

May 1988

**DAIRY TERMINATION
PROGRAM**

**A Perspective on Its
Participants and Milk
Production**



042319

**Resources, Community, and
Economic Development Division**

B-211447

May 31, 1988

The Honorable Jesse Helms
The Honorable Pete Wilson
United States Senate

In response to your December 9, 1986, request and subsequent discussions with your offices, we are presenting information on the Department of Agriculture's (USDA) Milk Production Termination Program, commonly referred to as the Dairy Termination Program. The program was authorized by the Food Security Act of 1985 to reduce milk production and federal purchases of surplus dairy products. Farmers participating in the program agreed to slaughter or export their entire dairy herds and not reenter dairying for at least 5 years. In return they received payments from the federal government. This report specifically covers (1) data on milk production during the program and (2) the results of a questionnaire that we sent to dairy farmers who bid to participate in the program. As agreed with your offices, in a later report we plan to present the results of an economic model's estimate of the program's long-term impact on domestic milk production as well as any costs associated with the program.

In summary, milk production leveled off during the Dairy Termination Program.¹ Total production did not decrease because nonparticipating farmers increased their production during the program period. The leveling off of production coupled with increasing demands for dairy products resulted in decreased federal purchases of dairy products in 1986 and 1987.

On the basis of the results of our questionnaire, the extent of the program's long-term impact on milk production is uncertain. For example, our questionnaire results indicate that (1) over 40 percent of the participants believe that it will have little or no effect on production at the end of 5 years, (2) about 26 percent of the program's participants reported that they may return to dairying at the end of 5 years, and (3) 26 percent reported that they probably or definitely would have quit dairy operations without the program. Additionally, many factors, such as farmers' expectations of future milk and feed prices, add to the uncertainty of future milk supplies.

¹Yearly information presented in this report is on a calendar year basis unless stated otherwise.

Milk Production

The major objective of federal dairy policies and programs is to ensure an adequate supply of milk. In recent years, however, the U.S. dairy industry has produced significantly more dairy products than can be marketed commercially at established market prices. The milk surplus, in the form of dairy products such as butter, cheese, and nonfat dry milk, is purchased by the government. These purchases increased from about \$247 million in fiscal year 1979 to a high of \$2.7 billion in fiscal year 1983.

In an effort to control the surpluses, the Congress authorized in November 1983 the Milk Diversion Program. We reported on this program in 1985.² From January 1984 through March 1985, USDA paid 38,000 of the nation's 200,000 commercial milk producers to reduce their milk sales by 5 to 30 percent. Although this effort temporarily slowed the increase in milk production and subsequent sales to the federal government, 1985's milk production was over 143 billion pounds as compared with over 135 billion pounds in 1984, and federal surplus purchases increased from over 8 billion pounds in 1984 to over 13 billion pounds in 1985.

Dairy Termination Program

The Dairy Termination Program was established to remove 12 billion pounds of milk, or about 8.7 percent, from annual production, using 1985 marketings as a base. USDA invited dairy farmers to submit bids for participation in the program. Essentially, a bid stated the amount of federal payment dairy farmers were willing to accept in return for their participation in the program. Participation required farmers to slaughter or export their entire dairy herds from April 1, 1986, to September 30, 1987. Under the program participating farmers had to agree to quit dairying for at least 5 years. Almost 40,000 producers submitted bids for the program. USDA accepted bids from about 14,000 dairy farmers, equating to 12.3 billion pounds of 1985 milk marketings. The accepted bids ranged from \$3.40 to \$22.50 per hundredweight, with an estimated federal pay out to the participants of \$1.8 billion.

