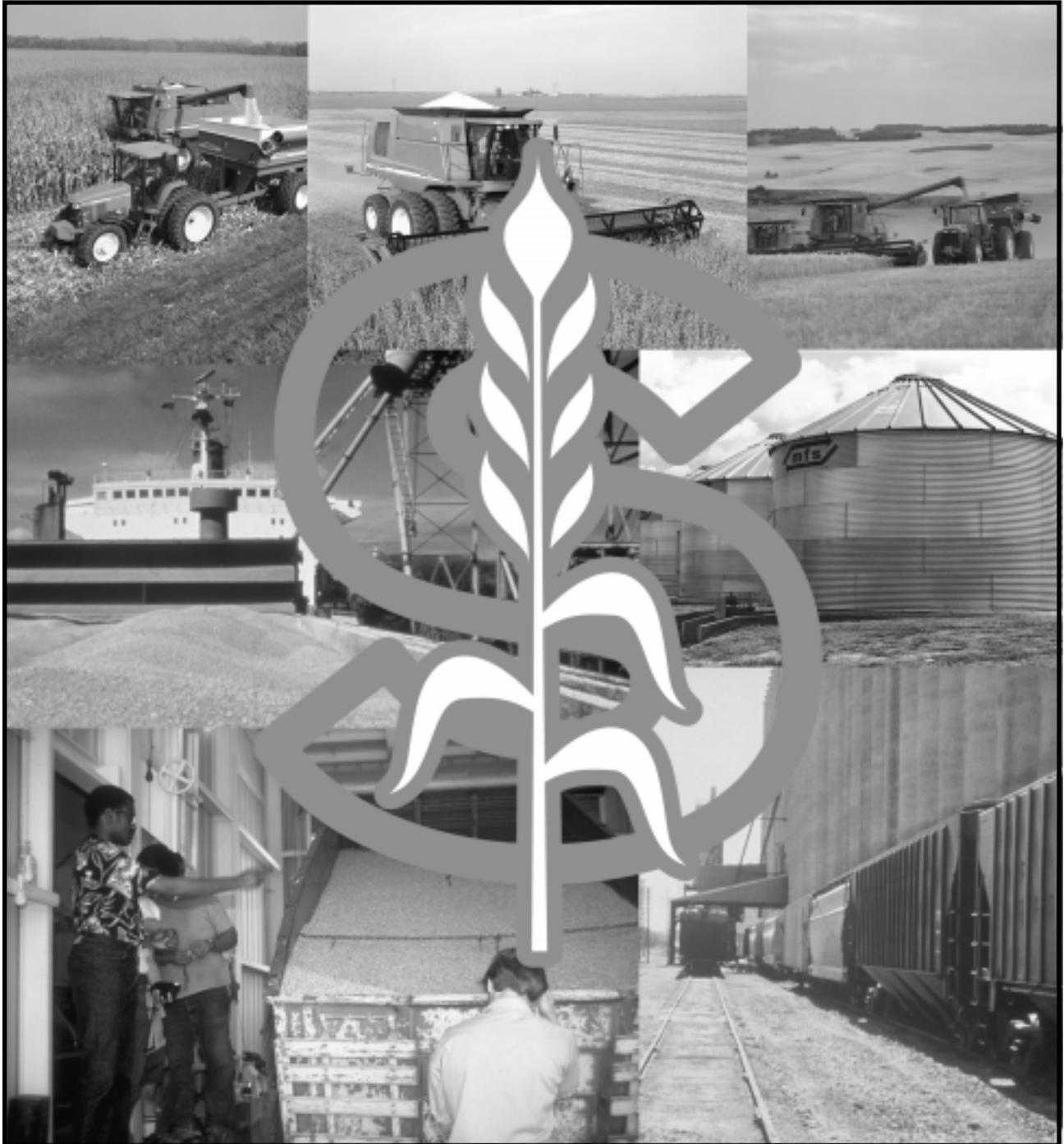


Grain Marketing Plans for Farmers



The Challenges and Benefits of Marketing

Some of the most challenging management judgments that grain producers face involve decisions about when and how to market grain. At any one point in time, changes in supply and demand factors and subsequent price trends are difficult to predict. This uncertainty is inherent in the process of determining grain prices, making effective management of price risk a major challenge for grain marketers.

Ongoing uncertainty about price prospects serves to emphasize the need to develop grain-marketing strategies with specific price goals and contingency plans. Without preset price goals based on-farm financial needs or some other farm business planning principle, grain producers are vulnerable to making marketing decisions based on short-term market trends, perceptions and emotion.

How effective are efforts by farmers to improve selling prices in comparison to managing other key factors in their farm business? Recent research indicates that yield levels, costs of production, and technology adoption have a greater impact on relative farm profitability than does grain selling price (Kastens and Nivens, 1999).

This study indicated that differences in no-till technology adoption, yields, cost of production, and profits were more persistent or consistent than differences in selling prices among farms in the Kansas Farm Management Association during the 1989-1998 period. The “good” one-third of farms for each of these management measures had 16 percent greater yields, 31 percent lower costs, 8 percent higher prices, and adopted no-till technologies sooner than the middle one-third of farms.

Conversely, for each of these measures, the low one-third of farms had 16 percent lower yields, 25 percent higher costs, 8 percent lower prices, and slower no-till

technology adoption than the middle one-third of farms. Other results in this study show the difficulty of obtaining higher than average prices.

This study assumed that all of these farmers took the same approach to marketing their crops. Whether they used formal marketing plans or specific preharvest or postharvest marketing strategies was not identified. The results of this study do not necessarily show that grain-marketing decisions are not important for farmers. Instead, they reinforce the principle that a crop has to be efficiently produced before it can be effectively marketed. The study also supports the idea that it is not an easy task for farmers to obtain better than average results in marketing their grain.

This publication focuses on the development of grain marketing plans for farmers. It begins with a discussion about the pricing efficiency of grain markets and how the long-term profitability of alternative grain-marketing strategies will be affected by the degree to which grain markets are efficient in forecasting prices. Alternative types of grain marketing strategies also will be discussed.

Then, factors affecting marketing plans will be examined along with marketing plan goals and performance, and the use of grain market information. The effects of futures and basis trends and the risk exposure of alternative grain marketing tools will be explained, followed by discussion of futures and basis trend-based marketing strategy recommendations. Finally, a grain marketing plan work sheet is presented with a discussion of the factors that sellers need to consider in developing a grain-marketing plan.

Much of the discussion in this publication will focus on the marketing plans of farm producers who are selling grains. Those buying production inputs can apply the same principles from the perspective of buying commodities for the lowest possible price or of limiting the risk of harmful upward price risk.

Basis—The difference between the current spot price (or cash price) of a commodity and the price of the nearest futures contract for the same or a related commodity. Basis is usually computed in relation to the futures contract next to expire and may reflect different time periods, product forms, qualities, or locations.

The Efficiency of Grain Markets in Determining Prices

The question of whether or not grain futures markets are efficient in predicting prices has a major effect on the approach taken in the development of marketing plans. In practical terms, this issue can be addressed with the following question: “Do grain marketing strategies exist that are more profitable than selling at harvest?” Whether economists believe such strategies exist or not depends on their beliefs regarding the efficiency of futures and cash markets as mechanisms in the process of “price discovery.” A range of opinions exist among economists and market analysts on this issue, varying from those who hold a strong view of market efficiency to those who question how strongly the theory holds true in grain markets.

Those who believe strongly in the efficiency of grain futures markets generally do not think that any grain marketing strategy is consistently more profitable than harvest sales. They hold that, because of the efficiency of futures markets, no more accurate source for predicting futures prices exists. From this point of view, the existence of average seasonal trends in deferred futures market prices is questioned, although the existence of seasonal patterns in price volatility is accepted. In a related issue, the existence of preharvest risk premiums is also questioned. Price risk premiums exist if preharvest prices consistently tend to be higher than harvest prices due to preharvest uncertainty about crop production and supply prospects. It follows that if markets are efficient and seasonal trends do not exist, then preharvest market risk premiums do not generally exist.

If consistent seasonal price patterns and preharvest price risk premiums do not exist in grain futures markets, then it is essentially impossible for consistently profitable preharvest or postharvest grain marketing strategies to occur over time. Consequently, if grain futures markets are efficient, harvest

marketings will be just as profitable over time as any systematic strategy involving preharvest or postharvest futures transactions. The efficient market perspective does allow for the potential existence of seasonal grain basis trends (i.e., wider basis levels at harvest, narrowing thereafter), leading to profitable postharvest storage opportunities for low-cost grain storers.

Toward the other end of the range of opinion about market efficiency are those who think that profitable nonharvest grain marketing strategies exist. They believe that these strategies can be identified in real-time, and that grain futures markets are not strictly efficient as defined by economic theory. In this viewpoint, futures markets are still seen as the primary source of price discovery and consensus forecast information for U.S. commodities. However, those holding this view judge that there is substantial benefit to examining market supply-demand information and other factors that may influence markets. This allows the producer to assess the likelihood of alternative market price outcomes in addition to the current consensus viewpoint provided by the futures market. This is especially true during the preharvest period, but also for potential postharvest price outcomes.

