your Risk Management Check-up:

- How much coverage do I need for adequate cash flow?
- Which crop insurance product will best complement my marketing plan?
- What are the implications of a crop loss on my ability to meet my debt obligations?
- What are the major sources of production risk and what type of crop insurance coverage do I need to protect against those risks?
- What are the costs of the various types of coverage and which offers the best protection for the level of coverage I need?

Contract Production

Contract production is normally associated with vertical integration, where an agribusiness firm coordinates all aspects of a product from production to the consumer's table. Contract production is common in poultry and livestock production. The agribusiness firm provides feed and other inputs to the producer, who manages the grow-out process.

Through production contracts, the agribusiness firm commits the producer to deliver a specific quality and quantity of final product. The producer must comply with the firm's quality specifications and must manage yield risk with insurance and sound management practices.

Before you agree to a production contract you need to consider the tradeoffs. A major advantage for the producer is that a market for the output and, very often, a favorable price is guaranteed. A disadvantage is that the producer loses the opportunity of benefitting from upside price potential, since the sale of the product is fixed by conditions of the contract.

The loss of flexibility and profit opportunities is the cost of receiving a predictable cash flow. The challenge associated with contract production is to find contracts that are consistent with the producer's goals and risk tolerance.

Some Questions for Your Risk Management Check-up:

- Which benefits will a production contract provide?
- What flexibility will I give up?
- Do I understand the conditions of the contract? Do I need legal advice?

Evaluating New Technologies

The challenge of evaluating new technologies is best illustrated by the two newest crop technologies: genetically altered seeds and precision farming.

For instance, some seeds are being genetically altered to provide resistance to specific herbicides, thereby permit-

ting improved weed control. Other seeds are being engineered to provide resistance to diseases or insects.

Precision farming controls the rate of application of crop inputs such as seed, fertilizer and pesticides on each acre of a field. By contrast, the conventional approach applies the same rate across an entire field. Precision farming allows yields to be measured for each acre so that output can be strictly measured against crop inputs.

As with all new technologies, farmers who adopt these new innovations try to capture a range of potential benefits, including lower input costs and environmental quality. Benefits can include higher crop yields due to improved pest control and more cost-effective use of crop inputs.

Some Questions for Your Risk Management Check-up:

- What are the economic tradeoffs between more aggressive pest control and minimal control?
- Are my pest management strategies consistent with my management philosophy about environmental quality?
- Will more intensive monitoring of pests be an economical strategy?

Some Questions for Your Risk Management Check-up:

- What is the economic benefit of adopting new technology?

You should compare each aspect of the new technology with the current technology to determine the desirability of adoption. For example, consider the evaluation of costs and benefits for corn seed that is resistant to the European corn borer. For this, you must estimate the probability of infestation by corn borers in a particular year, the cost and effectiveness of chemical treatment for borers, and the changes in field scouting costs.

These costs must be weighed against the additional \$25 or \$30 per bushel for borer-resistant seed and any increase or decrease in yield associated with the new seed.

- Does the adoption of a new technology reduce my risk?

New technology can provide only a narrow “insurance policy” if it protects against only one pest. Other insects, diseases, and weather conditions will influence yield too.

- Would it be more profitable to manage risk by purchasing seed that

is resistant to a specific pest or by diversifying production over several crops? For instance, would diversification encourage the spread of natural predators of the corn borer?... Or would it give the borer sanctuary?

- Would it be a better risk strategy to simply buy crop insurance, regardless of the specific factor that might cause a reduction in yield reduction, than to buy seed that is resistant to a specific pest?



UNDERSTANDING MARKETING RISKS

Marketing is that part of your business that transforms production activities into financial success.

Unanticipated forces, such as weather or government action, can lead to dramatic changes in crop and livestock prices. As agriculture moves towards a more global market, these forces stem increasingly from world factors. Other farmers' weather and other governments can affect your prices. When these forces are understood, they can become important considerations for the skilled marketer.