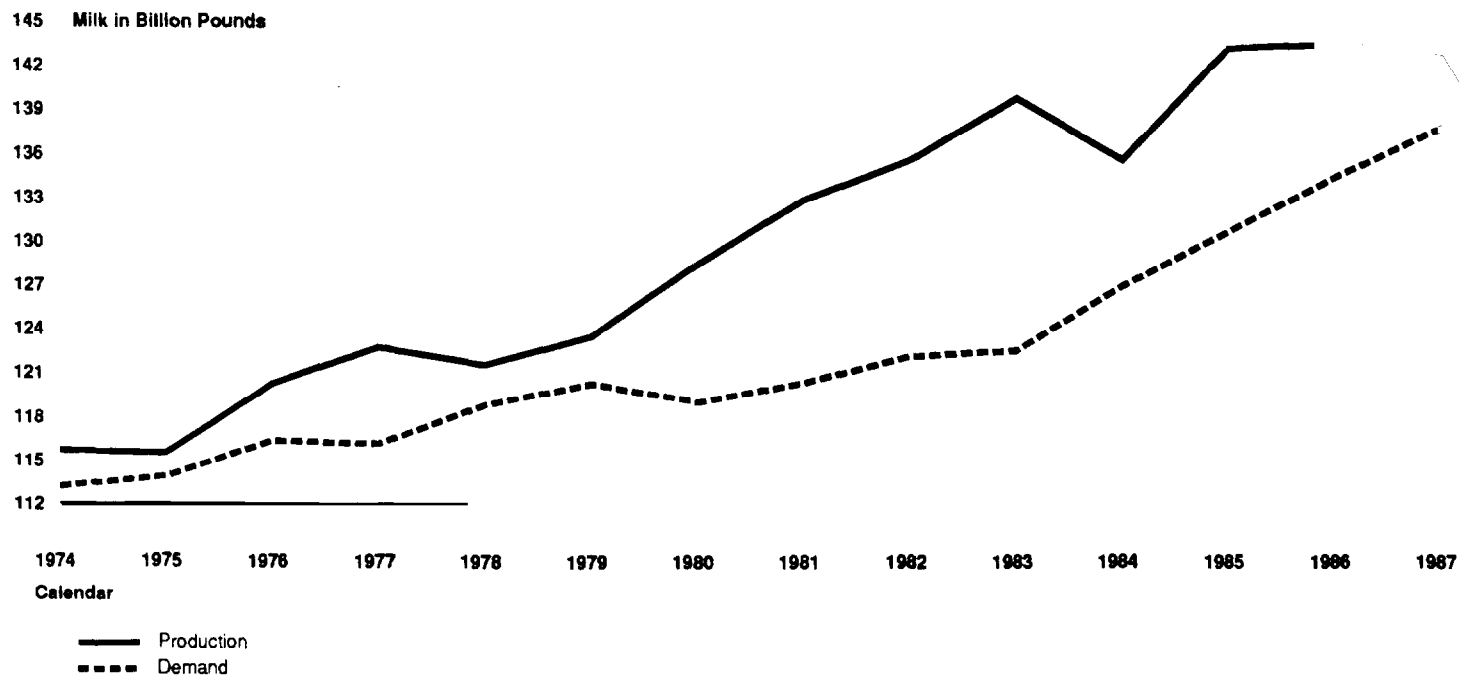
To help defray the cost of the program, the Congress authorized assessments on dairy producers. Producers paid 40 cents per hundredweight of production from April 1 through December 31, 1986, and 25 cents per hundredweight from January 1 through September 30, 1987. These assessments totaled about \$677 million.

²Effects and Administration of the 1984 Milk Diversion Program (GAO/RCED-85-126, July 29, 1985).

Total Milk Production Leveled Off During the Program

Milk production leveled off during the Dairy Termination Program. As previously mentioned, various factors in addition to the program affect milk production and supplies. Dairy farmers take into account expected milk and feed prices when making production plans. More financially attractive sources of income for existing or potential dairy farmers are also important factors in determining future milk supplies in the United States. While the program contracted to remove almost 9 percent from annual milk production, nonparticipating dairy farmers continued to increase their production. In 1986—the first year of the program—overall milk production increased about 234 million pounds, or a fraction of a percent, over 1985 production. In 1987 production dropped only slightly below the 1985 level by about a half of a percent. With production leveling off and demand continuing to increase, federal purchases of surplus dairy products decreased from 13.2 billion pounds in 1985 to 10.6 billion pounds in 1986 and declined further to 6.7 billion pounds in 1987. Figure 1 compares production and demand for milk and dairy products between 1974 and 1987.

Figure 1: Annual Production and Demand for Milk and Dairy Products, 1974-87



While production during the program generally leveled off at the national level, it varied among different geographic locations. Table 1 compares changes in milk production levels for 1986 and 1987 with the percentage of 1985 marketings contracted for removal by farmers within the 10 states that took the most pounds of milk out of production under the program. Milk marketings are the difference between total milk production and the amount of milk used on the farm. Since 1975, milk marketings have been almost the same as milk production—over 98 percent of production.

Table 1: Production Activity During the Dairy Termination Program

Percent of marketings and production change

State	1985 marketings removed by the program ^a	1985 to 1986 production change ^b	1985 to 1987 production change ^b
California	10.67	2.8	6.9
Idaho	21.79	(1.1)	(2.3)
Iowa	8.82	(4.4)	(12.8)
Michigan	11.67	(2.9)	(5.7)
Minnesota	8.99	(2.1)	(5.9)
Missouri	14.34	2.1	0.6
New York	4.09	0.1	(3.2)
Texas	16.25	3.0	8.4
Washington	14.50	0.3	(0.3)
Wisconsin	3.20	2.0	4.0

^aNot all of the program's dairy cattle were removed at one time. An estimated 57 percent were slaughtered or exported from April through August 1986, another 19 percent from September 1986 through February 1987, and the remaining 24 percent from March 1987 through August 1987.