This group thinks that persistent seasonal tendencies in both deferred futures prices and price volatility do exist, and that preharvest futures market risk premiums often occur. Therefore, they think that preharvest and postharvest marketing strategies may exist that are consistently more profitable than harvest-time market sales. Whereas those holding closely to the market efficiency view think that profitable nonharvest strategies may exist due mainly to predictable trends in local cash grain basis, this second group thinks that profitable strategies may occur due to predictable trends in both futures and local basis.

The previous discussion shows how perceptions of market efficiency have a major effect on recommended marketing plans. Analysts who hold a strong market efficiency

Efficient Markets are markets that accurately incorporate all known information in determining prices.

Futures price – (1) Commonly held to mean the price of a commodity for future delivery that is traded on a futures exchange. (2) The price of any futures contract.

view will focus predominantly on local basis patterns in formulating marketing plans, and will tend to avoid preharvest pricing for profit enhancement (but might use it to reduce risk by obtaining the “average” price each year).

Those who hold a weaker view of market efficiency will focus on both futures prices and basis levels in developing a grain-marketing plan. They will be more likely to carry out preharvest as well as postharvest sales.

Types of Grain Marketing Strategies

There are at least four types of strategies that may be used by grain marketers: routine strategies, systematic strategies, strategies based on individually generated forecasts, and strategies based on market-generated forecasts of production profits.

Routine Strategies

With routine strategies, grain is marketed each year during the same period using the same marketing tools regardless of market conditions. Once the decision is made to follow a routine strategy, little further analysis or farmer input is needed—marketing decisions are made automatically.

An example of a routine strategy would be to sell 100 percent of production each year at the end of harvest. Another would be to always forward contract one-third of expected production for harvest delivery on a specific date, to sell another half of the remaining actual production at harvest in the cash market, and to store the remaining production on farm for postharvest sale on a specific date.

Systematic Strategies

Strategies that allow for year-to-year variation in marketing actions based on key market indicators are classified as systematic strategies. The key market indicators may change in each production cycle or time period based on market conditions. Consequently, marketing strategies are allowed to

change based on the value of the market indicator.

An example of a systematic strategy would be to hedge or forward contract 50 percent of expected production during the winter months following a short crop harvest, and otherwise to sell the crop at harvest. The key market indicator in this strategy is whether the previous crop was considered to be “short” or not.

Strategies Using Individually Generated Forecasts

If individuals have superior access to market information or superior ability to analyze and forecast the grain market, then they may be able to profit from individual forecasts. Focusing a marketing plan on such strategies is generally discouraged by economists since the majority of marketers are not viewed as being able to forecast prices any more accurately than existing futures markets. Consequently, most producers will not be able to consistently profit from marketing strategies based on their own individually generated market forecasts. However, some individuals may have the superior analytical ability and market insight required to consistently profit from using their own forecasts in developing their marketing plans.

Strategies Using Market-Generated Forecasts

Grain marketing strategies may exist that use futures and options prices as a basis for production and marketing decisions.

An example of this type of marketing strategy is to store grain for postharvest sale when harvest grain basis levels are “wider” than normal. This strategy signals sellers to respond to wide harvest basis by storing grain for later sale, anticipating that cash prices will improve with a return to more normal basis levels later in the postharvest period.

A second market-generated forecast strategy is to hedge grain futures when futures and options-based forecasts are signaling higher than normal profits from preharvest hedges, and to avoid hedges when lower than

***Forward contract**—A cash transaction common in many industries, including agricultural commodity merchandising, in which a commercial buyer and seller agree upon delivery of a specified quality and quantity of goods at a specified future date. A price may be agreed upon in advance, or there may be agreement that the price will be determined at the time of delivery. Forward contracts, in contrast to futures contracts, are privately negotiated and are not standardized.*

Hedging—Taking a position in a futures market opposite to a position held in the cash market to minimize the risk of financial loss from an adverse price change; a purchase or sale of futures contract as a temporary substitute for a cash transaction that will occur later (i.e., long hedge and short hedge). Hedgers use the futures markets to protect their business from adverse price changes.

normal profits are projected from preharvest hedges. This strategy is based on anticipating the crop acreage responses of the collective group of grain producers to either high or low expected profits from a crop enterprise, and the subsequent change in production and subsequent prices that will occur the following harvest. Higher than normal preharvest hedging profits will give an incentive to crop producers to increase crop acreage and associated production, leading to lower prices by the following harvest. Conversely, lower than normal preharvest hedging profits will provide a disincentive for planting a particular crop, leading to lower acreage and production as well as higher prices by the following harvest. These strategies are in essence systematic strategies that use harvest grain basis and projected profits from futures hedges as key market indicator variables.

Factors Affecting an Individual's Marketing Plans

A number of individual, personal factors will affect marketing plan development. Some of the factors that lead people to use different grain marketing strategies in response to the same set of market factors are as follows.

Attitudes Toward Price & Income Risk

Grain marketers vary individually in their attitudes toward accepting and managing price risk. Attitudes range from those who have a strong preference toward avoiding price risk to those who actually prefer to use risky grain marketing strategies that have the potential for returning higher selling prices.

Most grain producers (and people in general) are thought to be risk averse, preferring to avoid risk when given the opportunity. To explain, if grain marketers are given two opportunities to sell grain for the same price, they will take the less risky approach all else being equal. Those with a stronger aversion toward price risk will use what they consider less risky grain marketing strategies that result in lower expected price. Those with a greater acceptance of price risk

will be willing to use what are considered to be somewhat riskier grain marketing strategies if they offer the potential of a higher selling price. In general, less risk adverse marketers are more willing to accept greater price risk in exchange for the possibility of higher selling prices than are more risk adverse marketers.

The challenge in understanding how attitudes toward price and income risk affect marketing plans is in determining what people individually classify to be risky behavior. This is particularly true for marketing plans using futures and options or preharvest pricing strategies.

If people consider the use of futures and options in themselves to be risky, then they tend to eliminate those risk management tools from consideration in their marketing plans. If they have a strong preference against making price and delivery commitments until a crop is physically harvested, then they will also tend to avoid the use of preharvest marketing strategies. Grain marketers may at times be acting as risk averse decision makers given their individual perceptions of what is risky behavior, while others may consider those same actions to be very risky or even speculative in nature.

Farm Financial Situation

Both the financial risk-bearing ability of grain marketers and their attitudes toward risk influence their grain marketing plans. The greater the overall financial risk faced by grain producers, the more incentive they have to make marketing commitments when financially-oriented price goals are met in the marketplace.

Farm financial net worth statements, farm income ratios (current ratio, debt-to-assets ratio, etc.), farm enterprise analysis of break-even grain prices, and farm cash flow plans are some of the primary financial analysis tools available to producers to help them assess their financial risk-bearing ability.

Price goals based on a whole-farm profit-objective pricing approach are particularly relevant for farms under financial stress. Family

living, principal payments, and tax obligations as well as direct crop production costs are accounted for in the development of whole farm profit objective price goals for marketing plans. The K-State Research Extension publication *Whole Farm, Profit Objective Pricing*, MF-1101 explains how these whole-farm costs can be incorporated into grain price goals.

Familiarity with Marketing Tools

Almost all grain producers are familiar with cash grain sales as a marketing tool. To a large degree, this is also true about the use of forward contracts. However, a lack of familiarity with other grain marketing tools may limit their consideration and use by farmers.

Other marketing tools divide into two categories, 1) those available through local grain elevators or grain merchandisers, and 2) those available through commodity brokers on commodity exchanges. Some local grain elevators and grain merchandisers may offer minimum price, hedge-to-arrive, and basis contracts in addition to regular forward price contracts to their local customers. For grain producers unfamiliar with futures and options, these alternative tools allow them to either lock in or protect prices through their local grain elevator or merchandiser without having to work directly with commodity brokers.

However, by using locally available contract-oriented marketing tools producers may sacrifice either a) their pricing flexibility through preharvest bushel delivery and price commitments, b) their ability to switch to contingency marketing plans and change strategies if market conditions change, or c) any benefit from improved grain basis bids at or after harvest if they should occur.

Many producers are unwilling to work directly with commodity brokers, and therefore will not be able to use futures hedges or put and call options in their marketing plans. They may still indirectly use and benefit from these tools through local elevators or merchandisers, but will likely end up sacrificing some pricing flexibility as well as potential basis improvement opportunities.

Grain Storage Availability

The availability to grain producers of either commercial or on-farm storage for postharvest marketing strategies can be a major factor in development of grain producers' marketing plans. If physical storage opportunities are not available, then there is an incentive to consider the use of call options as a storage substitute for postharvest price rise coverage. The generally higher cost of commercial storage effects the expected profitability of storage strategies. If on-farm storage facilities are a sunk cost, lower variable cash costs make postharvest on-farm storage strategies more profitable than commercial storage. This assumes no spoilage of grain in storage and that additional on-farm storage handling and transportation costs do not offset the on-farm storage cost advantage.

