

Some Critical Farm Management Concepts

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The longer term financial and economic outlook for agriculture is for modestly lower incomes and somewhat increased financial pressure than has existed during the past few years. Undoubtedly the “tried and true” management strategies to respond to tighter margins such as controlling costs, reducing debt loads (or at least borrowing carefully), increasing efficiency and productivity, and using various marketing strategies to reduce risk and enhance price should be reemphasized in this environment. However, it is also important to focus on longer term strategic issues for successful management of a farm business; that is the focus of this discussion.

Successful management of farm firms is an increasingly complex process. Undoubtedly, each farm business has its own unique characteristics which make generalization difficult, but the following twelve management concepts appear to be relevant to most farm firms.

1) Management Functions.

Management involves performing the three fundamental functions of planning, implementation, and control in the three fundamental fields or areas of production, marketing, and finance (Boehlje and Eidman). Other analysts have added additional functions such as staffing, as well as additional subject matter areas such as logistics and distribution, to the list. But, in essence, the management matrix of Figure 1 summarizes the key fields and functions of management. To be a successful manager, performance is required in all nine field/function cells. A manager must realistically assess his ability and/or the time available to devote to each field/function cell and, if this assessment suggests a deficiency, that management skill should be acquired through redirecting managerial effort, restaffing, or hiring appropriate external management services.

		Fields		
		Production	Marketing	Finance
Functions	Planning			
	Implementation			
	Control			

Figure 1. The Management Matrix

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2) A Commodity Business.

Agriculture is fundamentally a commodity business where product differentiation is not impossible but difficult. Porter’s discussion of competitive strategy indicates that there are three fundamental approaches to acquiring a sustainable competitive advantage: a cost leadership approach, a product differentiation approach, or a focus approach (specialization) (Porter). Because of the commodity nature of agriculture, the differentiation strategy is difficult to implement. Consequently, most farm firms must develop a competitive advantage through cost leadership or focussed specialization; even specialization will not be an effective long-term strategy if costs are not competitive. It may not be too strong a statement to conclude that since agriculture is a commodity business, the low cost producer will be the survivor.

3) Cost Structure:

In contrast to many manufacturing and other non-farm businesses, the cost structure in production agriculture is characterized by a relatively large proportion of total costs that are fixed in nature. There are two critical implications of this high fixed cost structure in production agriculture. First, plant “shut-down” decisions are much less responsive to price decreases in production agriculture than most industries. For example, in the automobile manufacturing business, where a large proportion of the total costs of production are variable costs, modest declines in automobile prices will result in the “shut-down” of the factory because prices won’t cover variable costs. Recall that in the short run the plant “shut-down” decision occurs when prices or revenues do not cover variable costs: fixed costs and total costs are irrelevant in the plant “shut-down” decision. In contrast, with a much smaller proportion of total cost being comprised of variable cost, as is the case in production agriculture, prices and revenues can decline substantially more and in percentage terms before plant shut-down occurs. Consequently, farmers are more inclined to produce themselves into a surplus situation compared to their counterparts in the manufacturing sector.

The second implication of a high fixed cost structure is that fixed asset utilization is critical; when farmers encounter financial stress, it is difficult to relieve that stress through typical cost containment ap-

proaches. For most producers in financial trouble, the fundamental problem is excessive fixed cost (interest, depreciation, taxes, and insurance) rather than variable cost (seed, fertilizer, chemicals, feed, etc.). Thus, the most successful strategy will require spreading those fixed costs over more output by increasing the thru-put (increased volume with the same asset base), or selling the fixed assets that are resulting in the excessive fixed cost.

4) *Profit Margins.*

It is critical that producers focus on profit margins rather than prices. Profit margins are a function of input prices, efficiency, and product prices. Even with low product prices, profit margins can be enhanced (or losses reduced) by paying less for inputs, buying fewer inputs, and increasing the efficiency of input utilization to get more product per unit of input. In fact, producers may have more leverage or control over what they pay for inputs and efficiency in input use than over product prices because of the competitive nature of the commodity markets, and the high fixed cost structure of agriculture that results in a bias to excess production. Many producers focus their efforts on obtaining higher commodity prices, but in reality profit margins can be large with lower commodity prices and small with higher commodity prices, depending upon cost of production.