To be successful, you should take an informed and balanced approach to making marketing decisions. Focus on long-term profitability, not short-term windfalls. Academic studies indicate that marketing strategies which depend on price chasing or speculation have not been shown to be consistently profitable. Also, those strategies that do not consider financial and production risks will likely prove to be poor.

Personal Considerations in Marketing

Marketing agricultural products involves information, objectivity, attitude and skill. You should develop marketing plans and strategies that work for you. Here are three important considerations in developing a marketing plan:

1. Know what level of risk you are comfortable with.

Inability to control market forces and difficulty in predicting those forces make marketing an inexact science. A better understanding of your financial situation and the possible consequences

of your decisions will remove some of the uncertainty from marketing decisions. Obviously, marketing involves understanding your level of risk tolerance. It also involves a good understanding of your current financial position.

2. Be willing to increase the number of skills in your marketing toolbox. You may need to pay for professional help in developing your marketing plan.

Successful marketers are continually updating their abilities by learning new skills. Such efforts should be undertaken without the expectation of an immediate payoff. There are many professionals who can help you. These include futures brokers, elevator operators, financial planners and farm consultants.

3. Develop an integrated management approach to your business.

Marketing decisions should not be made independent of other farm business decisions. They should be planned according to the impact they will have on the production, financial, legal and human resource aspects of your business. Marketing decisions often involve contractual agreements that have important legal consequences. These contracts can significantly affect financial plans.

Some Questions for Your Risk Management Check-up:

- Am I financially able to "shoot for the top price" and withstand the potential downside consequences of missing it?
- Can I afford to store a crop, hoping the price will increase, or are my cash flow needs such that I must sell directly at harvest?
- Will my lender understand my plan and help me achieve my goals?
- When cattle prices are moving downward, am I financially able to retain ownership of feeder calves and sell them at higher weights later?
- What are the potential costs and returns associated with alternative strategies?
- Should I seek professional marketing services?
- Would a "marketing club" fit my need for current information and help in developing a marketing plan?

Developing a Marketing Plan

Managing market risk begins with a marketing plan. The goals and objectives of your business should drive the marketing plan.

An accurate understanding of production costs is a critical part of a sound marketing plan. . . for you and for professionals who work with you. There may be times when the market price fails to cover all of the costs associated with production. A break-even

price should serve as an important reference, even though it is usually not your desired price.

An analysis of supply and demand is important in developing targets for your marketing plan. Supply and demand projections are published by the U. S. Department of Agriculture and by private firms. Early in the growing season, expectations are highly uncertain. However, commodity markets respond decisively to these projections, so you should be aware of them.

You should also be aware of prices received in your area and know the average prices received in previous years. Again, you have a choice of learning these skills and monitoring this information yourself, or hiring a professional to help you.

Financial considerations such as cash flow requirements, including family living needs, should be incorporated in your marketing plan. Financial circumstances and other personal factors help determine your ability and willingness to tolerate market risks. Marketing plans should be as unique as the financial, production, and management characteristics of each individual producer. What works well for a neighbor may not be appropriate for you and your family.

Some Questions for Your Risk Management Check-up:

- Does my marketing plan cover the entire calendar or crop year?
- Are all crop and livestock enterprises covered in my plan?
- Have I checked my marketing plan against my financial plan to make sure that income from marketing covers cash flow needs?
- Have I calculated production costs and estimated my yield to determine my breakeven price?

Marketing Plan Discipline

Marketing involves emotion, science, discipline, and analysis. The best marketing plan will fail without the self-discipline to stay on track. Unfortunately, letting emotions rule is easy when prices are moving. When prices rise, it is hard to resist trying to squeeze an extra few cents from the market. And, it is easy to panic when prices fall. In marketing, NOT making a decision IS a decision. A marketing plan is of little value if actual decisions deviate from the plan. Having a written marketing plan will help ensure discipline.

Contingency plans, as part of the basic marketing plan, will also help. What to do if the price doesn't reach the desired level and what to do if the crop is not as large as expected are important contingency actions when the market does not develop according to your general expectations.

Marketing Tools

Learning about the full range of price risk management tools will allow you to become a better marketer and risk manager. Selecting the right tool to use at the right time will not only reduce risk, it could increase your profit. Following are a basic overview of more commonly used pricing strategies and guidelines for determining when to use each.