Marketing Plan Goals and Performance

Farmers may formulate marketing plans with a number of goals in mind. Some possible price goals and/or combinations of goals are listed below.

Price Enhancement

Perhaps the most common goal of farmer-marketers in developing marketing plans is to enhance or improve their grain selling or purchase prices. Specific selling price enhancement goals may include selling for better than a) the highest available price during a marketing period, b) the average price available, c) the middle or midpoint price, and d) the harvest price. All price goals would be net of storage costs for postharvest marketing strategies.

Price Risk Reduction

Reducing price risk by protecting against harmful price moves is another common marketing goal. Most sellers negatively view the possible occurrence of lower, less profitable selling prices as downside price risk. Conversely, the possibility of

***Call option**—A contract that entitles the buyer the right, but not the obligation, to purchase an underlying futures contract at a stipulated basis or strike price at any time up to the expiration of the option. The buyer pays a premium to the seller for this contract. A call option is bought with the expectation of a rise in prices.*

Put option—An option contract to sell a futures contract at an agreed price and time at any time until the expiration of the option. A put option is purchased to protect against a fall in price. The buyer pays a premium to the seller of this option. The buyer has the right to sell the futures contract or enter a short position in the futures market if the option is exercised.

higher, more profitable selling prices occurring is viewed positively by these same sellers as pricing opportunities, and not associated with harmful price risk in most farm producers' thinking. In order to limit downside price risk but preserve the opportunity to benefit from profitable upward price moves, farmers may use preharvest minimum price contracts and put options, or rely on government program marketing loans. If they fear prices may decline into harvest they may use preharvest futures hedges or forward contracts to limit downside risk. However, hedges and forward contracts also limit upside selling price opportunities.

It is difficult if not impossible to consistently accomplish both of the goals of price enhancement and price risk reduction over time. That is, marketing strategies expected to result in less variable, annual crop revenue are also expected to result in lower revenue.

Because futures hedges, forward contracts, options and minimum price contracts are tools often used by sellers to manage grain price risk, the expected profitability of using them is an important issue. In a particular year, farm-sellers may view lost pricing opportunities resulting from the use of preharvest futures hedges and forward contracts as a cost of managing price risk.

However, from an efficient markets perspective, over a period of time, losses in any one year resulting from hedges and/or forward contracts will be offset by gains in others. Similarly, if option premiums are efficiently priced, then over time their expected payoffs will equal the sum of premium costs, and the true expense of consistently purchasing options to manage price risk should be equal to the opportunity cost (i.e., interest) on the option premium plus transactions fees (such as brokers' commissions) over time.

While in any specific year sellers may view the initial options premium expenses as a cost of price risk management, over a number of marketing years the net returns from options-based strategies are expected to

approximately equal the sum of option premium expenses. Similar expectations apply to the profitability of using minimum price contracts over time, since they incorporate the premium expense of buying options into minimum price contract bids. However, it is important to remember that local grain buyers may manage their basis bid risk by offering wider-than-expected basis bids in either forward or minimum price contracts relative to actual basis bids at the time of final sale. To the degree that this "cost of basis risk transfer" from buyers to sellers exists, the expected final net cash selling price over time will be higher for preharvest futures hedges and put option transactions than for realized forward and minimum price contract prices.

Average Pricing through Sequential Sales

In order to eliminate the possibility of receiving the lowest available selling price during a particular period, some farmer sellers may use a sequential sales or average pricing strategy. This strategy involves routinely selling equal proportions of the crop at different times of the year regardless of varying market conditions to avoid the possibility of selling the majority of the crop at market lows. This approach may or may not involve preharvest forward pricing activities.

While this type of strategy eliminates the possibility of selling at the lowest available price, it also eliminates the possibility of selling for the highest price or for higher than the average price. However, average price strategies may have merit if they are used to add structure and discipline to a marketing plan.

Financial Management Oriented Goals

Designing marketing strategies to meet farm cash flow needs has great merit from a whole-farm financial-management perspective. Grain enterprise cost of production figures can guide farmers in determining price goals for their marketing plans. This is particularly true for preharvest forward

pricing strategies and for years in which attractive postharvest pricing opportunities are available.

In addition to considering enterprise-specific costs of production, producers should consider other whole-farm costs in determining their pricing goals, including cost of living, principal payments on debt, and tax obligations. The K-State Research Extension publication *Whole Farm, Profit Objective Pricing*, MF-1101 explains how these whole-farm costs can be incorporated into grain price goals. Pricing opportunities that cover cost of production may never occur in years where grain markets are depressed, particularly for harvest and postharvest sales, making such strategies impossible to follow in those years.

Combination of Marketing Plan Goals

In many cases, producers have a combination of grain marketing goals they are trying to accomplish rather than any one goal.

For example, a common approach for farmers developing a marketing plan would be to try to improve their selling prices while reducing the risk of harmful prices. It also may be possible to pursue an average pricing or whole-farm profit goal-oriented approach and still use options and minimum price contracts as methods of limiting harmful downside price risk for selling grain.

It is important to remember that in any of these combination approaches involving price risk management there are usually trade-offs, such as up-front option premium expenses in any one year or lost pricing opportunities. However, with consistent use of price-risk management strategies, the option premium expenses and/or lost pricing opportunities from hedges and forward contracts in some years will tend to be offset by gains from their use in others.

Evaluating the Performance of a Marketing Plan

A number of criteria are available for evaluating the performance of a marketing

plan after it has been carried out. In general, a marketing plan should be evaluated in terms of whether or not the benchmark price and financial goals were attained. The harvest grain price and the highest available price during the marketing period are simple price goals that can be used as standards for comparison. Other standards for comparison include the selling price relative to the marketing loan equivalent price after accounting for loan deficiency payments and pricing opportunities that were available during the preharvest period through futures hedges, forward contracts, put option price floors and minimum price contracts. The cost of production and whole-farm profit objectives also are available standards of comparison for evaluating the performance of a marketing plan.

A less common measure of marketing plan performance is to evaluate how much lower profitability would have been if marketing strategies had netted the worst price available during the marketing period. To evaluate marketing plan performance, with this alternative approach, sellers should determine how successful the plan was in protecting them from harmful price risk, while taking advantage of pricing opportunities that were available.

Using Grain Market Information in Marketing Plans

The Seasonal Focus of Grain Markets

Grain markets tend to focus on different types of supply-demand information at different times of the crop year. This focus shifts seasonally depending on whether uncertainty about supply or demand factors have the most effect on immediate market prospects. When developing grain marketing plans, an understanding of which factors tend to be the focus of the market at a particular time will guide the selection of which market indicators are used in systematic marketing strategies and strategies based on market-generated forecasts.

Systematic preharvest pricing strategies will be heavily influenced by preharvest production-oriented information. Preharvest supply indicators for U.S. crops include crop acreage intentions, planting progress, crop condition ratings, USDA crop production projections, and world supply conditions.

Preharvest marketing strategies based on market-generated forecasts also rely on seasonal futures price information, such as new crop futures quotes available during the preharvest period. During and after the U.S. harvest, uncertainty about U.S. production and supply prospects diminishes, and the focus of the U.S. market seasonally shifts to demand-oriented factors. Key harvest and postharvest demand indicators for U.S. crops include prospects for export, feed, food, seed, and industrial usage of grain. Postharvest marketing strategies based on market-generated forecasts also will rely on seasonal grain basis information, such as the grain basis level at harvest relative to historic averages.

Futures contract – A standardized agreement calling for deferred delivery of a commodity, or its equivalent, entered through organized futures exchanges. Most agricultural futures contracts call for physical delivery, but feeder cattle futures contracts call for cash settlement at contract maturity. In fact, contracts are usually liquidated before delivery. Traders are classified as hedgers or speculators.

Market Information Sources

Grain futures markets are a primary source of information about grain price prospects. Futures markets represent a consensus forecast based on the information available to the market at any one point in time about supply-demand prospects.

Whether sellers also should consider other sources of market information depends on their views of the efficiency of grain futures markets. The more efficient they consider futures to be, the less they see the need to analyze other market information.

Conversely, the less efficient they consider futures to be, the more incentive they have to examine critically the supply-demand projections and other sources of market information. Their motive would be to determine the likelihood that price outcomes other than the current futures market forecast would occur.

Local cash grain price, basis, and forward contract bids are other sources of information to use in formulating and carrying out grain marketing plans. Local grain basis information is of particular importance in local marketing decisions, influencing the selection of local selling opportunities among competing grain buyers. Current cash price and basis bids are also important in the decision to sell or store at and after harvest, which is an example of a strategy based on market information.

