AGRICULTURAL

MU Guide

PUBLISHED BY MU EXTENSION, UNIVERSITY OF MISSOURI-COLUMBIA muextension.missouri.edu/xplor/

Crop Marketing Plan

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Every businessperson eventually becomes involved in finance, production and marketing. These three activities are essential to effective business management. While most farmers describe themselves primarily as producers, they also have to finance and market what they produce.

Fortunately, good producers can be good marketers because smart marketing begins with an idea of the cost of production. Managers who market without an idea of their cost of production can only concentrate on enhancing the price they get for their product. It's like driving a car that only has a front window and no side or rear windows. As long as everything runs smoothly, it can be OK. But any setback must be handled with incomplete knowledge.

Those who market with an understanding of their cost of production can make decisions about what is an acceptable price, what price will cover certain critical costs, and what are the risks of not taking a price when it is offered. Using the analogy of the car, it provides front, side and rear windows so that the decision maker can make both offensive and defensive decisions.

The marketing plan described here is intended, first, to cover as many of the costs of production as possible and, second, to maximize the price received for commodities produced. Many farmers try to maximize price before they have implemented strategies to cover all costs. While marketing in this manner is the prerogative of the farmer, it is not the approach recommended in this guide. The marketing plan discussed here focuses on relatively simple and available strategies that can be used to increase income and reduce risk.

A three-step process

A business-oriented marketing plan includes the following three steps:

1. Estimate your cost of production and expected break-even price per unit of commodity, e.g., bushel, pound or hundredweight.
2. Determine your marketing plan — how much you are going to sell at what price.
3. Develop a follow-through plan.

Your cost of production

Good producers can be good marketers because smart marketing is aided by a thorough understanding of the production process. By analyzing the production process, managers are able to estimate costs of production. Each productive activity involves the use of inputs and services. By listing the activities, you can estimate prices to cover each activity and eventually the whole production process. Table 1, a worksheet for computing the cost of producing corn, provides a framework for estimating costs.

The best source of cost information is an internal review of your own production activities and costs of production. A record keeping program that tracks all of the costs of production provides a historical perspective on costs. These are coupled with estimates of input use and prices for the coming production year to develop a projected cost of production for the coming year.

A good cost-of-production worksheet should contain sections detailing the operating and ownership costs incurred in production. These details give perspective on which costs are cash costs and which are not. Cash costs are those expenses, such as seed and fertilizer, that require cash to be paid to the supplier. Noncash costs include depreciation in equipment and land interest for owned land. An understanding of the nature of the costs (operating and ownership, cash and noncash) helps establish target prices.

The marketing plan, no matter how good, may not be able to lock in prices that cover all costs of production. Key target prices that compensate for critical costs are important to have in years where opportunities to cover all costs are limited.

In the absence of your own cost estimates, you can use published costs of production, such as *Missouri Farm Financial Outlook* or *Farm Management Newsletter*, available from University Outreach and Extension. However, these sources provide only rough estimates of fixed and variable costs of production and do not have the detail necessary for personal business analysis and marketing.

Table 1. Projected Corn Cost-of-Production Worksheet.

