REGARDLESS OF THE ENTERPRISE, whether it is crop production, livestock feeding, or commodity storage, good management requires that contracting and forward pricing decisions be coordinated closely with production and borrowing decisions (see next page). These suggested steps provide a general guide, as no single approach is best for every farmer. The choice depends on the individual farmer’s resources and objectives.

**Identify Production, Borrowing, and Marketing Alternatives**

The first step is to identify alternatives, which depend on the resources the farmer controls and the amount that the farmer can borrow. A crop farmer, for example, could grow different crops on the available land, lease more land, lease land to someone else, or even leave land idle. Similarly, the livestock feeder can place different types and weights of livestock on feed, feed to different weights, or leave the feedlot empty. Different levels of cultural practices, fertilizer application, pest control, feeding rates, and so forth, may be possible.

The farmer’s borrowing alternatives depend on the amount of collateral owned and on lenders’ policies. Alternatives include the amount to borrow and whether to use long-term or short-term loans.

The selling or contracting alternatives include the various outlets and types of cash, futures, and options contracts discussed in this report. Prices that potential buyers bid for cash contracts should be compared with futures prices where possible, using the appropriate basis. If direct use of futures or options is contemplated, then commission fees and margin requirements should be assessed, and lenders’ policies in covering futures margin calls should be determined.

**Estimate Costs and Returns Using Forward Price Information**

For farmers with fixed investments in land, equipment, or farming skills, a shortrun goal is to maximize expected returns above variable costs, subject to some restraint on risk. Expected gross returns can be based on futures or cash forward prices. Variable costs, such as purchased feed, fertilizer, and chemicals, for example, are directly tied to production and can be avoided by not producing. In the long run, the farmer wants returns to exceed total costs, both fixed and variable. But, profit is maximized or losses minimized in the short run by maximizing returns above variable costs.

Certain items that are fixed costs for one producer may be variable costs for another. For example, depreciation, interest, insurance, and taxes on a feedlot are fixed costs for the feedlot owner — they are realized whether the feedlot is used or not. However, the costs for these feedlot services are variable costs for the farmer who is hiring cattle custom fed in a feedlot.

**Evaluate Risk and Risk-Bearing Capacity**

Among the risks that a farmer must weigh are price risks, output risks, and risks of contract default by opposite parties. In past years, Government nonrecourse loans and deficiency payments effectively limited downward price risks for growers of program-supported commodities. The farmer who was eligible for loans and deficiency payments often needed no other price protection. Price risk has become more important with lower loan rates and target prices, and other farm program changes.

All crop producers face output risk, but the risks are particularly great in nonirrigated areas that are subject to frequent droughts. Crop yield risk includes not only the possibility of low yields but also poor quality; for example, high-moisture corn, weak-fiber cotton, or undersized potatoes. Diversification among enterprises, crop insurance, and holding of reserve funds to carry the farm through one or more bad crop years are the primary ways to deal with crop yield risk. In many crop-growing situa-
tions, forward selling no more than a third or half of the expected crop before yield is assured minimizes risk.

Farmers who enter cash contracts must also consider the possibility of default by buyers; farmers who use futures and options contracts must evaluate their basis risks, and farmers who hedge with futures must weigh the risks of margin calls. Dealing only with reputable buyers and sellers can limit default risk. Basis risk is relatively small for most producers, but may be substantial for farmers who are distant from futures delivery points or who produce commodities with special quality attributes. To be prepared for futures margin calls, the farmer must either hold cash reserves or make arrangements with a lender.

Farmers differ greatly in the amount of risk they can tolerate in an enterprise, depending on their overall debt-to-asset situation, their degree of diversification, and the riskiness of their other enterprises. One large loss, or two or three successive smaller losses, could throw into bankruptcy a specialized farmer with a high ratio of debts to assets. Such a farmer would want to make full use of forward sales, option contracts, yield insurance, and other precautions to assure some minimum level of return. In contrast, a farmer with substantial financial reserves or other sources of income may choose to carry greater risks on a particular enterprise in hopes of achieving higher average returns over time. However, even the more financially secure farmer can use forward contracts or options to expand profit opportunities while controlling risks.

Plan Borrowing, Production, and Marketing Activities

Once alternatives have been identified, costs and returns have been estimated, and risks evaluated, a coordinated plan for borrowing, production, and marketing can be developed. The plan needs to allow for the possibility of unfavorable contingencies, such as lower than expected prices or yields. A sound plan can also help in obtaining loans.

STEPS IN FARM DECISION MAKING

Planning stage

1. Identify the production, borrowing, contracting, and spot-selling alternatives available.
2. Estimate costs and returns using forward price information.

Implementation stage

1. Arrange loans, purchase inputs, and contract outputs.
2. Initiate and carry out production or storage.
3. Adjust to new information about price and yield prospects as needed.
4. Deliver the product, close out any futures or option hedges, and repay loans.

Implementation

Implementation involves arranging loans, obtaining insurance, buying inputs, and contracting for outputs, and then carrying out the physical processes of production and marketing. Changes in yield and price prospects after implementation begins may require modifying the plan. For example, the amount of a crop that is forward priced can be adjusted upward or downward as yield prospects improve or decline.