Many sources of market information are available that describe the underlying supply, demand and technical factors that influence the grain market. USDA supply-demand, export, grain stocks, government loan program, livestock production (i.e., indicator of feed usage), and other reports are sources of market information that have a major influence on U.S. grain prices. The potential influence of the production reports is particularly strong during the preharvest period, while the influence of the grain stocks, export, government loan inventory, and livestock production reports are greatest during the postharvest period. During the growing season, new crop production reports can have a large influence on old crop futures contract prices.

Seasonal price patterns are used by many market analysts to identify and anticipate the timing of price trends in order to devise potentially profitable grain marketing strategies. Some market practitioners also rely on technical price analysis, mainly focusing on price chart trends and analysis of historical price patterns to generate short- and long-term price forecasts. Other sources of information are available for grain marketers' use, including market analysis from extension grain marketing specialists, market advisory services, producer marketing and risk management clubs, and other farmers.

Alternative Grain Marketing Tools

Grain marketers have a number of pricing tools from which to choose. The most commonly used tools include cash market sales, different types of forward contracts, futures, options, and government marketing loans.

Cash Market Sales

Cash grain sales may occur both at harvest and afterward as part of postharvest storage-oriented marketing strategies. For harvest sales, the producer delivers grain to a buyer (such as a grain elevator), a price is agreed upon, and payment is made to the seller.

Postharvest grain ownership strategies may involve either commercial or on-farm storage. For commercial storage, the seller pays storage fees until the seller and buyer agree to the price and time of sale, with the seller receiving payment for the grain. For on-farm storage, grain is kept in noncommercial storage facilities, typically on the seller's farm or in other rented grain storage facilities, until the seller and buyer agree upon the price and time of sale. The seller delivers the grain to the buyer, with the seller receiving payment for the sale.

Forward cash contracts

Forward cash contracts are commonly used grain-marketing tools. Sellers make a commitment to deliver a specific quantity and minimum quality of grain to a buyer during a specific period in exchange for an agreed upon cash contract price. Buyers use a combination of futures prices and basis bids to determine forward cash contract prices.

Basis contracts

Basis contracts amount to a commitment by a grain seller to deliver a specific quantity and minimum quality of grain to a buyer during a specified time period in exchange for an agreed upon basis bid.

Unlike forward cash contracts, basis contracts involve a commitment only to a basis-level bid on the part of the buyer, while the futures price to be used in calculation of the final price is yet to be determined.

Hedge-to-arrive (HTA) contracts

Hedge-to-arrive (HTA) contracts involve a commitment by the seller to deliver a specific quantity and minimum quality of grain to a buyer during a specified time period for an agreed upon futures price, while leaving the final basis bid to be determined later. In a hedge-to-arrive contract only the futures bid is determined when the contract is entered into. This differs from forward cash contracts where both the futures and basis bids are agreed upon when the contract commitments are made, and from basis contracts where only the basis bid is agreed upon.

Non-rolling HTAs are discussed here, in which any HTA contract commitment made in a particular marketing period is fulfilled in that same period. This eliminates the possibility of "rolling" out of the initial futures position taken by the grain buyer and into a deferred futures contract position. Many of the problems that occurred with HTA contracts in recent years stemmed from grain buyers and sellers rolling out of their initial HTA short futures positions into deferred short futures contract positions in hopes of benefiting from anticipated futures price declines. When expected grain futures price declines did not occur during the 1995-1996 period, grain buyers accumulated sizable futures margin calls on the rolled short futures positions, which they were then forced to pass on to the sellers who were party to the HTA contracts.

Minimum price contracts

Minimum price contracts amount to commitment by a grain seller to deliver a specific quantity and minimum quality of grain to a buyer during a specific period in exchange for a minimum selling price. Minimum price contracts involve the use of

Short — (1) The selling side of an open futures contract; (2) a trader whose net position in the futures market shows an excess of open sales over open purchases.

Long — (1) One who has bought a futures contract or option to establish a market position; (2) a market position that obligates the holder to take delivery; (3) one who owns an inventory of commodities. The opposite of short.

Short selling—Selling a futures contract with the idea of delivering on it or offsetting it at a later date.

agricultural options by elevators along with a basis bid in calculating a minimum price contract bid.

Grain buyers may arrive at a minimum price bid in either of two ways. First, they may simultaneously sell futures contracts and buy call options, and then adjust for basis in calculating their minimum price contract bid. Any increase in futures prices after the minimum price contract is entered into will be reflected in increased values of the call option premium.

A second way for grain buyers to arrive at a minimum contract price is to purchase put options and then account for basis as they calculate their minimum price contract bid. Any decrease in futures prices after the minimum price contract is entered into will be reflected in increased values for the put option premium. Sellers can benefit if cash prices end up higher than the minimum price bid before or at the final closing date of the contract. In general, any remaining value in the associated options premiums may be used to offset the initial purchase cost of the call or put option.

Price later contracts

Price later contracts involve an agreement by the buyer to stop any further storage charges on grain in commercial storage in exchange for the right on the part of the seller to determine the final selling price at a later time.

There is an element of financial risk in this type of contract for sellers because the title of the grain passes to the buyer before the date of sale. The seller is then at risk in the event of a business failure on the part of the buyer if the buyer has already sold or moved the grain out of commercial storage before the time when the seller has sold the grain and received payment. Cases have occurred where sellers received little or no payment for the grain they had previously delivered under price later contracts because grain buyers have gone bankrupt prior to the sales decision and/or the sellers receiving payment for the grain.

Futures short hedges

Futures short hedges involve sellers working directly with commodity brokers to both enter into and lift short (sell) futures positions. To complete a true hedge, cash grain sales are then made by the seller just as they would be if no futures hedge position was involved. With futures hedge positions, margin accounts must be established by the hedger to pay potential margin calls out of or to receive hedge profits into.

In comparison, when using forward cash contracts, grain buyers establish and manage margin accounts, insulating producers from potential margin calls. Forward cash contracts involve commodity delivery commitments by grain sellers to grain buyers, which is an added source of risk in preharvest pricing strategies. However, no contract delivery commitments are involved with futures short hedges, since short futures positions are almost always offset by selling back the futures contract rather than actually delivering the commodity to the approved commodity exchanges.

With preharvest futures short hedges there is the risk of finding oneself in a speculative rather than a hedge position. This may occur if actual crop production falls short of the amount of grain covered by short futures hedge positions. While preharvest futures short hedges are commonly discussed, postharvest storage hedge positions can also be used to lock in profitable postharvest storage opportunities in the futures while allowing for seasonal narrowing of postharvest cash basis.

Buying put options

Buying put options involves sellers working directly with commodity brokers to both buy and sell back put options. Just as with futures short hedges, cash sales are then made by the seller just as they would be if no option position were involved.

While minimum price contracts also may use put options, they also involve grain basis level and production delivery commitments on the part of the buyer and seller,

respectively. By purchasing put options through commodity brokers, sellers avoid any contract obligation to actually deliver grain, and thereby gain some flexibility in their preharvest marketing strategies. By not locking in a basis bid, sellers may benefit if narrower basis bids occur in the future. Put options can also be used to protect from price declines in the postharvest period for stored grain, but marketers do not commonly use this strategy. Just as with postharvest futures short hedges, the use of put options during the postharvest period allows for seasonal improvement of postharvest cash basis while protecting from futures price declines.

Buying call options

Buying call options in combination with cash sales at harvest is becoming a commonly considered marketing strategy. This is especially true when grain storage space is limited and farmers have strong incentives, in the form of high commercial-storage charges, to sell grain immediately upon delivery to a commercial elevator.

To buy call options, sellers must work directly with commodity brokers to both buy and sell back call options. Cash sales are made just as they would be if no option position were involved.

A disadvantage of this strategy is that cash sales may be made at harvest or other times when grain basis levels are seasonally wide. Sellers rely solely on increases in futures prices to make this strategy profitable since they have already sold their cash grain and cannot benefit from seasonal postharvest improvements in grain basis. Call options also can be used in other ways, such as in contingency marketing plans. An example would be to buy call options to cover previous preharvest forward contract or futures short hedge positions in case of an unanticipated or upward trend in futures prices.

Marketing loans

Marketing loans with loan deficiency payment (LDP) protection for eligible U.S.

farm-program commodities are used extensively by sellers. Marketing loans operate similarly to put options in that they provide price floor protection. However, marketing loans arguably have little or no “premium” cost and provide open-ended price protection for all the qualified grain a farmer produces.

Marketing loans are the marketing tool of choice when prices are relatively low because of their low cost. Conversely, sellers may have an incentive to use minimum price contracts and put options when they provide net floor prices significantly above marketing loan rates.

Price Trend Effects of Marketing Tools

Table 1 identifies both the beneficial and harmful effects of futures price and grain basis trends on alternative pricing tools. It shows which price risk management tools can be used to protect sellers from either falling futures prices or widening basis levels. It also shows which tools allow them to benefit from potential futures price increases and/or narrowing basis levels.

