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Risk Management Planning : What You Can Do to Enhance Your Chances of Success

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Introduction

Farming always has been a risky business and, in all likelihood, always will be. However, risk exposure levels have increased as farm businesses have become larger, with increased investment and greater debt, and as they increasingly depend on purchased inputs. Changes in farm programs and trade policy have a direct impact on farm businesses. New technology frequently favors larger farms, which is one of the reasons farm numbers have fallen. Some new technology may not perform as advertised and some may not be profitable. The application of new technology frequently demands a high level of management skill. All of these factors place high demands on the managers of modern farm businesses. How can a manager cope?

There is a time-tested approach that managers can follow to increase their chances of success. This includes setting clear goals, careful planning, possessing or obtaining the resources and skills needed to implement the plan, and systematically monitoring and evaluating farm performance. Monitoring and evaluating farm performance and taking corrective actions when needed are sometimes referred to as *controlling* the business. Planning, implementing, and controlling are the three broad functions of management. Risk management is an important component of the sources of risk, identifying and evaluating the potential impacts of specific risks, and understanding and applying specific risk management strategies and tools. The approach described here can be applied to an existing business, to a proposed expansion, or to an entirely new business.

Setting Goals

Having clearly defined goals greatly increases the chance of success by focussing energy and attention, stimulating more effort and persistence, and encouraging effective work habits. However, no two individuals are alike and no two families are alike. Farm families have multiple goals and the goals of individual family members may conflict. The primary operator has both business and personal goals; a spouse may have both personal and professional goals; other family members have goals also. Furthermore, these goals will vary from family to family. Setting clear family and business goals may take a lot of careful thinking and effective communication between family members.

Many non-farm businesses and some farms have benefited from a three-step approach to goal setting. This process often starts with a mission or vision statement that describes in very general terms what the business is trying to accomplish. For example, one North Carolina dairy farm has the following mission:"To provide a high level of financial performance and family security, and a family lifestyle with time for recreation and relaxation for all involved. (Farm Name) is a respectable family owned business that markets only high quality milk and livestock. It is a farm with a high level of pride and seeks to provide a cheerful working environment and advancement opportunities for all ambitious team members." This statement says a lot about the farm and the owners.

The second step is to build on the mission statement by developing some long term objectives, say, for the next ten years. Some examples might be: To bring a son or daughter into the business; to build a retirement investment account; to pay off the farm mortgage; to make more time for family and recre-

ation. Some farm families feel more comfortable setting objectives first, then write a mission statement that ties them together.

The third step is to translate long-term objectives into written SMART goals. SMART stands for ***S**pecific, **M**easurable, **A**chievable, **R**ewarding and **T**imed.* These goals represent progress towards long-term objectives that can be accomplished in a short period of time, say, 12 months or less. For example, if the long-term objective is to retire a farm debt of $200,000 over a ten-year period, the SMART goal might be to reduce the indebtedness of the farm by $20,000 by December 31, 1999. It is important to write goals down because it is well documented that people who have written goals are much more likely to achieve them than those who do not.

Each of these three steps is important and interrelated. The mission statement provides the general sense of direction, helps tie objectives together in a coherent manner and helps set broad priorities. Having clear long term objectives helps guide the development of the individual SMART goals and short term priorities. Short-term goals may need to be adjusted as business and family circumstances change, but the mission and objectives are less likely to change.

From a long term, whole farm perspective, "success" may be viewed as the achievement of the most important objectives and goals a family has set. However, the future is uncertain and situations or events can occur that would prevent a family from achieving their goals. Risk is usually defined as the chance of some type of loss or unfavorable outcome, or to be exposed to the chance of loss. Therefore, the intent of risk management is to reduce the risk of loss in order to increase the probability of success. "Increasing the probability of success" provides a broad perspective on risk management and one that has several components, including a comprehensive approach to planning and decision making.

Planning

To achieve family mission, objectives and goals, the manager of every farm business must decide what to produce, how to produce it and where to produce it. Strategic planning is a logical process for making these decisions. Strategic planning takes time, skill, and a lot of information. It may require the assistance of outside advisors. However, the process enables the manager to identify alternatives, evaluate and discard ideas that are not feasible, select the preferred alternative, and identify potential problems and work to resolve them. The result is a well thought out plan with a higher probability of success.

