Vet Call

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Partial budgets for the beef cow herd

Veterinarians recognize that health is an important component in farm and ranch profitability; however, it is not the only, or even the primary, factor that dictates whether producers remain in business.

Management, which encompasses animal flow, animal husbandry, health, nutrition, capital acquisition and allotment, labor, buying of inputs, marketing products, and other areas of beef production are all interrelated and cannot be separated from each other.

Partial budgeting is a tool that veterinarians and producers can utilize to evaluate production options on individual farms.

Farm business planning includes taking an inventory of resources, devising alternate uses of these resources and choosing the best alternatives. Partial budgets assist in the planning effort by evaluating changes in resource use and evaluating the economic effect of making one adjustment in some portion of the business. Partial budgets will not take the place of a cash-flow or profit-and-loss statement or any other financial measurement of a farm's economic status.

▪Using a partial budget

The success of using partial budgets for farm or ranch planning depends on their prediction accuracy, which depends on the accuracy of the information and estimates they contain. Partial budgets are useful to evaluate changes such as adopting a new technology, expanding an enterprise, adopting an alternative enterprise, hiring a custom operation rather than purchasing equipment, making a capital improvement, or changing marketing strategy.

Partial budgeting is based on the principle that a change in the organization of a farm business will increase some costs and decrease others and increase some returns while decreasing other returns. The net effect will be the sum of positive economic effects minus the sum of negative economic effects.

Summaries of the National Animal Health Monitoring System (NAHMS) and Standardized Performance Analysis (SPA) data, farm records, university research, and production practices on other farms or ranches can serve as sources for alternate production or marketing ideas.

Once reasonable alternate plans are identified, the consulting veterinarian and producer should collect data about the potential change such as current costs of production, costs of capital, commodity prices, or other items pertinent to the particular decision alternatives.

In addition, reasonable estimates of future prices and animal production values (weight, efficiency, carcass value, etc.) are needed. Production estimates can be obtained from several sources, including

Figure 1: USING A PARTIAL BUDGET

Section 1

Additional returns if change is made	Amount of change
1	
2	
3	
4	
5	
Interest gained on increased revenue	
Subtotal additional returns	

Section 2

Reduced costs if change is made	Amount of change
1	
2	
3	
4	
5	
Interest saved from lower input costs	
Subtotal reduced costs	

Section 3

Additional cost if change is made	Amount of change
1	
2	
3	
4	
5	
Interest paid on increased costs	
Subtotal additional cost	

Section 4

Reduced returns if change is made	Amount of change
1	
2	
3	
4	
5	
Interest lost on reduced returns	
Subtotal reduced returns	

Summary

Section 5	Total change in Benefits (Section 1 + Section 2)	=	
Section 6	Total change in Costs (Section 3 + Section 4)	=	
Section 7	**Net change in Income (Change in Benefits – Change in Costs)**	=	

published research, Extension bulletins and current farm production records. Agricultural economists, U.S. Department of Agriculture (USDA) statisticians and futures markets provide information about the trend of prices and national production estimates.

An alternative to using one predicted price is to use a range of prices (low, medium and high) to evaluate changes. This method will evaluate the price sensitivity of the projected change.

Seven components

The partial budget is ready to be developed after all pertinent data is assembled. The seven components of a partial budget are (Figure 1):

1. Additional returns;
2. Reduced costs;
3. Additional costs;
4. Reduced returns;
5. Total for the additional returns plus reduced costs;
6. Total for the additional costs plus reduced returns; and
7. The net difference of 5 and 6.

Additional returns are those that occur if the change takes place. *Reduced costs* are current costs that will not be incurred under the proposed change. *Additional costs* are those that are incurred only if the change is implemented. *Reduced returns* are current returns that will no longer be received if the change is initiated.

The difference between positive and negative economic effects is an estimate of the net effect of taking the proposed change. A positive difference indicates the potential increase in net returns if the change is made. A negative difference is an estimate of the reduction in net returns if the change is adopted.

The extent of the positive or negative difference, given the producer's confidence in the numbers used, affects the final decision made.

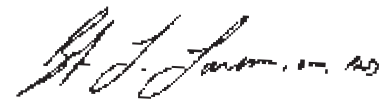
Only the costs and returns that change by proceeding with the alternate plan should be included in the partial budget. The unit used to analyze the change may be any size (that is, one head or the entire herd). After the analysis is performed, the result should be multiplied as necessary to show the economic effect on the entire enterprise or business.

Consider consequences

Veterinarians and producers need to consider the economic consequences of any production change. Depending on marketing strategies and production inputs for individual farms, recommendations will vary from one farm to another. Partial budgets allow producers and their advisors to predict the economic outcome of management or marketing changes before those changes are instituted. By using best case, expected and worst case scenarios for production response to a change and to expected price received, producers develop a sensitivity analysis for the proposed change.

A note of caution: The value of the analysis using partial budgeting is only as accurate as the input data. A positive net change indicates that it would be economically wise to proceed with the alternate plan. A negative amount implies that it would not be economically profitable to proceed with the change.

Other questions to consider when making the final decision include: Are the performance levels realistic? Are prices realistic? Do better alternatives exist? How much risk is involved? What are the transitional costs and effects on liquidity? How will management requirements change?



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