Cash marketings offer the opportunity to benefit from futures price increases and narrowing basis levels, but also are exposed to the risk of falling futures and widening basis. *Forward cash contracts* have set futures and basis bids, providing protection from harmful futures and basis trends, but also offer no opportunity to benefit from beneficial futures and basis trends. *Basis contracts* provide set basis bids and protection from any potential widening of basis, but no opportunity to benefit from basis improvement. While basis contracts offer no protection from falling futures prices, they do provide the opportunity to benefit from futures price increases. *Non-rolling hedge-to-arrive (HTA) contracts* provide grain marketers with a set futures bid, which provides protection from declining futures but limits any opportunity to benefit from futures price increases.

Table 1. Price Trend Effects and Risk Exposure with Various Grain Pricing Alternatives

Pricing Alternatives	Price Trend Effects				Areas of Risk Exposure			
	Falling	Rising	Wider	Narrower	Production			
	Futures Prices	Futures Prices	Cash Basis	Cash Basis	Options Volatility	Risk if Preharvest	Counter Party Risk	Control Risk
Cash Market (Harvest & postharvest sales)	(-)	(+)	(-)	(+)	-	-	-	Yes
Forward Contracts								
Forward Cash Contract	None	None	None	None	-	Yes	Yes	-
Basis Contract	(-)	(+)	None	None	-	Yes	Yes	Yes
Hedge-To-Arrive (HTA) Contract (non-rolling)	None	None	(-)	(+)	-	Yes	Yes	Yes
Minimum Price Contract	None	(+)	None	None	Yes	Yes	Yes	Yes
Price Later Contract	(-)	(+)	(-)	(+)	-	-	Yes	Yes
Futures & Options								
Futures Short Hedge (Sell futures, owning cash grain)	None	None	(-)	(+)	-	Yes	-	Yes
Buy Put Options (Setting futures price floors)	(+)	(-)	(+)	Yes	Yes	-	Yes	
Sell Cash, Buy Call Options (Harvest sale & buying call option)	None	(+)	None	None	Yes	-	-	Yes
Other Marketing Tools								
Marketing Loan with LDPs (LDP: Loan Deficiency Payment)	None	(+)	(-)	(+)	-	-	-	Yes

Since HTA contracts do not include an up front basis price bid, they provide the opportunity to benefit from narrowing basis levels while leaving the user vulnerable if basis becomes wider. *Price later contracts* are similar to cash marketings in that they are exposed to both the benefits of rising futures and narrowing basis and the negative effects of falling futures and widening basis. Perhaps the primary benefit of price later contracts is the elimination of storage costs, while their primary disadvantage to grain sellers is the financial risk that occurs from losing of title to the grain prior to the actual date of sale.

Futures short hedges are similar to hedge-to-arrive contracts in that grain marketers are protected from futures price declines but are left vulnerable to changes in grain basis levels. While sellers may pay margin calls on short hedges if futures prices increase or receive money in their margin accounts if futures decline, the net effect of futures changes is zeroed out because sellers still own the underlying cash grain in this hedge transaction.

While futures price variation does not effect a net hedge position, changes in basis

from expected levels will affect net price. If the basis at the time of the final cash sale turns out to be wider than what was expected when the hedge position was originally entered in to, then the net hedge price will be lower than expected. Conversely, if the basis at the time of the final cash sale turns out to be narrower than what was expected when the hedge position was originally entered in to, then the net hedge price will be higher than expected.

Buying put options provides protection from falling futures prices, while furnishing the opportunity to benefit if futures prices move higher. However, put option positions will be affected by either a wider or narrower than expected basis in the same manner as futures short hedges. *Buying call options in combination with cash sales* allows grain sellers to benefit from postharvest futures price increases, while eliminating any harmful effects of falling futures. Since call options are used in combination with cash grain marketings, users have no further exposure to either the beneficial or the harmful effects of basis variation.

Marketing loans with loan deficiency payments protect users from falling futures prices (if prices decline to very low levels) but allow them to benefit from futures price increases. Wider or narrower than expected basis levels still tend to have a negative and positive price impact, respectively. This is because the formula used by USDA is based on calculated local adjustments of selected major grain markets for different commodities. The USDA bases its local LDP payments on historic transportation differentials and other market factors, which may or may not be representative of current local market conditions. Therefore, wider or narrower than expected basis levels are quite likely to impact profitability apart from the formula-based loan deficiency payments.

Risk Exposure of Alternative Marketing Tools

Options Volatility Risk

This is the risk that option premiums will not change one-for-one with cash and futures prices as the price level changes. It is a factor only for marketing tools that use put and call options. For put options used in minimum price contracts or purchased by the seller directly, it is the risk that put premiums will not increase one-for-one as grain futures prices decline. For call options used either in minimum price contracts or as part of a cash sale/buy call option strategy, it is the risk that call premiums will not increase one-for-one as grain futures prices increase. The size of options volatility risk tends to be greater as grain futures markets are more volatile, and as the length of time increases until option expiration.

This source of risk is relevant in situations where put or call options are initially purchased during times of high market volatility, but then sold back or offset later during periods of low market volatility. In times of high market volatility, options premiums tend to be bid higher, while options premiums tend to be bid low during periods of low market volatility. The higher than

normal premium cost paid to buy the option during a period of high market volatility may not be offset by the premium income received when the option is sold back (i.e., offset), even though futures prices have either fallen in the case of put options or risen in the case of call options.

Production Risk if Preharvest

This source of risk is relevant to forward contracts and futures and options hedges. If, when using preharvest forward contracts, a seller has made a commitment to deliver more production than produced, the producer has “over-contracted.” If this happens, the seller will typically need to buy cash grain to fulfill the production contract commitment shortfall.

Similarly, when using forward short hedges, a seller will be in a speculative position in the futures market if the amount of grain produced is less than the amount previously hedged.

In a conventional hedge, movements in the cash price of the underlying commodity offset movements in futures prices. Therefore, to the degree that sellers have over-hedged their grain production they find themselves in speculative positions in the futures market without protection from offsetting price movements in the underlying cash market.

Because there are no limits concerning the amount of grain production that may be placed under marketing loan for qualified commodities, they are not subject to preharvest production risk. However, government payment limitations may be a constraint for some larger farm entities.

Crop insurance tools are available to help manage preharvest production risk in preharvest strategies. Either regular multi-peril crop insurance (MPCI) or the newer crop revenue coverage (CRC) tools can be used to help manage the risk of over-contracting or over-hedging. The insured crop production levels of MPCI and crop revenue levels of CRC can be used as guidelines to determine the maximum amount of production that a

Marketing assistance loans – Nonrecourse loans made available to producers of wheat, feed grains, upland and ELS cotton, rice, soybeans, and minor oilseeds under the Agricultural Market Transition Act provisions in the FAIR Act of 1996. The new law largely continues the commodity loan programs as they were under previous law. Loan rate caps are specified in the law. Marketing loan repayment provisions apply should market prices drop below the loan rates. For farmers who forego the use of marketing assistance loans, loan deficiency payment rules apply.

producer may commit to preharvest pricing strategies.

Counter Party Risk

The risk that grain buyers will be unable to perform all or any part of their contractual obligations or will be unable to pay the seller for grain that has been delivered to them for sale is termed “counter party risk.” This source of risk is relevant for each of the forward contract tools discussed in Table 1. It is especially relevant to price later contracts where a buyer has already taken title to the grain, and in some cases, has sold and physically removed it from grain storage and handling facilities before the seller has either priced or received payment for the grain.

Marketing loans are typically not subject to counter party risk, but an exception would occur if unanticipated government farm program rules and regulation changes occurred that hurt the profitability of seller marketing strategies.

Control Risk

The risk that prices and returns from using a particular marketing strategy will get “out of control” is termed “control risk.” In other words, there is some risk that market actions could change the net return from a particular strategy to an unacceptable level before the seller can realize what is happening and take corrective action.

Except for forward cash contracts, all of the pricing alternatives listed here are subject to control risk. Only in the case of forward cash contracts is the seller totally insulated from further futures and/or basis risk. Net returns from other marketing tools may all be adversely affected by harmful futures price and/or basis changes if sellers are not diligently aware of market activity. Marketing loans are also subject to control risk to the degree that profitable pricing opportunities above the loan rate may quickly be lost if prices decline and sellers are not diligently watchful.

Futures and Basis Trend-Based Marketing Strategies

In this section, recommendations are made regarding which marketing tools to use based on sellers’ expectations about futures and basis trends. Recommendations are given for preharvest marketing strategies and for harvest and postharvest strategies.

Two types of recommendations are given for each futures and basis trend scenario: marketing strategies to use if trends are known with certainty, and marketing strategies to use to manage price risk if the futures trends are not known with much certainty. These risk management strategy recommendations focus on managing futures risk while assuming that producers typically do a better job of predicting trends in local basis levels than predicting trends in futures prices.