5) *Purchasing Decisions.*

Significant opportunities exist to enhance profit margins through smart buying decisions in production agriculture. Farmers should be comparison shoppers with detailed knowledge of the price and service options of dealers within their geographic region and beyond. In many cases, differences of 10-20 percent can be found in fertilizer, chemical, and feed prices from dealers who are equally accessible to the producer. Producers should attempt to obtain volume discounts or other concessions by purchasing seasonal products in off-season when discounts are available. Producers should hone their negotiating skills so as to obtain the best price and service combination available. Product and service should be unbundled so that producers know what they are paying for the product and what charge is associated with a service such as delivery or application. In many of the input industries servicing agriculture including feed, chemicals, fertilizers, and machinery, excess plant capacity means that manufacturers and dealers are more willing to negotiate prices and services than in the past when excess demand characterized these industries.

The first important marketing decision made in any agricultural enterprise is buying the inputs properly, whether it be the rent paid for the land; the price of the fertilizer, seed, and chemicals; the price paid for feeder livestock; or the price paid for capital assets such

as land, machinery, and equipment.

6) *Marketing.*

Significant payoffs result from market planning and implementation. Market planning requires answers to the following six questions: When to price? Where to price? How to price? What form, grade, or quality to sell? What services to utilize? When to deliver? The two key elements in successful marketing decision making are developing a plan, and having the discipline to follow through with the plan unless fundamental conditions change. The most effective marketing plans are written and include specific answers to the above questions based on current information of fundamental supply and demand relationships and production schedules and efficiencies. A written plan that includes “trigger prices” which designate specific prices when marketing decisions will be implemented is critical to the development of discipline in market planning.

In addition, producers must develop a system for monitoring and evaluating their effectiveness in performing the marketing function. Components of such a system would include whether a plan has been developed, whether the plan has been followed, prices actually received compared to what the potential price could have been, the proportion of the products sold near the high or the low of the price range, the range or variance in prices received compared to what might have occurred, etc.

7) *Strategic Planning.*

An extremely important challenge that must be confronted by producers is that of the problems and payoff of strategic planning. Farmers suffer from what might be called a “hit the wall” syndrome — changes in direction don’t occur until major and dramatic problems are encountered. Producers are very effective tactical planners; they can get the job done in spite of the weather or machinery breakdowns. But additional emphasis should be placed on strategic planning — emphasizing the strengths and weaknesses of the firm and the opportunities and threats of the environment. This focus requires long-term planning — thinking about the next 3-5 years and how the business fits in international, as well as domestic, markets.

When the focus is on strategic planning, the role of information becomes critical; while the owner of capital was in control in the past, in today’s environment, the controller of information has ultimate control. Information is a critical resource, suggesting that significant outlays to obtain it will have a high payoff. One of the critical steps in strategic planning is to identify a firm’s sustainable competitive advantage that would allow it to be viable in the long run. As noted earlier, for farm firms involved in the commodity business, a cost con-

tainment or cost control strategy is typically required to be the low cost producer. Today's successful farmer must implement a strategic plan that focusses on what it does better than its competitors, but is sufficiently flexible to allow adjustments to changing environmental conditions and competitor strategies.

Strategic planning implies scenarios — thinking about the future not in terms of just a single expectation, but thinking in terms of two or three alternative futures. Planning for these alternatives requires the development of contingency plans. The contingency planning concept necessitates planning for events that might occur rather than attempting to predict the future with certainty and operating with only a single plan.

8) *Risk Assessment and Management.*

The risk faced by most producers can be classified as operating risk and financial risk. Operating risks are those price, yield, disease, weather, liability, technological, and other risks that are a function of the day-to-day operation of the business. Financial risk is the additional risk exposure that the firm faces when it borrows money and incurs the fixed obligations of debt service payments. Financial and operating risk are not simply additive; the financial risk of borrowing money magnifies or multiplies the operating risk and, thus, increases the total risk of the firm.

The typical farm business of today encounters high levels of risk. During the 1970's producers paid little attention to the increased risk in farming. When farmers "rolled the dice," the dice often came up "winners" due to inflation, relatively good weather, and a strong export demand. However in the 1980's low inflation, poor weather, and a faltering export demand caused the dice to come up "losers" much more often.

Farmers weren't prepared — they had borrowed lots of money, reduced their liquidity and were not using risk management practices, such as crop insurance, hedging, or forward contracting. Many learned a painful lesson as they sold off part of their farms! The move toward containing cost in the 1990's will create additional risk. Decisions to decrease cost by banding herbicides must be weighed against the additional risk associated with not having suitable weather for cultivation. Decisions to decrease investments by reducing machinery size must be weighed against the increased possibility of reduced yields due to planting delays from unfavorable spring weather.

