

January 1986

A.E. Ext. 86-11

Formulating a Bidding Strategy for the Milk Production Termination Program

by
Eddy L. LaDue

**Part VII of Materials Prepared by the
National Dairy Herd Extension Program Committee**

**Department of Agricultural Economics
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853**

National Dairy Herd Buyout Extension Program Committee

In November, 1985 a group of agricultural economists representing six land-grant universities informally organized the National Dairy Herd Buyout Extension Program Committee. The milk production termination program, as the buyout program is formally called, became official policy when the President signed the Food Security Act of 1985 on December 21.

The purpose of this ad hoc committee effort is to formulate materials that could be widely used in cooperative extension programs designed to help dairy farmers, lenders, and other industry groups to better understand and make decisions relative to the new milk production termination program. The individuals and institutions who have contributed to this effort are listed below.

CORNELL UNIVERSITY

Andrew Novakovic	Wayne Knoblauch
George Casler	Harry Kaiser
Eddy LaDue	Stuart Smith

MICHIGAN STATE UNIVERSITY

Larry Hamm
Sherill Nott

NORTH CAROLINA STATE UNIVERSITY

Geoffrey Benson

OHIO STATE UNIVERSITY

Robert Jacobson
Bernard Erven
Cameron Thraen

TEXAS A&M UNIVERSITY

Robert Schwart
James Richardson
Clair Nixon

UNIVERSITY OF WISCONSIN

Robert Cropp
Edward Jesse

Funding for this project has been provided in part by the Farm Foundation and the Cooperative Extension Services of the respective universities.

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Attachment One

Materials Provided by the National Dairy Herd Buyout Extension Program Committee

- Part Ia
Detailed Summary of the Dairy Provisions of the Food Security Act of 1985, Andrew Novakovic, Cornell University
- Part Ib
"Update on ASCS Rules Concerning the MPTP," Andrew Novakovic, Cornell University
- Part II
Dairy Outlook: 1986 Through 1990, Alternatives, Prices, Expenses, Receipts, R. Jacobson, C. Thraen, E. Jesse, R. Schwart, L. Hamm, and R. Cropp, Ohio State University.
- Part III
Goals and Your Whole Herd Buyout Decision, Bernard Erven, Ohio State University.
- Part IV
Your Buyout Bid: Factors to Consider, Sherill Nott, Wayne Knoblauch, and George Casler, Michigan State University and Cornell University.
- Part Va
Worksheets for Calculating Breakeven Bids for the Milk Production Termination Program, George Casler and Wayne Knoblauch, Cornell University.
- Part Vb
User's Guide to Buyout Program Decision Aid (BOPDA) and accompanying BOPDA microcomputer software, Harry Kaiser and Stanley Payson, Cornell University.
- Part VI
Federal Income Tax Considerations for Dairy Bidout, Clair Nixon and James Richardson, Texas A&M University.

Tax Planning in the Dairy Herd Buyout, Stuart Smith, Cornell University.
- Part VII
Formulating a Bidding Strategy for the Milk Production Termination Program, Eddy LaDue, Cornell University.
- Part VIII
"The Milk Production Termination Program: Analyzing the Buyout Decision," a videotape, A. Novakovic, W. Knoblauch, G. Casler, and E. LaDue, Cornell University.

**FORMULATING A BIDDING STRATEGY
FOR THE MILK PRODUCTION TERMINATION PROGRAM**

Eddy L. LaDue

Farming has frequently been compared to a poker game. In that context, bidding in the Milk Production Termination Program (buyout program) could be considered just another hand. Like the cards in your hand, there are some things you know: your historical operating results; your debt/asset situation, and your desire to continue farming. Like the cards in the other player's hands, there are many things you do not know: the exact economic environment for dairying in the next five years (costs and prices); the production costs and debt situation of other bidders, and the bid evaluation procedure to be used by ASCS. Like the poker game, the actions of other players will influence your results. It is not required that a bid be a direct reflection of the cards held (the break-even situation for the farm). A player with a good hand (a low break-even bid) who decides to pass (not bid) could influence whether your bid is accepted -- as could one who overbids his hand (bids far above his break-even). Someone who plans to get out of dairying with or without the buyout program may find it easy to underbid you. The ideas presented below are designed to help you think about your bidding strategy. Like a set of tips on how to play poker, they do not guarantee that you will win, but they may increase the chances that you feel you did the best you could after the process is over.

