

RISK MANAGEMENT ALTERNATIVES

why Manage Risk?

Risks threaten the <u>security</u> of future necessities and wants of life.

Perils such as fire, crop loss, or disability can damage assets, interrupt income, and affect the future enjoyment of life. For this reason most farmers elect to manage their risks (i.e., do something about them) rather than simply accept them as they are.

Associated with the desire for security are the financial losses that a farmer can experience as a result of risk. These losses can cripple or destroy businesses and/or families, and come in different forms -- direct losses (property), indirect losses (profits), and loss of human life values.

In addition to the actual loss associated with a risk, the uncertainty surrounding risk adds to its cost. Money that is "put aside" to cover unexpected happenings could be used in a more productive manner. The inability to correctly predict the chance or extent of loss causes too much or too little being "put aside", resulting in wasteful or insufficient preparation. The cost associated with worrying about risks is difficult to judge but is nonetheless costly. The "opportunity cost" of worry time is great when the value of other things that could be done are considered.

<u>l</u>/ Series prepared by A. Lines, Extension Economist, and J. Howell, D. Miller, W. Smith, and D. Moore, Area Farm Management Agents in the Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.

Methods of Handling Risk

The methods of dealing with the economic risks that farm families face can be classified under six headings: (1) risk avoidance, (2) risk retention, (3) hazard reduction, (4) loss reduction, (5) risk shifting, and (6) risk reduction.

Risk Avoidance

The most obvious method of handling risks is to avoid them. Many risks and subsequent losses associated with farming can be avoided by deciding not to start farming or to sell out. Risks associated with livestock can be avoided by electing to produce only crops and vice versa. Farmers regularly avoid some of the risk associated with disease by planting disease resistant varieties and by intentionally infecting livestock. Most risks associated with farming cannot be avoided, however, and must be handled in some other way.

Risk Retention

If a risk has not been avoided, a farmer may keep it, planned or unplanned. Unplanned risk retention occurs more often than not, and may be the result of one or more of the following: (1) lack of knowledge of the risk and/or the severity of loss, (2) inability to make a decision or simply putting the decision off, and (3) ignoring unimportant risks. Planned risk retention, on the other hand, is the result of a conscious effort to do something about the risk. An important part of this decision will be the farmer's willingness and ability to sustain the associated loss if it does occur. There are a number of reasons why a farmer might plan to retain a risk: (1) the risk may be uninsurable, (2) the loss may be too small to be of concern, (3) the loss may be frequent enough that it can be treated as an operating cost, or (4) the cost of protection may be too great.

Hazard Reduction

Reducing hazards is an attempt by the individual to prevent losses.

Farmers can do many things to reduce the hazards associated with their business: (1) adhere to building codes, (2) keep pto guards in place, and (3) wear respirators when using toxic chemicals, etc. Hazard reduction, however, is only a partial treatment of the risk involved. The risk still exists but some of the uncertainty has been removed.

Loss Reduction

Efforts to reduce losses, in the event a peril does materialize, is another partial treatment of risk. Smoke and head detectors, fire extinguishers, and automatic sprinklers do not reduce the likelihood of a fire but may result in a less costly fire. Farmers producing livestock in confined buildings are very susceptible to the risk of power failure. Many of these farmers have installed self-starting generators to reduce the loss associated with this risk. Another example is the temperature sensing device for grain bins that farmers use to reduce losses from grain that may overheat.

Shifting Risk

Hedging is the classic example of a farmer shifting a risk. A producer of crops and/or livestock doesn't know what the price will be when his product is sold. Farmers can shift this risk to speculators by contracting for a price in advance of sale or by selling a "futures" contract.

Incorporating the farm buisness is another method of shifting risk.

The owners of an unincorporated farm bear the risk that assets will be insufficient to pay all claims against the business. Incorporation shifts this risk to the creditors.

Reducing Risk

Traditionally farm businesses have diversified to reduce the risk of complete failure. Although it is decreasing, farmers continue to use diversification as a method of reducing risk. Diversification increases the number of risks a farmer is exposed to, but the uncertainty of total failure is much reduced.

Improving one's management ability or hiring good management can and does reduce risk. The more adept the manager is at controlling the business, physically and financially, the less uncertainty and risk there is.

Another method of reducing risk is by insurance. Farmers know that some tractors, houses, combines, or etc. will burn but are uncertain about their own. As a consequence they are uncertain about the loss they may incur in the event of a fire. By combining risks with other farmers, through an insurer, a farmer reduces the uncertainty (risk) of loss. Each member of the insurance group knows what their loss will be in the event of a fire and can plan for it.