Controlling risk means using the traditional risk management tools such as insurance, participating in government farm programs, using forward contracting and hedging techniques, holding extra feed inventories in case of a short crop and borrowing less money. Another risk management tool is to maintain a portion of the farm assets as liquid assets that can easily be

converted to cash to cover losses in years of low prices or yields. In 1950, liquid assets made up 27 percent of total assets. During the 1970's, many farmers converted liquid assets into fixed assets such as machinery and land. By 1980, the portion of liquid assets had dropped to 11 percent. This reduced liquidity of agriculture and made it more difficult to respond to the financial stress of the 1980's.

9) *Capital Structure.*

During the 1970's, low interest rates combined with high rates of inflation suggested that debt financed expansion was the best strategy and that there was little risk in borrowing. The painful lesson that there is a risk-reward ratio with borrowed money, and that with increased leverage the risks increase more rapidly than the rewards, is now apparent. Farmers are now using credit in a more judicious fashion — they are borrowing smarter. They are more aware of repayment capacity and safe debt loads tied to income and cash flow generating ability rather than collateral and asset values.

Many farms in financial difficulty are well organized, of adequate size, and use appropriate technology, but have excessive leverage. In a few cases, recapitalization may be possible and appropriate. This can be accomplished by adding equity from an outside source. In some cases, family members may be willing to provide such as equity infusion to protect the integrity of the family business. An expected future inheritance of nonbusiness assets could be converted into current cash through sales to other family members. A nonfamily investor might be willing to contribute capital for a larger-than-proportionate share of the ownership of the farm.

Recapitalization may also occur through using a sale-leaseback agreement. In this case debt would be repaid with the proceeds of the sale of land or other assets, but the size of the business would remain unchanged if the assets were leased back. Limited partnership arrangements may also provide a way for highly leveraged firms to recapitalize and continue operating.

Ownership is the preferred method of obtaining the control and the rights to use productive assets in agriculture. But there are other methods, including leasing. The implications of different real estate lease terms, in addition to the traditional cash and crop-share arrangements (e.g., multi-period lease arrangements; sharing of outlays for and benefits of the permanent improvements; and the sharing of cost, risks, and responsibilities for soil erosion and environmental degradation), merit further analysis. Leasing of other capital assets (e.g., machinery, equipment, buildings, and breeding stock) has not been particularly popular in agriculture, but may have more potential than we now perceive. An interesting question is, "Why is leasing used more frequently in the business sector generally, and specifi-

cally and increasingly, for personal as well as corporate automobiles and trucks as compared to the agricultural sector?" More generally, the costs and benefits of diversified financing, such as using the optimal mix of farm and nonfarm equity; debt with various rates, terms, and repayment characteristics; and various forms of real estate and capital asset leasing arrangements are worthy of detailed investigation.

But ownership and leasing do not exhaust the options available for resource control. Some farmers obtain certain machine services by exchanging labor or other machine services for them. Various schemes for joint ownership of "extra" power or harvesting capacity to obtain timeliness benefits without incurring excessive costs may be possible. One such scheme is to have "extra" capacity jointly owned by geographically dispersed farmers who are not subject to the same rainfall pattern and who bid for the use of the "extra" capacity on a weekly or daily basis. Acquiring machinery services through "custom hire" (whether for individual activities such as harvesting or for the full set of cropping activities, such as with custom farming) is increasingly popular in some geographic regions. Budgeting analysis suggests that custom farming is frequently a lower cost cropping alternative for a landowner than cash or crop share renting. One possible explanation is that the hourly return for labor is typically relatively low in crop production and that custom operators frequently price their services based on marginal costs and cash flow needs, which are typically lower than the full cost of machine ownership.

A parallel in the livestock sector to the leasing and custom farming options in crop production is custom feeding and contract production. Contract production has become increasingly important in the poultry and swine industries. Resource providing contracts where the contractor supplies important inputs, such as feed or feeder pigs, appear to be of the most interest. Farmers may find contracting attractive because it provides them with expensive inputs, utilizes their facilities and technical skills, and assures them of a reasonable return. The reduced risk with contract production may be a major advantage when the producer is negotiating with a lender to borrow funds for expansion or new facilities. In fact, some resource providing production contracts are not all that different than leasing arrangements in terms of the cash flow and financing implications for the farm business.

10) *Control.*

Control is a critical management function that is underemphasized in most farm firms. The control function involves measuring performance and correcting deviations from expected behavior to assure the accomplishment of plans. Control is much broader, however,

than simply keeping track of past performance through detailed historical records. The control function requires the farm manager to compare the actual outcome reported in the records with the projected budgets prepared during the planning process. If the control system is properly designed, deviation between planned and actual performance should provide the manager with some indication of what might be the causal problem. Consequently, the manager with an adequate control system can detect problems early in their development and make appropriate corrections to ensure efficient satisfaction of the specified goals.