Activity	Operation	Hours/Acre	Labor	Fuel	Total/Acre	Your Farm (cost per acre)
1	Fertilize (phosphorus and potassium)	0.08	$ 0.56	$0.35	$0.91	
2	Chisel plow	0.14	$1.01	$0.64	$1.65	
3	Fertilize (nitrogen)	0.08	$0.59	$0.37	$0.96	
4	Disking	0.15	$1.08	$0.68	$1.75	
5	Planting	0.20	$1.42	$0.89	$2.32	
6	Spray preemergent herbicide	0.08	$0.59	$0.37	$0.96	
7	Spray postemergent herbicide	0.08	$0.59	$0.37	$0.96	
8	Harvest	0.32	$2.21	$2.14	$4.35	
9	Grain drying	0.00	$0.00	$0.00	$0.00	
Fuel and labor subtotal		1.15	$8.05	$6.45	$13.85	
Materials and services						
Activity	**Material**	**Quantity**		**Cost/Unit**	**Total/Acre**	
1	Dry fertilizer rig rental	1 acre		$2.50	$2.50	
1	DAP (18-46-0)	150 lb 18-46-0		$0.14	$21.00	
1	Potassium chloride	45 lb K_2O		$0.13	$5.85	
3	Liquid N (UAN)	130 lb N		$0.25	$32.50	
5	Corn seed	0.33 bag		$100.00	$33.00	
6	Preemergent herbicide	1 acre		$18.00	$18.00	
7	Postemergent herbicide	1 acre		$7.50	$7.50	
8	Truck, custom charge	112 bu		$0.10	$11.20	
9	Grain drying, custom charge	112 bu		$0.10	$11.20	
Materials subtotal					**$142.75**	
Repair					$12.57	
Management					$11.00	
Overhead and miscellaneous					$8.60	
Interest on operating capital (9% of above expenses for 6 months)					$7.87	
Total operating costs					**$196.64**	
Land interest ($1000/acre at 6%)					$60.00	
Land taxes					$5.00	
Total land charge					**$65.00**	
Equipment depreciation					$25.67	
Equipment interest					$20.49	
Equipment taxes					$2.05	
Equipment insurance					$2.05	
Total equipment charge					**$50.26**	
Total costs					$311.91	
Total cost per unit (Total costs divided by 112 bushels, expected yield)					**$2.78**	

The marketing plan

The primary objective of a marketing plan is to cover as many costs of production as possible. Use the cost-of-production estimate discussed above and begin to set target sales prices as follows:

1. Estimate the outcome of different pricing alternatives.
2. Determine a target and quantity to market.

Estimate different pricing alternatives

Consider several marketing opportunities from cash sales to forward contracts to futures and options. The price worksheet organizes the appropriate information so that the alternatives are easily analyzed. Basis information for your local market is necessary to analyze the futures and options marketing alternatives.

The result of considering all marketing alternatives is to arrive at expected prices for all marketing alternatives. These expected prices can be compared with the cost of production. Whether the current expected prices exceed or are less than the total cost of production, the decision becomes one of marketing a certain percentage of expected production now or taking a risk that a higher price can be obtained at a future date.

Determine a target and quantity to market

Anytime a manager is waiting for a higher price, the possibility of getting a lower price exists. From this perspective, a marketer needs to have both a defensive and an offensive strategy (see Marketing Plan, Target Price Worksheet). The offensive position indicates that you will sell when the price rises to a certain level and

Marketing Plan

Crop: _____

Current expected production _____ bushels/lb/cwt

Units still not forward priced _____/bushels/lb/cwt

Previous units forward priced _____ bushels/lb/cwt

Current expected break-even price $ _____ /bushel/lb/cwt

Targets

	Offensive plan	Defensive plan
Trigger price		
Quantity to be sold		

Target Price Worksheet

Date _____	Forward contract (month _____)	Futures (month _____)	Put option (month _____)
Price (on the board)			
Expected basis			
Premium			
Expected price			

Action taken: Date:_____

Sold _____ bushels/lb/cwt using forward contract/futures/put option/other _____

for _____ (date) delivery at $_____/bushel/lb/cwt

Percentage of expected production forward priced _____%

Result at cash sale

Cash sale of grain – Date:_____ $_____/unit

Futures price, if used, when position sold $_____/unit

Futures price, if used, when position bought back $_____/unit

Gain or loss on futures transaction, if used $_____/unit

Option premium, if used $_____/unit

Total marketing value of crop $_____/unit

Marketing Plan (Example)

Crop: *Corn*

Current expected production *36,000* bushels/lb/cwt

Units still not forward priced *36,000* bushels/lb/cwt

Previous units forward priced *0* bushels/lb/cwt

Current expected break-even price $ *2.78* /bushel/lb/cwt

Targets

	Offensive plan	Defensive plan
Trigger price	*2.50*	*2.30*
Quantity to be sold	*10,000 bushels*	*10,000 bushels*