Storage(with no protection).

Storage is a way of avoiding seasonally low prices. When prices are below the level anticipated in the marketing plan, storage may be justified, assuming that you have adequate financial resources. Storage may be warranted when there is a realistic expectation of a market price increase. Historical data indicate that the market is often willing to pay your storage costs. However, stored grain can go out of condition and is subject to theft.

Cash Sale. When prices are favorable and at levels anticipated in the marketing plan, a direct cash sale is warranted.

Deferred Payment Contracts.

Deferred payment contracts allow for the current pricing and delivery of the crop, but can delay the receipt of payment. They are often used as an income management tool for tax planning purposes. A deferred payment contract makes the seller an unsecured creditor of the elevator. This has implications both for legal and for financial risk exposure.

Fixed Price Contract for Deferred Delivery. This contract allows producers to establish a price for later delivery. A fixed price contract, also known as a cash forward contract, may

allow you to schedule deliveries at times of the year that better fit with labor, grain quality, and logistics. Having an adequate amount of crop insurance allows you to comfortably contract the insured portion of your crop. These contracts often work well when crops are large, when storage is tight, or when the market price reaches the objective in your marketing plan.

Basis Contract. Basis is the difference between the local cash price and a futures contract price. Basis is typically more stable and predictable than either the underlying futures contract or the local cash price. However, basis does change in response to local supply and demand factors. A basis contract allows you to fix the basis, but allows the final cash selling price to be determined at a later date by subtracting the fixed basis from the futures price. This strategy works well when the basis is strong (cash prices are high relative to futures) and there is some potential for an increase in futures prices. MPCI or revenue insurance can give you the confidence to enter into basis contracts without the concern of not having a crop to deliver.

Deferred or Delayed Price Contract. A deferred or delayed price contract transfers title of a crop to the buyer at delivery, but allows the seller to set the price later. It is commonly used when storage is tight. At these times, the local elevator wants to move more grain into the marketing channel, but the seller may not be satisfied with

current prices. When producers have crop insurance, they have a guaranteed, minimum production level. They can, therefore, safely use deferred price contracts early in the growing season.

Minimum Price Contract. A minimum price contract establishes a floor price for the duration of the contract. The floor price is typically several cents below the cash price at the begin-



ning of the contract. A producer could net less with a minimum price contract than with a fixed price contract if prices fall, but will benefit from a rise in market prices. This contract eliminates much downside price risk.

Hedge-to-Arrive (HTA) Contract.

This contract has risk management properties similar to a short futures market position. It is the opposite of a basis contract. It permits the seller to set the futures price level by the delivery date, but the basis is determined later. The seller is responsible for delivering the contracted amount on the delivery date.

Short Futures Hedge. Selling futures contracts to protect the value of grain or livestock in inventory or the value of expected production is a short futures hedge. A short futures hedge reduces downside price risk. On the other hand, it also reduces the ability to capture upside price movements.

Put Option Purchase. This tool is similar to a minimum price contract. It sets a floor on the crop or livestock price throughout the life of the contract. If prices rise during the period, the seller can capture upside price gains.

Contracted Production. Many variations of this type of contractual arrangement exist. Historically, production contracts have been used for specialty crops, poultry, and livestock. Purchasers have been willing to offer such contracts to fulfill the need for highly specific agricultural products. Recently, contracted production has been offered on an increasingly broader range of crops and livestock. Contract production reduces flexibility and the opportunity to capture upside price potential. But, it assures a relatively reliable cash flow.

Marketing Cooperatives. Forming and participating in marketing cooperatives provides members the opportunity to benefit from volume sales or purchases. Benefits may be in the form of enhanced prices received or reduced costs. There has been an increased interest in marketing cooperatives for both crops and livestock.

Direct Sales. For some producers, selling directly to final consumers is a way to enhance profitability and reduce risk. Smaller farms near population centers may especially benefit from direct sales. Examples include the sales of fruits and vegetables through roadside stands and “you-pick” operations. Also, some producers can increase profits and reduce risk with specialty livestock products, like “all natural” beef, which reach a specialized market niche.