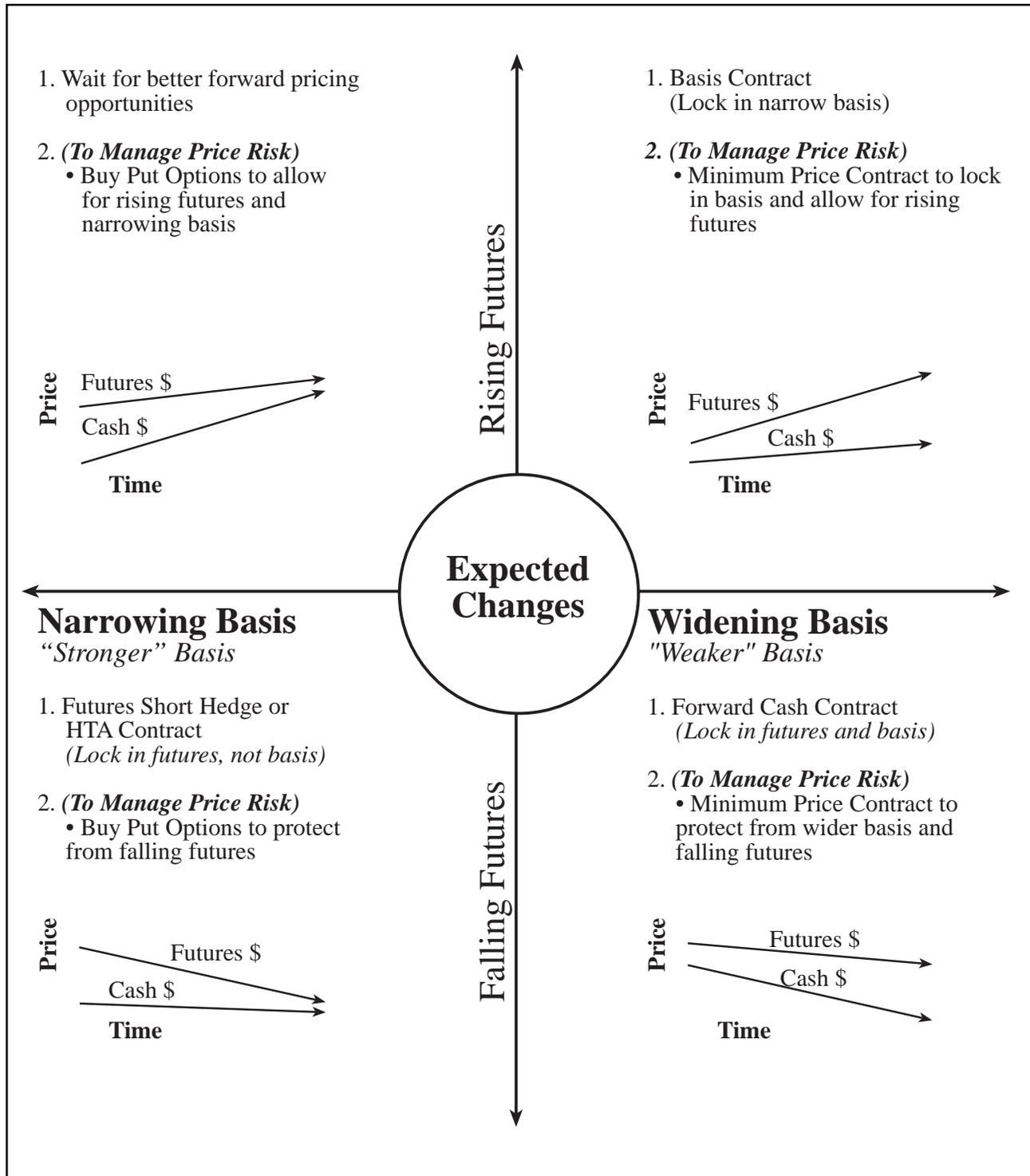
Preharvest Strategy Recommendations

Chart 1 presents preharvest grain sales strategies for selected market conditions. These strategies will have greater appeal to sellers with a less strict view of futures market efficiency, since those with a stronger opinion on the issue will tend to avoid preharvest pricing. See page 2 of this publication for further discussion about the effect of market efficiency on marketing strategy selection.

Rising Futures – Narrowing Basis

If, during the preharvest period, a seller expects futures to rise and basis to narrow from the preharvest basis bids currently being offered, then the recommended strategy is not to act now, but to wait for better forward pricing opportunities. Expected improvement in both harvest futures and basis bids will result in a more attractive and profitable price later. To manage price risk, a seller may buy put options to allow for rising futures and narrowing basis bids to occur, yet to protect from the possibility of declining futures prices.

Chart 1. Preharvest Grain Sales Strategies for Selected Market Conditions



Rising Futures – Widening Basis

If a seller expects futures to rise and basis to become wider than the preharvest basis bids currently being offered, then the recommended strategy is to take out a basis contract. A basis contract would lock in the

current narrow basis bid, but allow better grain futures prices to occur later. Expected improvement in futures prices would benefit the seller, but a wider basis trend would diminish the benefits of the futures price increase. To manage price risk, a seller may

take out a minimum price contract. A minimum price contract would lock in the current attractive basis bid while still allowing for the possibility of benefiting from rising futures prices. At the same time, a minimum price contract would provide protection should futures prices decline.

Falling Futures – Narrowing Basis

If, during the preharvest period, a seller expects futures to decline and basis to narrow from the preharvest basis bids currently being offered, then the recommended strategy is to either carry out a futures short hedge or a hedge-to-arrive (HTA) contract. Both the short futures hedge and the HTA would lock in the current futures price before it declines, but allow for the expected narrowing of local basis in the future. To manage price risk, a seller may buy put options to protect from falling futures and still allow for the expected narrowing of the basis to occur. This strategy would still allow the seller to benefit in the event that cash prices should rise rather than fall.

Falling Futures – Widening Basis

If a seller expects futures to fall and basis to become wider during the preharvest period, then the logical strategy is to take out a forward cash contract, locking in both the current futures and basis bids. In this scenario, all future prospective pricing opportunities are likely to be worse than those currently available, so the seller should take immediate action to lock in futures and basis pricing opportunities. To manage price risk, a seller may take out a minimum price contract to lock in the current basis bid and still allow for the possibility of benefiting from rising futures prices. A minimum price contract will provide protection should futures prices decline as expected.

Harvest and Postharvest Strategy Recommendations

Chart 2 presents harvest and postharvest grain sales strategies for selected market conditions. These strategies will appeal more broadly to sellers across the range of opinions regarding market efficiency, because of their focus on expected basis trends and the exclusion of preharvest pricing strategies. These strategies will be presented from the perspective of the seller's expectations at harvest about postharvest futures and basis trends. Sellers typically are deciding whether to sell or store their grain, to do a storage hedge, or to buy options during the harvest period. However, these same strategies are valid for decisions made during the postharvest period (i.e., to sell now or continue storing, etc.).

Rising Futures – Narrowing Basis

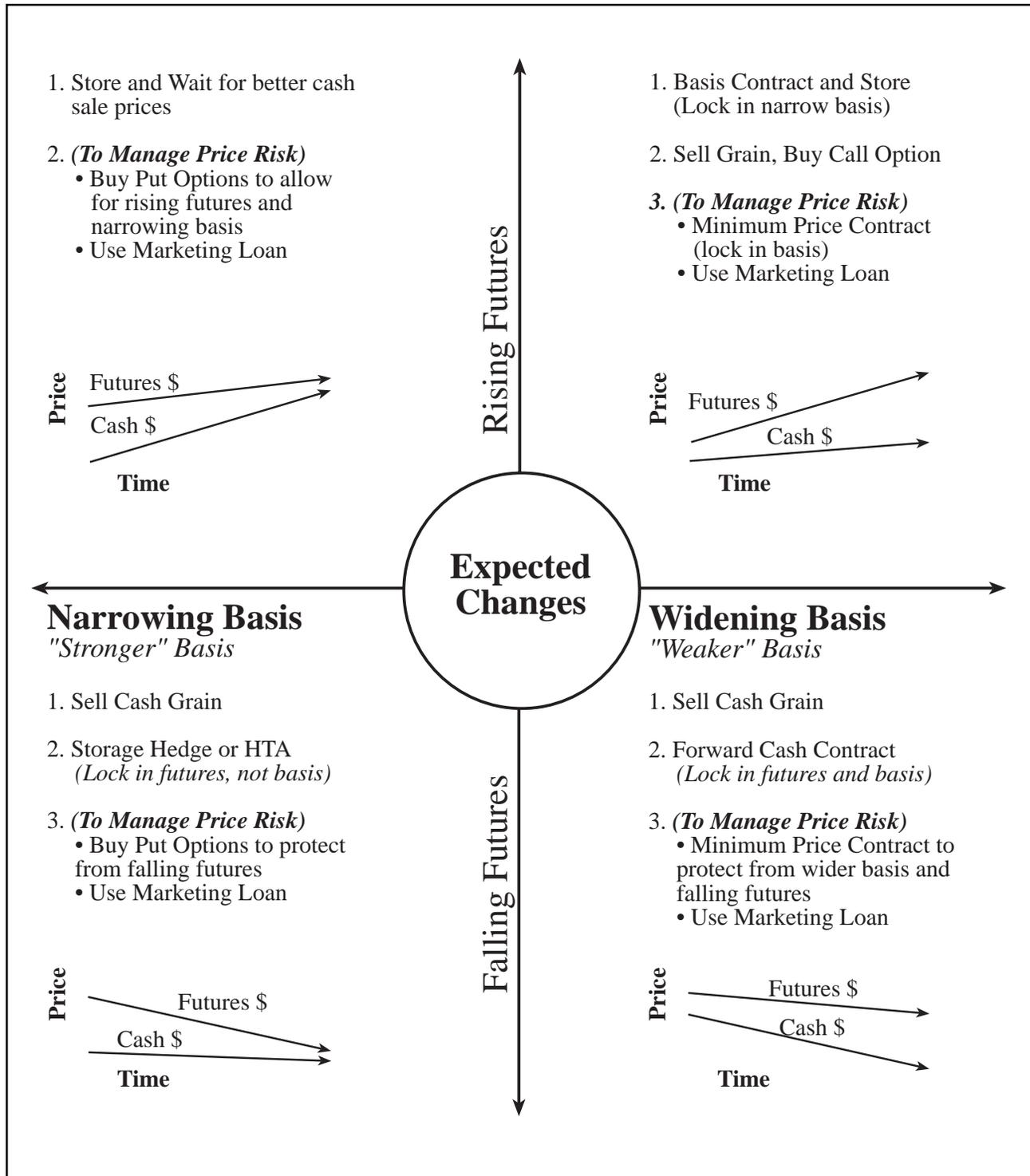
If, at harvest, a seller expects futures to rise and basis to narrow during the postharvest period, then the recommended strategy is not to act now, but to wait for better forward pricing opportunities in the future. Expected improvement in postharvest futures and basis bids would result in a more attractive and profitable selling price later. However, the expected price rise will still need to be enough to more than cover either commercial or on-farm storage and interest costs in order to make storage a profitable decision.