Strategic planning includes the following steps:

1. Inventorying business resources;
2. Analyzing past performance;
3. Identifying alternatives;
4. Evaluating the business environment;
5. Evaluating the production, marketing and financial feasibility of alternatives;
6. Making a decision;
7. Developing an implementation plan;
8. Developing a plan for evaluating outcomes and performance.

Risk and risk management are integral parts of items 4 through 7. Evaluating the business environment, item 4, should include an assessment of the key sources of risk that affect the business. These specific risks can then be considered in the assessment of production, marketing and financial feasibility, item 5. The evaluations normally would include an assessment of variability in production, prices and financial performance and the impact of unfavorable outcomes on business performance. Past performance of an existing business, item 2, can provide historic information on the variability in yields, prices and financial performance. There are a number of decision tools that incorporate risk and allow the manager to make informed decisions, item 6. A well thought out, written, implementation plan helps ensure the important elements have been considered and helps identify and work around potential problems.

Having a clear goal or purpose in mind fosters sound decision making. Even though some family goals will be non-financial ones, there will be important financial goals for the farm business that may include profit levels, income for family living, net worth, and cash flow feasibility. By definition, business decisions involve choices between alternatives and there may be several possible outcomes or consequences for each decision. The outcomes or consequences of decisions are seldom, if ever, known in advance because we lack the necessary information.

Strategic plans involve long-term decisions but businesses operate in an ever-changing environment, which adds elements of risk and uncertainty. For this reason, strategic planning is a continuous process and managers must always be on the lookout for changes in the business environment that might threaten the business or create new opportunities.

Planning does not end there, however. Strategic planning maps out the big picture. More specific short term or tactical plans will be required also. Each tactical plan should describe specifically what must be done to achieve a clearly defined short-term goal. This plan states what must be done, how it is to be done, who is to do certain tasks, and when the tasks need to be completed. These plans are intended to help the manager and the farm

workforce get work done right the first time and on time. Time spent on tactical planning can increase the effectiveness and efficiency of the business.

Risk Management

If the manager of a business is to manage risk, he or she must have (or must develop) a broad awareness and understanding of risk and risk management and an appreciation of the value of incorporating risk management into strategic planning and decision making discussed above. A manager must also develop and implement the tactical plans needed to manage specific risks.

Risk management includes (a) an understanding of sources of risk and the ability to evaluate the impact of specific risks; (b) the ability to set risk management priorities; and (c) an understanding of risk management strategies and decision making tools.

A. Sources of Risk

Describing and categorizing risks in a meaningful way can help a manager develop an understanding of the sources of risk, which is essential in the development of effective risk management strategies.

There are five fundamental sources of risk:

1. Weather and other natural phenomena. Local weather affects yields and quality, both directly through temperature and precipitation and indirectly through impacts on pest populations. Global weather affects world production and prices. Weather and other natural phenomena can cause many types of natural disasters.
2. Technology. Technology is embodied in farm operating inputs, such as seeds and pest control products, and capital assets, such as machinery and buildings. The performance of existing technology is not known with certainty (efficacy). The performance of new innovations is even more uncertain but, once established, may render current farm practices and assets obsolete. Early adopters of new technology take more risks because new technology may not work under certain conditions and may not be profitable. However, when new technology does work the early adopters earn the greatest rewards. Those who wait to adopt have more information available because of the activities of the early adopters, but the major benefits may have already been captured.
3. Social attitudes. The attitudes and preferences of society as a whole affect the demand for farm products directly, and indirectly they influence government policies and regulations.
4. Institutions. This encompasses a wide array of government policies and regulations, the legal framework of society and business, and industry structure and performance. Government policies are pervasive and include farm, trade, macroeconomic, and environmental policies. Health and safety policies and regulations affect productivity and cost. Laws determine or influence business and economic behavior by defining what is legal and what is criminal activity, and by affecting business incentives and opportunities.
5. Individual human behavior. This category includes the level of knowledge and skills of the primary operator; the family situation (health, personal relationships, etc.); the knowledge, skills and behavior of key employees; the behavior of third parties (failure to fulfill business contracts, negligence, criminal acts, etc.).

These sources of risk affect the farm and the family in a variety of ways. The effects may be categorized by the specific nature of the negative impact inflicted on the family or farm business:

1. Reduced revenue generated by the farm;
   - a. Smaller quantity produced
   - b. Reduced product quality
   - c. Lower price
2. Increased operating expense incurred;
   - a. Reduced effectiveness of inputs used
   - b. Increased input price
3. Increased annual ownership costs;
   - a. Reduced efficiency
   - a. Increased depreciation charge
   - b. Increased interest expense
4. Increased demands on time of manager and family labor;
5. Loss of assets or reduction of asset value;
6. Loss of liquidity (cash flow problems);
7. Financial claims are made against the business;
   - a. For family income needs,
   - b. To settle family or third party claims.