Some Questions for Your Risk Management Check-up:

- Which marketing tools are most familiar to me?
- How can I learn the basics of unfamiliar marketing tools?
- Does the use of a particular marketing tool preclude the use of others? If it does, have I weighed all the alternatives?
- Is the use of a particular marketing tool likely to enhance income, reduce risk, or both?
- Can my marketing plan be executed without undue influence from income tax and cash flow demands?





UNDERSTANDING FINANCIAL RISK

Financial risk has three basic components: 1) the cost and availability of debt capital, 2) the ability to meet cash flow needs in a timely manner, and 3) the ability to maintain and grow equity. Cash flows are especially important because of the variety of ongoing farm obligations, such as cash input costs, cash lease payments, tax payments, debt repayment, and family living expenses.

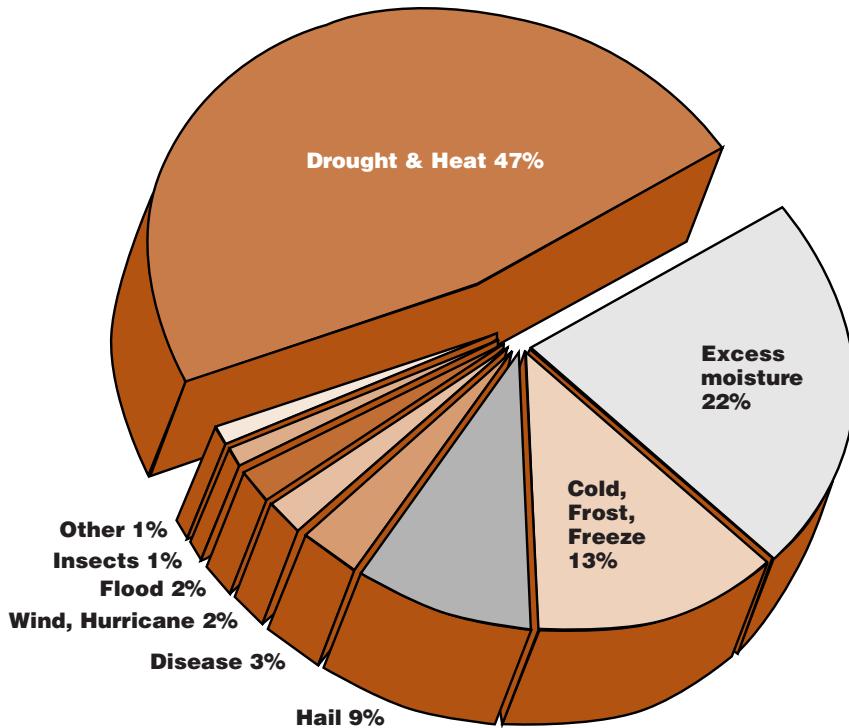
Your objective should be to manage this risk through sound planning and financial control. To do that, you should continually monitor your ability to bear financial risk.

Farm Records and Financial Analysis

A set of well-maintained financial records is an absolute necessity to maintaining financial control of a farm or ranch. The flow of information is critical in evaluating past performance and in planning for future accomplishments. Financial risk management is not achieved directly by maintaining comprehensive records. However, records do provide much of the information needed to understand critical financial risks.

Essential financial statements include the balance sheet and statement of owner's equity, income statement, and projected and actual cash flows. These records provide a history of your business and the data you need to calculate financial performance measures. Even small farms need a basic level of record keeping.

As the size and complexity of an operation grow, so does the need for financial records. Ratios such as debt-to-asset, debt-to-equity, and asset



Causes of Crop Loss These recent percentages illustrate the return to more volatile weather patterns after decades of relatively stable weather. For the first time, causes other than drought represented more than half of all crop losses.