The basic control process involves three steps: (1) establishing standards, (2) measuring performance against these standards, and (3) correcting deviations from standards and plans. Standards are the criteria against which actual performance can be measured and are derived from the goals that have been specified by the manager. Standards for control purposes can and should be established for specific enterprises and even specific work activities as well as for the business as a whole. These standards normally should be specified as part of the planning function.

Although measurement of performance is an essential component of control, much of the performance data currently acquired by many farm firms is inadequate for control purposes. This inadequacy occurs for two reasons. First, many farmers measure performance only on an annual basis and, consequently, an entire production period elapses before a serious attempt is made to compare performance with budgeted expectations. A control system must provide timely information that will enable management to make appropriate adjustments early enough in the production process to have an impact on performance.

A second problem with many of the record keeping or control activities of farmers is that the performance variables being monitored provide little indication of potential problems. Although most farmers keep fairly accurate income and financial statements, these data provide only aggregate information on performance for the typical multi-enterprise farm firm. In many cases, a deviation between actual income and projected income cannot be traced to a particular enterprise or production activity. Thus, many of the accounting systems currently used by farmers are inadequate for control purposes because they do not indicate the causal forces that result in deviations between plans and actual performance.

The third step in the control process is that of actually correcting deviations from plans. In fact, the correction of deviations in performance is the point at which control interfaces with the other managerial functions. The manager may correct a deviation by modifying the goals, by redrawing the plans, or by making

improvements in the implementation of the original plan. This overlap of the control function with the planning and implementation functions demonstrates the interrelationships of the manager's job.

Almost all controls can be categorized into one of three types. Preliminary control focus on the prevention of deviations from the plan by identifying potential problem areas and specifying inputs that are effective in preventing the occurrence of the deviation. Concurrent controls are based on monitoring the system and adjusting the timing, level, and method of using inputs to maintain the quantity and quality of output at standard levels. Feedback control recognizes that in some cases the operator may be unable to solve a deviation from the plan with concurrent controls. This third form of control recognizes that the deviation might be handled more effectively in future periods in another way.

Information is needed to support decision making in each of the functional areas of management. A management information system is the key mechanism to accomplish this. Such a system requires developing control systems for the major profit and cost centers in the business — the production, marketing, and service enterprises that make up the total farm business.

11) *Negotiation and Relationships.*

Although many in the farm sector highly value their independence and their status as "self made" business people, interpersonal relationships and negotiation skills are becoming increasingly important for the successful farm and agribusiness firm of the future. Even for those individuals who are self-employed with no employees, negotiation skills are critical in buying inputs and selling products. The ability to successfully negotiate a loan arrangement with the banker, a lease arrangement with a landlord, a purchase transaction with a machinery equipment dealer, or a contract arrangement with the feed company or processing facility is critical to the success of the operation. The increased potential of contract arrangements where products are produced to certain specifications rather than sold in an impersonal, raw commodity market will increase the need for negotiating and bargaining skills.

Furthermore, an increasing number of farmers will be hiring permanent or temporary employees as

they expand the size of their operations, or, alternatively, will be acquiring specific services including marketing or crop consultant services, and even services to complete production operations such as custom spraying, custom harvesting, and custom farming. Again, the ability to successfully negotiate and bargain will be essential to obtain such services in a cost-effective manner.

And, finally, a number of farming operations will involve other family members in the management and operation of the business. The ability to skillfully handle interpersonal relationships is particularly important as one attempts to manage and operate a business firm that includes family members such as parents, children, or siblings. The unique difficulties of combining family and business relationships cannot be overstated.

12) *Creativity.*

Although little research has been done on the importance of creativity for the long-term success of a business firm, it would appear that a firm without creativity will stagnate and eventually dissolve. Successful managers are frequently innovators in terms of new approaches, new products, new technologies, new ideas, new ways of organizing, etc. They are careful to evaluate the risk and rewards of new ideas, technologies, products, or processes so as to not choose those alternatives that have high risk with little potential payoff. But they are always looking for new ways to do things; they may not have the research and development staff of their "big business" counterparts, but they perform that function themselves by continually reading, studying, talking to colleagues, visiting with others that have new ideas, and assessing new products and techniques provided by the private sector as well as obtaining information available from government agencies and universities. They use insight and intuition along with their inquiring natures to access new ideas and directions and maintain a viable and vibrant, rather than a stagnant and declining, business.

References

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