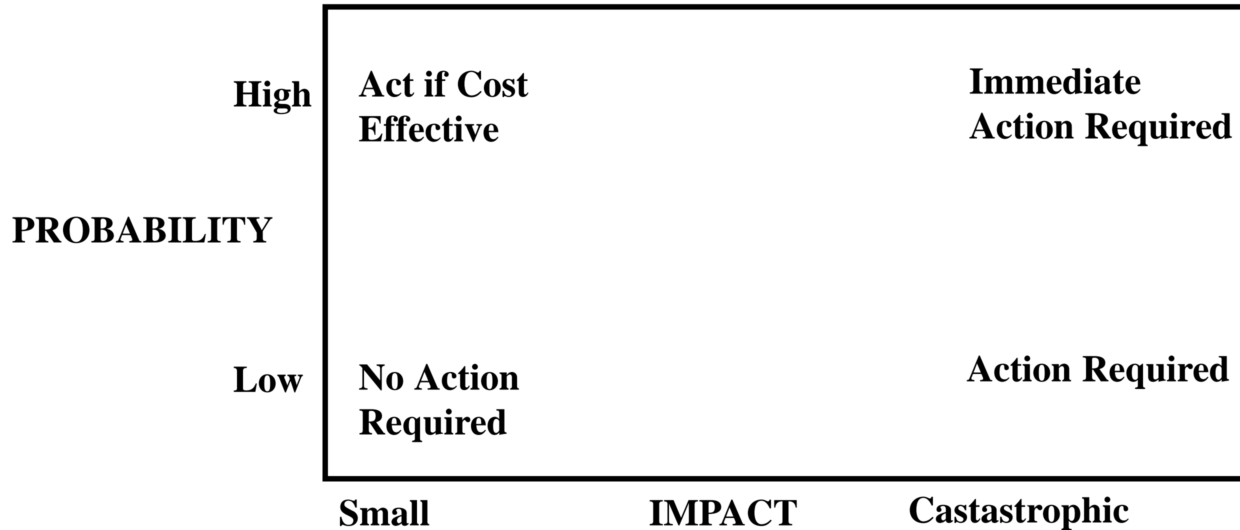
If risks are to be managed, the manager must consider both the probability of an undesirable event occurring and the size of the impact that event might cause.

B. Setting Risk Management Priorities.

Risk has two components: (a) The chance or probability that an unfavorable event will occur, and (b) The impact of that event if it does occur. For many types of risk, say yield reduction because of "bad" weather, there is a whole range of possible outcomes. This implies that for each type of risk the manager must be concerned with the number of possible events or outcomes that could occur, the likelihood or probability attached to each of these and the magnitude of the impact of each of the possible outcomes on the business. A comprehensive approach to risk management means assessing the potential impact of the multitude of risks faced by the business and then addressing these risks in some order based on importance or significance. To assess the financial impacts of various risks, the manager must have a sound grasp of the financial performance and status of the business. In this way, the manager can assess the potential impact of different risks on the achievement of family goals.

Figure 1 provides a starting point for establishing priorities among different risks in a comprehensive fashion.

Figure 1. A Qualitative Approach to Prioritizing Risk



C. Risk Management Strategies.

The third component of risk management concerns strategies and tools or aids to help the manager in reaching a decision on what action to take to manage a specific risk. There are three basic strategies:

1. Reduce the probability of an unfavorable event;
2. Self-insure and accept the impact if an unfavorable event occurs;
3. Reduce the impact on the business if an unfavorable event occurs by shifting the risk to others.

Each category includes a large number of specific actions that can be considered.

Reducing the probability of an unfavorable outcome can be accomplished by effective strategic planning. In particular, managers can improve their management skills and increase their knowledge base, either directly through self-improvement or indirectly by using outside advisors. Included under this heading are:

- A thorough understanding of the external environment within which the business operates and of the trends and forces that could change the operating environment in the future.
- An understanding of the management process and of the production processes of the enterprises that comprise the farm business. This knowledge base would also include an understanding of past farm performance, both physically and financially, and knowledge of the current financial status of the business. It would also include knowledge about the historical variability of key variables, such as yields and prices.
- Skill development, which runs the gamut from production skills through labor and financial management.

