Risk Management at the Farm Level

William W. Riggs

Introduction

Alfalfa hay and other forage producers often become complacent when they hear the term Risk Management. Most often this is attributed to the misunderstanding that risk management programs relate only to managing financial risk via future, options, hedging, forward contracting, or crop insurance programs. While these tools are available most forage producers have not had the opportunity to fully understand that risk management is much more encompassing and has a multitude of layers for today’s producer or farm manager. Risk management contains a number of parameters, Sources of Risk and Uncertainty, Risk Bearing Ability and Attitude, and Tools for Managing Risk. This article is developed to provide a more in depth look into the intricacies of risk management and its use on farms producing forage crops.

Sources of Risk and Uncertainty

In the forage industry there are many sources of risk, especially at the production and technical level. Weather, insects, weeds, inputs costs, machinery, and adoption of technology, all have risks tied to the production of the forage crop. While weather can’t be controlled we can take steps to reduce risks associated with it. The world wide web technology provides an array of data that helps monitor and forecast certain weather events. In addition sites such as Agimet (http://www.usbr.gov/pn/agrimet/) provide current and historical data that can be evaluated and used for decision making.

Other production risks can be addressed as well. For example the Western Alfalfa Hay and Forage Conference provides numerous sessions addressing risks associated with pests, soils management, water management, fertilization, technology, and a host of other subjects that are basically risk management opportunities supported by current science. Managing the risk associated with the inputs used to produce the forage product is a daily task for most producers and farm managers. Without realizing it they are managing risk through changes or by addressing production and technical risk.

Price and market risk, the subject that most producers think of when evaluating risk management, is the next major source of risk. Being in agriculture often dictates that we are what is know as in a perfect market place. As such producers often find themselves in the price taker market position, that is, the product is sold at what the current market will bear. Addressing price and market risk is also a regular chore for the producer and

---

1 Willie Riggs, Cooperative Extension, University of Nevada published in: Proceedings, 2006 Western Alfalfa & Forage Conference, December 11-13, 2006, Reno, Nevada Sponsored by the Cooperative Extension Services of AZ, CA, CO, ID, MT, NV, NM, OR, UT, WA, WY. Published by: UC Cooperative Extension, Agronomy Research and Extension Center, Plant Sciences Department, University of California, Davis 95616. (See http://alfalfa.ucdavis.edu for this and other alfalfa proceedings.)
manager. However risks associated with price and market can and are being addressed by a number of producers in the west. Niche and value added markets are continually opening up for those producers willing to become a price setter as opposed to a price taker. Markets related to companion pets, organic dairy, certified noxious weed free, and others provide the grower the opportunity to arrange the product for sale in a different form which the consumer will pay for. As hay producers in the west price and market risk are addressed with each cutting. In the Great Basin first and third cut is managed as test hay and marketed towards the dairy industry. Second may be managed towards retail feed stores, companion pet owners, or as livestock feed. Targeting each crop towards a different buyer helps spread the price risk across more markets and allows for higher probability of profitability.

**Financial risk** is a source of risk that is often recognized but not addressed until its too late. Keeping and analyzing financial records ranks as one of the least palatable tasks that a grower or producer wants to accomplish. While undesirable it is just as important as any other source of risk. In fact, if financial risk is not addressed, the future of the farm may be a stake. A regular reference to the farm plan and the financial statements of said plan will allow the producer manager an opportunity to evaluate short and long term profitability of the production unit, i.e. the farm. Regular reference to the financial statements should be conducted in order to evaluate “what if” scenarios. These scenarios often have associated risks and tracking those risks into the long term profitability of the farm is important.

**Legal risk** pertains to more then just being worried about lawsuits. Forage products as stated are often marketed to a number of different buyers. Contracts sometimes are involved in these dealings and need legal addressing in order to be relevant. In addition changes in ownership, water rights issues, land use and planning, all have legal risks that are associated with them. Addressing legal risks at all levels of production is sound risk management.

**Personal risk** completes the category of sources of risk. This risk factor pertains to more than safety on the farm issues. Items such as health insurance, life insurance, and management backup are important to recognize as risks. Ones mental and physical well being must be monitored and satisfied as risk management across the other subjects is address.

**RISK BEARING ABILITY AND ATTITUDE**
This topic is by far the most personal of any risk management concept. Each and every grower/manager has a different attitude towards risk. Some will put it “all on the line” will others manage at an extremely conservative level and don’t put anything at all “on the line”. This individual willingness to take risks should not be judged, but should be recognized. By understanding the risk bearing ability and attitude, efforts related to risk categories can be better managed.
For example the ability to bear risk changes as financial reserves fluctuate. The higher the financial reserve the more ability a grower/manager has when taking risks. Thus a farming unit with a large amount of capital can withstand larger losses then a farming unit analyzing risks with limit capital resources. Larger capital resources allow for larger losses before the farm becomes insolvent.

The willingness to accept risk is also very personable. Some growers/managers will refuse to take even the slightest risks even if they have the capital resources, no dept, and large cash flow. This willingness can be influenced by a number of factors such as age, equity, financial commitment, past financial experiences, and the size of the potential gain or loss.

TOOLS FOR MANAGING RISK
Once a grower/manager understands the different levels of risk management they can begin to utilize an array of tools to assist in the decision making process. Tools that can assist in the establishment of minimum income levels, production levels, or price levels can be used to implement additional practices. The grower/manager can maintain flexibility in the decisions making process once the level of risk is established. They can also then improve the risk bearing ability for the farm through time.

At the production level risk can be achieved through diversification, addressing insurance needs (crop insurance programs), evaluating additional production capacity, analyzing share leases, utilizing existing equipment for custom hire, aftermath grazing programs, and developing alternatives for the inputs used on the farm. Evaluating production risks on a small level, such as 5-10 acres for a year, may provide needed information prior to adopting a practice over an entire acreage. Leasing or custom hiring of different equipment allows for evaluation prior to outright purchasing of a new piece of machinery.

Once the forage is produced the risk associated with marketing can also be addressed. Spreading sales across multiple buyers or client bases, evaluating contract sales, or flexibility in bale size all address marketing risk. Evaluating small niche markets, or developing new clientele bases also allow for risk management in marketing.

When evaluating financial risk tools such as fixed interest rates, restructuring of debt, self liquidating loans, use of owners equity or estate transition can be evaluated. These financial risk evaluations should be done at the short and long term level to evaluate risk through time.

Legal risk tools incorporating formal business organization, estate planning, leases, sales contracts, and liability insurance have to be addressed.

SUMMARY
Risk management is more then crop insurance programs. While crop insurance is an option, today’s forage grower/manager must also address risk at a number of levels.
Being able to identify and incorporate risk management strategies relating to production, technical, price and market, financial, legal, and personal levels will help meet the goals and objectives of the farm plan. Understanding ones level of risk tolerance will add in the process of incorporating additional risk management opportunities. Incorporating and implementation of new ideas and tools into the management of the farm will assist in meeting the long term financial well being of the farm production unit.

**RISK MANAGEMENT WEB SITES**

The National Ag Risk Education Library
http://www.agrisk.umn.edu/

Introduction to Risk Management

Texas Risk Management Education Program
http://trmep.tamu.edu/cg/list.htm