1. **What game do you prefer to play? Do you want to (should you) continue dairying?**

Like all of agriculture, dairy farming is a very competitive business with a high and increasing level of technology involved. How strongly do you want to continue in the business? The 1979-82 period was likely one of the most profitable dairy farming has seen in many years. If you did not make any money then, and do not have a good, correctable reason for it, maybe this is the time to consider alternatives. The buyout program might provide a time period with some income from the farm (government payments), but few labor responsibilities for the farm, when alternative employment opportunities could be explored, and experience and seniority developed in a nonfarm job. If you plan to exit dairy farming regardless of whether your bid is accepted, or you consider leaving farming via the buyout program, you should make break-even bid calculations under those assumptions. If you plan to continue dairy farming if you do not participate in the buyout program, use your expected return from farming as your base for break-even bid calculations.

2. Look carefully at your hand -- calculate break-even bids for your situation. A set of break-even bid calculations for your farm business provides the basic point of departure for your bid.

Calculate a break-even bid under the most likely set of circumstances for your farm business and the general economic environment. Worksheets have been developed to assist in these calculations (see Casler and Knoblauch, Worksheets for Calculating Break-Even Bids for the Milk Production Termination program and/or Kaiser and Payson's microcomputer program for calculating break-even amounts). However, the results you get using the worksheets or the computer program are no better than the data that are put in them. It will pay to spend some time getting sound historical data for your business and for your estimates about the future with and without participation.

Remember, no one knows the future with certainty. Therefore, there will be a number of pieces of data used in the analysis that you must estimate to the best of your ability. Some of the factors used in your analysis, particularly the future milk price and the general level of farm costs, are sufficiently important that calculation of a break-even bid with a \$0.50 higher and \$0.50 lower milk price and a five percent higher and lower value for all costs will give you a better feel for the likely range over which your bid could vary and still be the correct bid when you look back at the bid after the program is over. The computer program will automatically make these alternate calculations.

3. Carefully consider your opponents -- think about the situation of other farmers. In a real poker game you cannot look at the other players cards. However, in the buyout program there is no law against trying to do so. At least something is known about some other players (farmers).

Dairy farmers in some parts of the country have many alternatives that are nearly as good as milking cows. For example, a drylot dairyman in the southwest may be able to switch to drylot beef and use all the facilities except the milking parlor and milkhouse. The costs of that switch if feeding beef had the same profitability as dairying, would be the difference between the current value of the dairy herd and its value if sold for slaughter. USDA Agricultural Prices for late 1985 list dairy cow prices at approximately \$815 and cull dairy cow prices at approximately \$0.32 per pound or \$416 for a 1,300 pound animal. Thus, such farmers have a loss of about \$400 to be recovered over the life of the program. If their cows produced 13,000 pounds of milk per year, their break-even bid would be \$3.08 per hundredweight ($\$400 \div 130 \text{ cwt}$), assuming all the money is received early in the program.

Farmers with youngstock would, however, have to cover the loss connected with selling them for slaughter. The beef value of these animals will depend on what can be obtained for such animals when they cannot be purchased for breeding or feeding. The loss on these animals might also be about 50 percent of the market value for dairy purposes. Average value of heifers might be 50 percent of cows. Under these conditions, a farm with 70 percent as many heifers as cows would have to raise their bid by about 18 percent ($.50 \times .5 \times .7$) to allow for sale of heifers. Break-even bids would then be \$3.63 per hundredweight.

Dairy farmers who plan to exit farming with or without the program will need to cover the difference between market and slaughter value for their cows, plus the decline in the value of their real estate because milk cannot be produced on it for the duration of the program. Average northeast farms frequently have real estate valued at about two times the value of the livestock. Thus, a 25 percent decline in the value of real estate would represent a loss equal to 50 percent of the value of the livestock and thus would roughly double the bid compared to the farm with other farming alternatives about equal to dairying. That is something on the order of \$7.26 per hundredweight for the five year program.