Some Questions for Your Risk Management Check-up:

- What are my short-term and long-term goals and how do they affect my financial planning?
- Was documented historical information used in my financial projections? Was it accurate?
- Which records do I need to monitor the financial status of my operation?
- Which records do I need to document my borrowing requests?
- Which farm record and financial analysis packages might help me?
- What have been the trends in my business's key performance indicators?
- How do the ratios for my operation compare to those of similar operations?

turnover are important in monitoring overall financial performance. Other measures can be used to monitor the financial status of the business and provide guidelines for future decisions. These examine liquidity, solvency, profitability, financial efficiency, and repayment capacity of the business.

Interest Rate Risk

Investment decisions are based on assumptions about future borrowing costs or the opportunity cost of invested funds. Borrowed capital can be a reasonable expense, especially if you are prudent in the financial leveraging of your business. After all, few operations are in a position to use only equity capital for new investments. Borrowing is a vital part of most farming businesses.

Interest rate risk is mostly out of your control. However, you can sometimes influence your interest rate by lowering your debt-to-asset ratio and through the use of crop insurance coupled with a sound marketing plan. These actions by you reduce a lender's risk exposure.

Some Questions for Your Risk Management Check-up:

- What is the most effective way to monitor general financial conditions and expected changes in interest rates?
- What are alternative sources of financing and their terms and conditions?
- What can I do to reduce a lender's risk exposure and thereby ensure that I pay the lowest possible interest rate?
- Do I completely understand the terms and conditions of my borrowing arrangements, including the calculation of interest?

Liquidity and Meeting Cash Flow Requirements

Ensuring liquidity and adequate cash flow is the same as ensuring the farm's ability to survive shortfalls in net income relative to various cash obligations.

Assets classified as current on the balance sheet are assets that can be converted into cash within one operating cycle of the farm business, usually 12 months. Liquid assets include instruments that yield cash directly or that can be converted quickly to cash. Liquid assets include cash on hand, supplies, and crops and livestock to be sold within the year.

Adequate liquidity is essential to ensure a sufficient cash flow. Also, adequate liquid reserves can facilitate contingency plans for production disasters or poor market conditions.

However, excess liquidity typically generates lower rates of return than fixed assets.

Timing is critical for ensuring adequate cash flows. With proper planning of expenses, cash flow needs can be known with reasonable certainty. This allows you to plan marketing decisions in advance and to take advantage of attractive pricing opportunities. Improving liquidity to ensure adequate cash flows can include reducing family living expenditures, using resources efficiently, leasing assets, and utilizing appropriate insurance programs.

Some Questions for Your Risk Management Check-up:

- What alternative sources of income are available to me?
- What are my cash flow requirements for operating inputs, machinery, personnel, land costs, debt payments and farm overhead?
- What are some ways of reducing cash expenses?
- What are my tax obligations?
- What types of personal and property insurance do I need?
- What are the cash flow implications of a crop failure or low market prices?
- What is an effective contingency plan for meeting cash flow needs after a crop failure or a period of low prices.

Insurance

There is a lot more to risk management than buying insurance. But, insurance can complement many other risk management tools. Knowing these interactions in risk can help you get more value from your insurance dollar.

Benefits of insurance planning:

An annual insurance review should assure proper coverages and protection. Just because many insurance policies are automatically renewed is no reason to neglect an annual examination of your insurance needs. A healthy “what if” session with your insurance professionals can help identify both weaknesses and opportunities in your coverage.

Questions for Your Risk Management Check-up:

Life insurance:

- Have I compared costs and benefits of different types of policies?
- Is low-cost borrowing power “hidden” in a long-held life insurance policy?
- Is my list of beneficiaries up-to-date?
- Do I need to include an investment program in my life insurance policy (whole life), or is pure life insurance (term) sufficient?

(See other sections for crop insurance, liability insurance, health, etc.)

Family Living Costs

A significant component of financial risk is controlling and meeting family living costs. Reducing family living costs may not be feasible. But, careful scrutiny of your living costs should be an integral part of annual cash flow planning.

In certain instances, off-farm employment can be a risk management strategy. It can ensure that living costs are met and can increase the family's standard of living. It may also reduce the need to liquidate farm assets to meet family living needs.