All of these activities impose costs in the form of time (opportunity costs) and money.

- Reducing production risk by spreading production geographically, but this is likely to cause costs of production to increase.
- Building net worth can help a business survive the impact of many risks, but may be achieved by foregoing credit financed business opportunities or reducing family living withdrawals.
- Building excess production capacity is a form of self-insurance, including investing in oversize equipment, keeping back-up equipment, and carrying extra labor. This reduces the odds that production related activities will be delayed, but adds to costs.
- The form of asset ownership and business organization may also be used to limit the impact of adverse outcomes. This includes leasing versus owning farm assets, the proportions of equity and debt capital invested in the business, and the legal form of business organization.

Reducing the impact by risk transfer may involve

buying insurance of one form or another, including indemnity insurance, life insurance, and multi-peril crop insurance. This incurs costs in the form of insurance premiums. Price risk can be reduced by hedging, options, forward contracting, etc. but management time is required and there are transactions costs.

For any given risk there may be more than one risk management strategy, there may be several options under each strategy, and the effectiveness of each option may be different. Furthermore, the financial status and performance of the business affects the choice of strategy. Decision criteria and tools are needed to evaluate alternative risk management options. Many tools are available, such as, sensitivity analysis, payoff matrices, risk-rated returns, decision grids, and contingency planning. However, risk management makes demands on a manager's time and the specific risk management options are not costless, so benefits and costs must be weighed.

Implementation

Implementation is an essential component and requires a wide array of aptitudes and skills. Most farmers are good at implementing the production part of a plan—probably better than many other three areas of management—marketing, goal setting, planning and controlling. Implementing a production plan means acquiring the resources called for in the plan, including land, facilities, equipment, and working capital. It includes acquiring and managing the human resources, both hired employees and family. Implementing a risk management plan requires additional information and skills in the various areas of risk, including production, market, financial, institutional, and human resource risk. In general, the needed information and skills cover risk management strategies and tools, the effectiveness of these alternatives, and decision criteria and tools. Time is required to evaluate and make timely decisions about specific risks. Implementation may be a continuous process, for example, tracking market developments when futures and options are used to manage price risk.

Self-management is also part of management. It includes taking the time to manage and developing the skills required of a manager, including information management and problem solving. An assessment of past business performance, knowledge and skills relative to managers of similar businesses may help an individual manager determine his or her strengths and weaknesses. This, in turn, may suggest areas where professional development would be helpful, or where assistance from outside professionals is required.

Controlling

Controlling is the third area of management. It consists of monitoring farm performance and evaluating results against clearly defined standards or targets. These targets could be production related, such as per acre yields, animal growth rates, or feed conversion rates. Or they could be financial, such as cost of production per bushel, return on investment, or income generated for family living. Monitoring performance of key performance factors allows early detection of unfavorable outcomes, such as yields and prices. Monitoring financial performance such as debt-to-asset ratios, net worth trends and cash flows will show changes in the financial status of the business and its ability to bear risk.

Effective monitoring requires timely information from a record keeping system designed specifically for this purpose. Evaluating performance regularly relative to previously set standards allows a manager to spot problems early and take action. Minor problems may be easy to solve with a little fine-tuning but major problems may require an entirely new strategic plan.

In addition to controlling business performance, managers must also monitor the external business environment for impending changes or unexpected events that may create either problems for the business or new opportunities.

Summary

The approach to risk management described here has four parts: goal setting, planning, implementing the plan, and controlling or evaluating the results. Goal setting provides direction and the other three parts describe the process of managing the business to achieve these goals. Risk management is a component of planning and implementing.

A manager must be aware of risk and the importance of risk management in achieving family goals. This includes an understanding of the sources of risk and the impacts unfavorable events can have on the family and farm. This helps managers identify gaps in their current risk management program and set risk management priorities.

It is relatively easy to define and categorize a number of risks and discuss risk management strategies in general terms. However, risk management strategies impose added costs and make added demands on managers' time. Therefore, priorities must be set between risk management and other management

functions. Within the time allocated to risk management, the manager must set priorities among the various risks facing the family and farm. Once priorities are set, the manager's attention can turn to specific risk management strategies and decision making processes and tools. Outside assistance likely will be required, because these decisions can be complex and specific technical knowledge often is required.

Clearly, managing a business in a risky environment places high demands on a manager's time, energy and skills, but there is no other way "to increase the probability that the family will achieve success."

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