Professor Casler, Cornell University, has calculated the break-even bids required to maintain income at 1984 levels for average New York farm situations. Such bids frequently fall in the \$3-5 per hundredweight per year of the program for a total bid of \$15 to \$25, depending upon the assumptions used.

Some farmers with reasonably good businesses who have made rough calculations with very incomplete information on the program have indicated they could bid in the \$6-7 per year range and be willing to participate. These calculations imply a total bid of \$30 to \$35 per hundredweight. However, given the shaky nature of these calculations, all that is known for sure is that farmers with good businesses are likely to submit bids that are above the \$15 to \$25 per hundredweight level.

There may (or may not) be limitations on the number of bids accepted in any geographical region. If such limitations do exist, your competition will be people in your geographic region. The biggest difference between regions is the profitability of alternatives to dairying. As indicated above, those with other alternatives nearly as profitable as dairying will often be able to submit relatively low bids.

4. Remember, you do not make the rules. Unfortunately some of the rules in this game will likely be made as the game is played. ASCS has established the rules for bidding in the program but is likely to make up the rules on who is accepted after looking at the character of the bids.

Since no preference will be given to those who submit early bids, and additional information and rules may become available during the bidding period, it will likely be in your best interest not to hurry to make your bid. Start your analysis early (now). But, do not push to submit the first bid in your county. Just be sure you get it in before the end of the bidding period.

Control over when your cows can be sold can be obtained only by limiting your bid to one of the three bid periods. If you place a bid for two or three periods, ASCS will choose one. It will not necessarily be the lowest of the bids placed. If bids are placed in more than one period, the difference between the bids should reflect the difference in lost income and your desire to exit dairying at a particular time.

Placing a bid in all three periods (or at least the first and third) likely increases your chances of getting a bid accepted. Since ASCS has been instructed to have more cows culled in the first and third periods than the second, the cut-off (highest accepted) bid may vary significantly between periods. If you have a high desire to participate, placing a bid in all three periods, even if the difference between the bids is significant, may be a good strategy.

5. Bidding is based only partly on the cards one holds. Poker bidding is frequently based on the cards you hold, what you think others hold and your "feel for the game".

Most farmers will obviously require more than a break-even level of income to participate. By definition, a bid exactly equal to your calculated break-even bid will not make you any better off than not participating. Thus, farmers will add something (a participation premium) to their calculated break-even amount to determine the actual bid they submit. Participation limits what can be done with cattle and real estate. Some farmers will require significant premiums to accept these limitations. There is a natural tendency to want to bid as high as possible while still getting the bid accepted. However, the higher the bid, the lower the probability of acceptance. Some will have a high level of desire to participate and, thus, will add only a small premium. The range of break-even bids calculated for your situation, plus your participation premium, can be used to provide a range in which you can make logical bids. Those with a high desire to participate may bid toward the low end of the range. Those desiring to maximize income with less concern about the possibility of not being accepted may bid toward the high end.

6. You have to bid to play. In spite of the many uncertainties of the situation, you can participate in the program only if you bid.

Since we are dealing with the future, there is no way that a perfect bid can be determined. You can only obtain concrete data on your situation, consider your desires and make as informed a bid as possible

7. Carefully select your method of payment if you win (your bid is accepted). In selecting your payment option, consider interest, taxes and cash flow.

Receiving the bulk of the money early will reduce the amount of interest paid on loans where the buyout payments are used to reduce loan balances. Alternately, if you get the money early, you can earn interest on it longer. Accepting a large payment in one year could increase your taxes, especially in the first year when taxable income may be high from the sale of cows and possibly some other assets. If the cattle are raised, the cows should qualify for capital gains. Income averaging may also be useful if income is low during the preceding three years (see Smith, Tax Planning in the Dairy Herd Buyout). Getting most of the money early in the buyout period should provide the most flexibility in handling cash outflows unless you need help in controlling the expenditure of funds. Many lenders can allow early payments on loans even if those loans will continue after the program.