Target Price Worksheet

Date *July 10*	Forward contract (month *Jan.*)	Futures (month *Dec.*)	Put option (month *Dec.*)
Price (on the board)	*2.40*	*2.82*	*2.90*
Expected basis		*.32*	*.32*
Premium			*.16*
Expected price	*2.40*	*2.50*	*2.44*

Action taken: Date: *July 10*

Sold *10,000* bushels/lb/cwt using forward contract /futures/put option/other _____

for *December* (date) delivery at $ *2.82* /bushel/lb/cwt

Result at cash sale of grain

Cash sale of grain – Date: *November 20* $ *2.35* /unit

Futures price, if used, when position sold $ *2.82* /unit

Futures price, if used, when position bought back $ *2.62* /unit

Gain or loss on futures transaction, if used $ *+.20* /unit

Option premium, if used $ *0* /unit

Total marketing value of crop $ *2.55* /unit

you are able to cover pertinent costs. The defensive position is the price at which you will sell some of your production in an attempt to lock in income you might otherwise lose.

The target consists of a trigger price and quantity to sell for both an offensive and a defensive position. The trigger price is the price for each marketing alternative that will create a response from the marketer. When the expected price reaches the trigger price for either the offensive or defensive plan, a sale is initiated.

The quantity you decide to sell under each plan (see Marketing Plan, Targets) determines how much of the expected production you will market at different times. Your goal is to maximize the price you receive while minimizing downside price risk.

The follow-through plan

Once the target table is completed, the markets must be watched to determine when either trigger price has been reached. A key to effective marketing under this plan is to have a method of following the markets. Futures prices can be tracked by having continuous market information delivered to your office, using daily or weekly closing prices, or giving your broker or elevator manager authority to conduct the trade.

Because the trade will be initiated at an unknown time in the future, it is necessary to make arrangements that facilitate quick trading. Open any necessary accounts with a broker and banker. Have forward contracts ready to be signed and delivered. When a trigger is pulled, the decision should be easily implemented.

Stick to your plan

Because marketing is an emotional activity, it is important to have someone to keep you accountable to conduct trades at the predetermined triggers. If prices are moving up, the tendency will be to postpone pulling the trigger because a higher price surely is ahead. When prices are moving down, optimism says they will bounce back and you should wait for the rebound. This is not objective marketing.

You set trigger prices in an attempt to capture an acceptable price without undue risk. Because you market only a portion at each target, the price expectations experienced at each trigger can be built into future targets.

Accountability can be obtained by having another person know and understand the marketing plan. Spouses are often in a good position to implement a marketing plan because they may not feel as attached to the production as the person producing the commodity. When the target is reached, your spouse can remind you to initiate a trade. Marketing clubs, brokers and business partners can also serve as reminders to trade. Giving authority to grain traders to initiate a trade at certain targets can also be a way of keeping to the plan.

Aim at a second target

Whenever a trigger is pulled, aim at a second target. Select both offensive and defensive trigger prices, along with quantities to be marketed (repeat steps 1–3 on page 1). The process of setting a target, pulling the trigger at key points and aiming at another target repeats until all of the production is sold.

Marketers need to keep track of what percentage of expected production is forward priced so that they do not oversell as they repeat the marketing plan. Portions of the marketing plan worksheet assist producers in tracking what percentage of expected production is already forward priced.

Marketing tips

The plan described here is an attempt to introduce objectivity into the marketing process. Other things need to occur to market production successfully. The following tips should help make your marketing more successful.

- Don't market all of your production at one time — especially anticipated production. Grain in the field is not as sure as grain in the elevator. Forward price less than 75 percent of your expected production.
- Remember your strengths. Most farmers prefer production to marketing. Focus on production. Market as objectively as possible according to plans.
- Keep an eye on your financial position. Leverage and liquidity problems can wreak havoc on your finances and marketing plans. Having to sell to meet financial obligations is not part of the marketing plan and is not usually the best time to sell.
- Don't get greedy. If you can lock in a profit, do it. It may not be the highest profit, but it is a profit.
- Remember profit is a return to risk. You cannot reduce all risk and still expect to excel in profit.

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