To manage price risk, a seller may buy put options to allow for rising futures and narrowing basis to occur, yet to protect from the possibility of declining futures prices during the postharvest period. Depending on the level of cash prices and the relative expense of buying put options, sellers may elect to use marketing loans to protect from possible price declines.

Rising Futures – Widening Basis

If a seller expects futures to rise and basis to become wider after harvest, then the recommended strategy is to take out a basis contract to lock in the current narrow basis

Chart 2. Harvest and Preharvest Grain Sales Strategies for Selected Market Conditions



bid and to store grain to wait for better grain futures prices. Expected improvement in futures prices would benefit the seller, but the expected trend toward a wider basis would diminish the benefits of the postharvest futures price increase.

A second recommended strategy is to sell grain at harvest and to buy call options. This locks in the current narrow cash basis bid and uses call options to benefit from expected postharvest futures price increases.

To manage price risk, a seller may take out a minimum price contract to lock in the attractive basis bid currently available, while still allowing for the possibility of benefiting from rising futures prices during the postharvest period. A minimum price contract would provide protection should futures prices decline during the postharvest period. As with the previous scenario, depending on the level of cash prices and the relative expense of buying put options, sellers may use marketing loans to protect from possible price declines.

Falling Futures – Narrowing Basis

If, at harvest, a seller expects futures to decline and basis to narrow during the postharvest period, then the recommended strategy is to sell cash grain at harvest. Even though a narrowing trend in basis would improve the selling price of later sales, the expected decline in grain futures would likely lead to lower selling prices in coming months.

A futures storage hedge and/or HTA storage contract also could be used to lock in any profitable storage opportunities in deferred futures contracts, while allowing for the expected narrowing of local basis.

To manage price risk, a seller may buy postharvest put options to protect from declines in deferred futures while still allowing for the expected narrowing of the basis to occur. This strategy would still allow the seller to benefit in the event that cash prices should rise rather than fall during the postharvest period. Marketing loans are still a viable alternative, especially if the expected net price from other pricing opportunities is at or below marketing loan rates.

Falling Futures – Widening Basis

If a seller expects futures to fall and basis to become wider after harvest, then the logical strategy is to sell cash grain at harvest. All later pricing opportunities are expected to be worse than what is currently available.

A second alternative is to take out a storage-oriented forward cash contract, locking in any profitable deferred futures and basis bids. The most important comparison will be between harvest cash sales and storage-oriented forward contracts. Any prospective postharvest pricing opportunities available later are expected to be worse than those currently available, so the seller should take immediate action.

To manage price risk, a seller may take out a storage-oriented minimum price contract to lock in the current basis bid and still allow for the possibility of benefiting from rising futures prices during the postharvest period. A minimum price contract would provide protection should futures prices decline as expected, yet provide the opportunity to benefit from any increases in futures prices. Marketing loans are also a viable alternative in this situation, again depending largely on the level of pricing opportunities relative to marketing loan levels.

Developing a Grain Marketing Plan

The purpose for the information presented up to this point has been to equip sellers to develop effective grain marketing plans. The key elements of a comprehensive grain marketing plan are presented in Table 2 (see pages 21 and 22). While this marketing plan work sheet may be used by sellers to develop a marketing plan, its true purpose is broader. It is meant to serve as a guide in leading marketers through the process of determining their grain marketing goals, assessing market prospects, developing a marketing plan, monitoring the progress of their plan, and finally of evaluating performance of their plan. The elements of a grain marketing plan as presented in Table 2 are discussed below.

Essential Information (1)

Basic information is recorded in this section, including the name of the person

developing the plan, the specific crop to be marketed, expected production to be marketed, and the time period that the plan encompasses. It also identifies the original date when the marketing plan was developed as well as scheduled dates for review and update.

This section also includes a record of the intended timing of marketing strategies, such as whether the seller intends to use preharvest, harvest, or postharvest sales. The proportion of the crop to be marketed during the preharvest, harvest, and postharvest periods is recorded. A question is asked about the use of MPCI or CRC insurance. The proportion of expected production or expected crop revenue that is protected by crop insurance may be used as a guide to determine how much production can be priced during the preharvest period.

Price Goals (2)

The factors affecting an individual's price goals in a marketing plan are discussed in the earlier parts of this publication on "Factors Affecting an Individual's Marketing Plans" and "Marketing Plan Goals and Performance."

In Table 2, individuals are asked to identify the price goal criteria or major factors upon which they base their marketing goals and the specific price goal they have set in terms of price per unit. Specific price goal criteria may include price enhancement, managing harmful price risk, and achieving specific financial goals (covering cost of production or profit objective pricing).

Market Prices, Outlook and Price Trend Expectations (3)

Factors affecting how different individuals interpret and respond to market price and supply and demand information are discussed in the earlier sections on "The Efficiency of Grain Markets in Determining Prices" and "Using Grain Market Information in Marketing Plans."

Futures and cash market prices are identified, as well as current and historic

basis levels. Historic average grain basis levels can be obtained from either university extension or other sources. From a market efficiency viewpoint, this market price information alone may be enough from which to develop a marketing plan, especially if deciding between harvest and postharvest storage strategies based on either carrying charges in deferred futures or current versus historic cash grain basis levels at harvest.

A section is included for those who value grain supply/demand and other types of market information in their marketing decisions. Key supply/demand and other factors are identified with indications given as to their expected effects on grain prices (positive, negative or unsure).

Finally, expected trends in futures (rising, falling, unsure) and basis (widening, narrowing, unsure) are identified.

Marketing Strategies (4)

The futures and basis trends indicated in the previous section of this worksheet can be used to select marketing tools and appropriate strategies. Previous sections on "Types of Grain Marketing Strategies," "Price Trend Effects and Risk Exposure of Marketing Tools," and "Futures and Basis Trend Based-Marketing Strategies" each are useful in developing specific marketing strategies that make use of specific marketing tools. The strategies and associated tools are identified, as well as the number of bushels involved, price goals, period to perform the strategy within, and how the strategy was actually carried out. More space will likely be needed to fully define marketing strategies than is presented in this worksheet.

"Stop Loss" Intervention Price Levels & Contingency Plans (5)

The purpose of this section is to develop fallback or reactive contingency plans in case unanticipated futures or basis trends occur that make the original marketing plan strategies untenable. In a two-step process, first "stop loss" intervention price levels are

identified. These are grain futures, cash and/or basis levels identified when the original plan is developed that would result in large enough actual or potential financial losses that the original marketing plan strategies would have to be changed.

The second step occurs if the intervention price levels are reached. It consists of identifying reactive contingency plans to follow in light of updated price trend information.

For guidance on what reactive contingency plans to use, the charts accompanying the section on “Futures and Basis Trend Based-Marketing Strategies” can be reexamined. Contingency plans can then be chosen based on the updated expectations on futures and basis trends.