Some Questions for Your Risk Management Check-up:

- Have family expenses followed projections?
- What alternative enterprises or employment opportunities are available?
- Are all living expenses included in cash flow projections?

Legal Issues and Security

Important legal issues are involved in borrowing. The legal language incorporated into loan contracts can be intimidating and puzzling. Nevertheless, you should have sound knowledge of the details and implications of all legal documents. You should seek the guidance of an attorney before you sign important documents.

From a lender's point of view, security and repayment capacity are essential. Liens, credit life insurance, and crop insurance — coupled with a sound marketing plan — can help to make a loan more secure in the eyes of the lender.

From your perspective, you can ensure continued access to debt capital when you need it by maintaining accurate financial records and a consistent record of timely repayment of loans.

Some Questions for Your Risk Management Check-up:

- Are certain contracts beneficial to me?
- Do I understand all the implications of a contract before I sign?
- When do I need to consult an attorney in regard to contracts?





LEGAL ISSUES ASSOCIATED WITH AGRICULTURE

Many of the day-to-day activities of farmers and ranchers involve commitments that have legal implications. Understanding these issues can lead to better risk management decisions.

Legal issues cut across other risk areas. For example, acquiring an operating loan has legal implications if not repaid in the specified manner. Production activities involving the use of pesticides have legal implications if appropriate safety precautions are not taken. Marketing of agricultural products involves contract law. Human resource issues associated with agriculture also have legal implications, ranging from employer/employee rules and regulations, to inheritance laws.

The legal issues most commonly associated with agriculture fall into four broad categories: appropriate legal business structure and tax and estate planning, contractual arrangements, tort liability, and statutory compliance, including environmental issues.

Structural Issues

The first legal issue that many family farms encounter is the nature of the entity under which the business is to be operated. Often, through lack of attention, sole proprietorship is automatically chosen. However, alternatives entities exist including partnerships, limited partnerships, limited-liability companies, and corporations (both Subchapters C and S) as well as a wide variety of trust arrangements. In addition, many States, and the Federal Government, have special statutory provisions for farms meeting certain criteria, such as "family farm" provisions.

Income and property tax consequences at the local, State and Federal level vary significantly, depending upon the legal entity chosen. Some structures lend themselves to the avoidance of estate tax and the ease of administration during probate. Liability to third parties is also a consideration in structural decisions, as is ease of operation within the chosen structure.

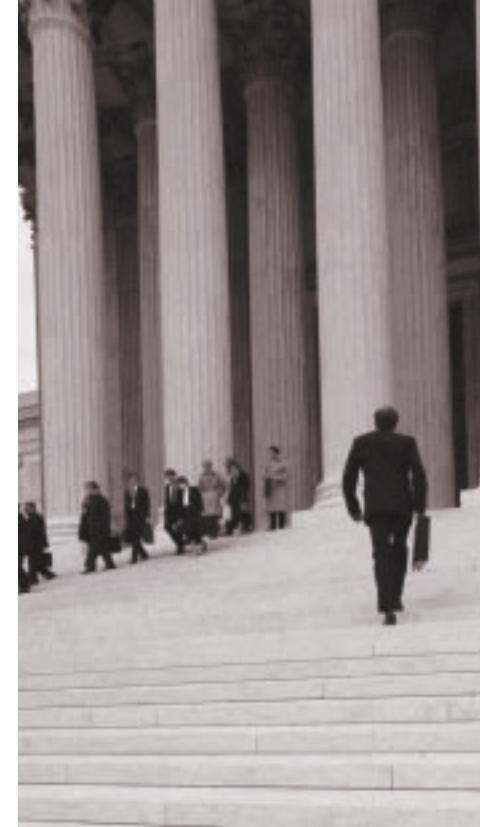
Estate planning considerations may arise in the course of making structural decisions. Estate planning mechanisms range from simple wills to family farm corporations with complex inheritance provisions. Trusts, both living and testamentary, are often included in estate planning.

Contract Arrangements

Contractual arrangements in agriculture take many forms. A contract is any agreement (written or verbal) where the parties exchange mutual promises in return for some sort of consideration or benefit.

Contracts include financial arrangements, such as promissory notes and mortgages. Leases and crop share arrangements are contracts. Many State and Federal farm programs are contractual in nature, such as the Conservation Reserve Program. Sale of agricultural products is often accomplished by contracts for future performance. Crop insurance coverage is also based on a contractual agreement. Even employment arrangements, although often not written, are treated as contracts.

A basic legal issue pertaining to contracts is their enforceability. For instance, many States have what is known as "statutes of frauds," which require that certain types of agreements



be in writing before they can be enforced. Examples of contracts which often must be in writing before they are considered valid include agreements for the sale of real estate and agreements which cannot be performed within 1 year.

Assuming a contract is legally enforceable, a concern arises as to nonperformance by a party to the contract. Obviously, nonperformance can come from the farmer or rancher, or from the other party to the contract.

In many instances, contracts specify what constitutes events of default and the remedies of the various parties in the event of default. If the contract is unclear, the courts generally employ two types of relief for breach of contract: specific performance and damages. In the case of specific performance, the breaching party is ordered to remedy the default and fulfill the contract. If specific performance is not possible or reasonable, damages are awarded to compensate the party not in breach.

Contractual nonperformance can have ramifications well beyond the scope of the contract itself. For instance, the inability to meet contractual financial obligations to your mortgage lender may result in foreclosure. Alternatively, it may force you to seek other legal recourse, such as debt restructuring or liquidation in bankruptcy.

Statutory Obligations

A huge variety of statutory mandates apply to farmers and ranchers. These include tax reporting and payment obligations, wage and hour and safety requirements, compliance with nondiscrimination statutes, termination of employees, use of pesticides and herbicides, participation in certain farm programs, and many more. Although many in agriculture are not fully aware of their legal obligations, failure to comply may have serious consequences in terms of fines, penalties and abatement.

Tort Liability

Tort liability arises from the negligent or intentional infliction of damage to a person or to property. This type of liability is commonly insured under a general liability insurance policy.

The simplest type of tort arises where someone is injured on a farm or ranch property. In recent years, tort liability has broadened significantly, to include what may be classed as employment torts, such as wrongful discharge. Another area of expansion has been in the so-called "toxic tort" area in which adjacent landowners, public groups, or others assert liability for damage to air and water quality on account of agricultural activity.

Environmental Liability

Pollution laws are a major concern for farmers. The line between point and no-point pollution is being erased by the courts. Many of the newer liability policies exclude coverage for pollution claims entirely, forcing farmers to purchase special pollution policies. The pollution policies that are available contain unique characteristics that are unfamiliar to farmers. Managing liability risk begins with understanding liability insurance coverage.

Beyond having the proper liability coverage as protection, farmers must be prepared to deal with possible criminal prosecutions by State and Federal agencies for environmental events. Liability insurance affords no protection from criminal penalties assessed against a farmer by a regulatory agency. Farmers can greatly reduce their criminal liabil-

ity exposure by formulating and following environmental audit procedures. Many good farmers fail to keep records necessary to prove compliance. Accurate records should be kept on the applications of herbicides, pesticides, and fertilizers.

Summary

When entering into any contractual arrangement, either oral or written, you should be concerned about what happens if a disagreement between the parties arises. How will disputes be handled? What is the appropriate jurisdiction if the contracting parties do not reside in the same county or State? Is one party liable for court costs and attorney's fees?

When contacting an attorney, you should ask for basic information about the attorney's familiarity with the law for particular situations. Attorneys are like other professionals in that they often specialize. For example, a good contract attorney may not have much expertise in estate planning. You should have a good understanding of fee arrangements, billing cycles, expected costs, etc., for any matters that will involve your attorney.

It is a good practice to visit an attorney prior to entering into a business transaction rather than after the transaction has gone bad. Preventive actions are often cheaper and less time-consuming.

Many States have publications on various legal topics available from the State Bar Associations. Some land-grant universities and State cooperative extension services also have lay publications about legal issues. However, for issues and concerns specific to your operation, contact a qualified attorney.