Evaluating the Performance of the Marketing Plan (6)

Evaluating marketing plan performance is an ongoing, periodic process that should occur throughout the life of the plan as well as when it is completed. A marketing plan should be evaluated in comparison to specific price enhancement, risk, and financial management goals as discussed in the section on “Marketing Plan Goals and Performance.” The comparison of “Actual \$ vs. Price Goal” can be in the form of a cents per unit difference or as a percentage. The previous worksheet section on “Stop Loss” Intervention Price Levels is closely related to this section, in which the ongoing performance of the marketing strategy is being monitored.

Marketing Plan Development and Review Comments (7)

The final part of the marketing plan work sheet provides a section for comments on the development, progress, review, and performance of the marketing plan. The

identification of specific dates is meant to encourage sellers to periodically review and update their marketing plans to allow such plans to become dynamic decision-making processes rather than onetime exercises. If marketing plans are not periodically updated they may either provide poor direction to marketers or become irrelevant in light of changing market conditions.

Concluding Comments

The information and procedures presented in this grain marketing publication are based on the belief that sellers will be more successful at marketing their grain if they take a systematic, disciplined approach to developing and carrying out a marketing plan. Studies have shown that it is often difficult for farmers to obtain higher than average selling prices for the grain they produce.

Although marketing grain is a challenging endeavor, it is naive to presume that sellers should make simplistic, routine marketing strategy choices without adequate consideration of current market conditions and individual financial and managerial factors relevant to their decision. This publication provides sellers with a framework for developing marketing plans and following through on the process of making effective grain marketing decisions.

University extension grain marketing specialists are able to provide more information on marketing plan development and evaluation of the performance of grain marketing strategies. More specific information is available on the definition and function of various forward contract, futures, and options marketing tools as well as on current government marketing loan rules, regulations, and loan deficiency payments.

Table 2. Elements of a Grain Marketing Plan

1. Essential Information

Name: _____
 Crop to be Marketed: _____
 Expected Production: _____
 Time Period for Plan: _____

Original Marketing Plan Development Date: _____

Scheduled Dates to Review & Update Plan: _____, _____, _____, _____, _____.

Timing of Strategies Included in this Marketing Plan:

Preharvest Marketings: Yes _____ No _____ If Yes, what % of total sales: _____ %
 MPCII or CRC Insurance: Yes _____ No _____
 Harvest Cash Sales: Yes _____ No _____ If Yes, what % of total sales: _____ %
 Postharvest Marketings: Yes _____ No _____ If Yes, what % of total sales: _____ %

2. Price Goal(s)

<u>Price Goal Criteria:</u>	<u>Price Goal (\$/unit)</u>
_____	_____
_____	_____
_____	_____

3. Market Prices, Outlook & Price Trend Expectations

a. Market Prices on (____ / ____ / ____):

Futures:	Futures Contract	Closing Futures Price
	_____	\$ _____
	_____	\$ _____
	_____	\$ _____

Cash Prices:	Location	Cash / Contract \$	Basis (Fut\$ - Cash\$)
	_____	\$ _____	\$ _____
	_____	\$ _____	\$ _____
	_____	\$ _____	\$ _____

b. Market Outlook

Key Supply/Demand or Other Factors:	\$ Impact: (+), (-), None
_____	_____
_____	_____
_____	_____
_____	_____

c. Expected Price Trends

Futures Trend (select one):_ Rising ____ Falling ____ Unsure ____
 Basis Trend (select one):_ Rising ____ Falling ____ Unsure ____

(Continued)

4. Marketing Strategy

<u>Marketing Tool to be Used</u>	<u># Bushels or cwt.</u>	<u>Price Goal</u>	<u>Time Period</u>	<u>Explanation & Comments</u>
_____	_____	\$ _____	_____	_____
_____	_____	\$ _____	_____	_____
_____	_____	\$ _____	_____	_____
_____	_____	\$ _____	_____	_____
_____	_____	\$ _____	_____	_____

5. “Stop Loss” Intervention Price Levels & Contingency Plans

<u>Marketing Tool to be Used</u>	<u>“Stop Loss” or Intervention Price</u>	<u>Reactive Contingency Plans</u>
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____

6. Evaluating the Performance of the Marketing Plan

<u>Marketing Tool to be Used</u>	<u>Price Goal</u>	<u>Actual Final Selling Price</u>	<u>Actual \$ vs. Price Goal</u>	<u>Comments</u>
_____	\$ _____	\$ _____	_____	_____
_____	\$ _____	\$ _____	_____	_____
_____	\$ _____	\$ _____	_____	_____
_____	\$ _____	\$ _____	_____	_____
_____	\$ _____	\$ _____	_____	_____

7. Comments on Marketing Plan Progress & Performance

Date: (____ / ____ / ____) Comment: _____

Date: (____ / ____ / ____) Comment: _____

Date: (____ / ____ / ____) Comment: _____

Date: (____ / ____ / ____) Comment: _____

Date: (____ / ____ / ____) Comment: _____

Table 2. Example Elements of a Grain Marketing Plan

1. Essential Information

Name: Joe Farmer
 Crop to be Marketed: Hard Red Winter Wheat
 Expected Production: 20,000 Bushels (500 acres x 40bu/ac)
 Time Period for Plan: July 2000 - May 2001

Original Marketing Plan Development Date: June 19, 2000
 Scheduled Dates to Review & Update Plan: 7/15/00 9/15, 11/15, 1/15, 3/15

Timing of Strategies Included in this Marketing Plan:

Preharvest Marketings: Yes No If Yes, what % of total sales: 0 %
 MPCJ or CRC Insurance: Yes No
 Harvest Cash Sales: Yes No If Yes, what % of total sales: 25 %
 Postharvest Marketings: Yes No If Yes, what % of total sales: 75 %

2. Price Goal(s)

<u>Price Goal Criteria:</u>	<u>Price Goal (\$/unit)</u>
<u>Break-even wheat cash flow cost (after program payments)</u>	<u>\$ 3.00 / bu</u>

3. Market Prices, Outlook & Price Trend Expectations

a. Market Prices on (6 / 19 / 2000):

Futures:	Futures Contract	Closing Futures Price
	<u>July (KCBT)</u>	<u>\$ 3.01</u>
	<u>December</u>	<u>\$ 3.25</u>
	<u>May 2001</u>	<u>\$ 3.42</u>

Cash Prices:	Location	Cash / Contract \$	Basis (Fut\$ - Cash\$)
	<u>Colby, KS</u>	<u>\$ 2.65</u>	<u>\$ 0.36</u>
	<u>_____</u>	<u>\$ _____</u>	<u>\$ _____</u>
	<u>_____</u>	<u>\$ _____</u>	<u>\$ _____</u>

b. Market Outlook

Key Supply/Demand or Other Factors:	\$ Impact: (+), (-), None
<u>Moderate U.S. wheat stocks (809 mln. bu)</u>	<u>-</u>
<u>Reduced U.S. wheat production prospects</u>	<u>+</u>
<u>Historically low foreign wheat stocks base</u>	<u>+</u>
<u>Poor local wheat production prospects</u>	<u>+ Basis Impact</u>

c. Expected Price Trends

Futures Trend (select one): Rising Falling Unsure
 Basis Trend (select one): Rising Falling Unsure

4. Marketing Strategy

Marketing Tool to be Used	# Bushels or cwt.	Price Goal	Time Period	Explanation & Comments
Harvest time cash sale	5,000	\$ 2.65	Oct 25 - 7/1	Harvest sales for cash flow purposes
Farm storage cash sale	5,000	\$ 2.85	Oct - Nov	Sequential sale of 25% of prod.
"	5,000	\$ 3.05	Jan - Feb	"
"	5,000	\$ 3.25	Mar - April	"
		\$		

5. "Stop Loss" Intervention Price Levels & Contingency Plans

Marketing Tool to be Used	"Stop Loss" or Intervention Price	Reactive Contingency Plans
Cash sales in Nov-Dec	\$ 2.50 Cash	Sell 10,000 bush in Nov-Dec if \$2500
Buy Call Options in Jan	\$ 3.40 May bush	Cash in Oct - Dec Buy 2 - 5000 bu calls if KLB May > \$3.40 in Jan, 2000.
	\$	
	\$	

6. Evaluating the Performance of the Marketing Plan

Marketing Tool to be Used	Price Goal	Actual Final Selling Price	Actual \$ vs. Price Goal	Comments
Cash sales at harvest	\$ 2.65	\$		
Cash sale Oct-Nov	\$ 2.85	\$		
Cash sale Jan-Feb	\$ 3.05	\$		
Cash sale Mar-Apr	\$ 3.25	\$		
	\$	\$		

7. Comments on Marketing Plan Progress & Performance

- Date: (7 / 15 / 00) Comment: _____
- _____
- Date: (9 / 15 / 00) Comment: _____
- _____
- Date: (11 / 15 / 00) Comment: _____
- _____
- Date: (3 / 15 / 00) Comment: _____
- _____
- Date: (___ / ___ / ___) Comment: _____
- _____
- Date: (___ / ___ / ___) Comment: _____
- _____

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Extension Agricultural Economist
Northwest Area Office

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