Some Questions for Your Risk Management Check-up:

- Have I reviewed my property and liability insurance policies? Do they exclude areas that concern me, such as pollution or livestock?
- Am I covered in community service activities?
- What about leased buildings or equipment?
- Are my recent acquisitions covered, such as computers or antiques?
- Do I need to perform an environmental audit? Am I aware of and do I follow environmental record keeping requirements?



HUMAN RESOURCES ISSUES

Human resources are both a source of risk and an important part of the strategy for dealing with risk. At the core of dealing with that risk, and that potential, is your approach to managing people.

Managing People

Most families that successfully work together have evolved a good management system, although they usually don't think about it as a management system. Their system flows from the interdynamics of lifetimes spent together, of giving and taking, of listening to and respecting one another. But, even small family farms can benefit as much as large operations from clearly defining how plans and decisions are to be made for the business.

Involving everyone, family and outside employees, in the planning process can create a sense of group ownership of the goals of the organization. Workers who understand why and how decisions are made, and exactly what their responsibilities are, will see opportunities for the organization and for themselves inside the organization. Formalizing planning and management can improve safety performance and reduce legal risks arising from employee relationships.

Human resource management is best viewed as a process. Seven functions describe that process:

- 1) Job analysis and job descriptions,
- 2) Hiring,
- 3) Orientation and training,
- 4) Employer/employee interaction,
- 5) Performance appraisal,
- 6) Compensation, and
- 7) Discipline.

You can learn more about these functions — what is expected from you and what you should expect from employees — from your local library and from your State cooperative extension service.

Remember, hired labor is not the only component of your human resource team. Family, managers from outside the business, consultants, and external advisory committees can also be a part of your team. It is important

that everyone on your management team understands your risk management tools.

Human resource calamities can hamper even the most carefully made and appropriate risk management decisions. Those calamities include divorce, chronic illness, and accidental death. Your risk management plans should anticipate the likelihood of human resource calamities.

Remember, risk management strategies are implemented through people. Every manager's job description should have explicit risk management duties and delegations of power and authority to manage risk.

Identifying risks and strategies for managing those risks is an important part of business planning and can give employees confidence in their own long-term future with the organization. That is especially true of family members. For family members, business planning should inevitably lead to estate planning.



Benefits of formal planning and management systems:

- Helps everyone focus on the right priorities.
- Allows the business to function during the illness or absence of a key person.
- Gives employees a better opportunity to plan their own lives.

Estate Planning

Estate planning: the process of planning for the final disposition of your life's work. Will the distribution be fair, and according to your desires? Life will be tough enough for your family and business partners after your death without leaving tough decisions for them to make. Estate planning is as much for them as it is for your peace of mind. Who should have an estate plan? Anyone with business or personal assets and with responsibility for children or parents should have an estate plan.

Benefits of Estate Planning:

- A reduction in estate tax liability, where there is sufficient wealth to exceed the legal life time limit, thereby preserving more assets for your family.
- Peace of mind for you and your family.
- A distribution of assets which is according to your wishes.
- An assurance that your business will continue with the least amount of disruption.

Questions for Your Risk Management Check-up:

- Does everyone understand our plans and decision making structure?
- Does everyone feel that they have a chance to contribute to the planning process?
- Do I understand the goals of other family members and employees?
- Do we have regularly scheduled times for reviewing goals and performance?
- Does everyone clearly understand what has to be done to be successful within the organization?

Questions for Your Risk Management Check-up:

- Do I have a will? When did I last review it?
- Have I sought professional help to guide me through this process?
- Can I find important documents such as wills, titles to property, banking and investment records? Is it possible for others to find them?

- Have I explored combinations of ownership, trusts, disposition by will, and lifetime gifting as a way to transfer assets to the next generation?



The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call 1-800-245-6340 (voice) or (202) 720 1127 (TDD). USDA is an equal opportunity employer.

Acknowledgements: Alan Baquet, Montana State University; Ruth Hambleton, University of Illinois; Doug Jose, University of Nebraska-Li; Jan Eliason, Ad Hoc Associates.