^bParentheses indicate negative numbers.

Table 1 shows that while Texas participants contracted to remove about 16 percent of the state's 1985 milk marketings during the program, milk production actually increased 3 percent in 1986 and over 8 percent by 1987. In contrast, Iowa's 1987 production decreased more than the percentage of 1985 milk marketings its program participants contracted to remove.

Questionnaire Results

We sent questionnaires to random samples of 650 unsuccessful and 545 successful Dairy Termination Program bidders to (1) develop a profile of program participants including reasons for bidding on the program and current employment activities, (2) ascertain indications of the long-term

impact of the program, and (3) determine how many unsuccessful bidders might bid on a future termination program and at what price. We attained a 73-percent response rate from unsuccessful bidders and a 77-percent response from successful bidders.

Profile of the Program Participants

About 96 percent of the program bidders were sole proprietorships or partnerships as opposed to corporations. Program participants had a wide range of ages. Forty-eight percent of the program participants were 50 or younger and about 13 percent were over 62.

The predominant reason cited for bidding on the program pertained to finances. About one-half of the bidders said they were moderately to very greatly influenced by the fact that program participation would be more profitable than continuing dairy operations. One-half of the bidders also said they were somewhat to very greatly influenced by the need to get out of debt. In comparison, about 69 percent of the bidders said that the desire to retire from all work had little or no influence on their decision to submit a bid.

After entering the program and slaughtering or exporting their herds, successful bidders were employed in several occupations most of which pertain to some type of farming. Only 17 percent left farming. Table 2 is a breakdown of the employment activities of program participants.

Table 2: Program Participants' Occupations

Occupation ^a	Percent
Farm crops for sale	48
Maintain a livestock operation	44
Work for a dairy farmer	2
Do other farm-related work	15
Do nonfarm-related work	28
Not currently working but seeking work	5
Not currently working and not seeking work	9
Other	8

^aA farmer may be included in more than one occupational category.

Questions Concerning Long-Term Impact of the Dairy Termination Program

The possible return of program participants to dairying at the end of 5 years may diminish the extent of any long-term impact of the program on milk production. Approximately 26 percent of the program participants reported they either will definitely go back, will probably go back, or are just as likely to go back as not. Generally, program participants say it would be easy to recondition and/or acquire the needed land, dairy equipment, and buildings. Another factor affecting program impact is the number of participants who would have quit dairy operations without the program. Twenty-six percent of the program's participants indicated that they probably would have quit dairying without the program. However, we do not know how many of these farmers would have slaughtered or exported their herds as opposed to selling them for continued use in a dairy operation.

About 40 percent of the farmers who bid on the program believe it will have little or no effect on milk production at the end of 5 years. Our questionnaire did not address the reasoning behind the opinion on minimal long-term impact. However, the return of some program participants to dairying and continued increasing production per cow are possible explanations.

A Future Dairy Termination Program Could Be More Costly

Most of the bidders who did not have their bids accepted under the program said they would bid on a future program, but at an average amount that significantly exceeds the average bid on the previous program. About 69 percent of the unsuccessful bidders indicated that they would probably or definitely bid on another program. Unsuccessful bidders said that they would bid an average of approximately \$32.00 per hundredweight of milk production. The average accepted bid for the questionnaire respondents in the last program was \$15.49 per hundredweight.

Scope and Methodology

In obtaining information for this report, we contacted various USDA officials and gathered production data at USDA's headquarters in Washington, D.C. However, the primary information source for this report is the results of a mail-in questionnaire that we sent to random samples of both successful and unsuccessful program bidders. A more complete description of our questionnaire methodology appears in appendix I. A summary of our questionnaire responses is contained in appendix II. Our audit work took place between May 1987 and April 1988. We discussed this report with officials from the Agricultural Stabilization and Conservation Service who generally agreed with its contents. However, as

requested, we did not obtain official agency comments on a draft of this report.

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Agriculture; and other interested parties. Copies will be provided to others upon request. Major contributors are listed in appendix III.

A handwritten signature in black ink that reads "Brian P. Crowley". The signature is written in a cursive style with a horizontal line underneath the name.

Brian P. Crowley
Senior Associate Director

Contents

Letter		1
Appendix I Questionnaire Methodology		10
Appendix II Summary of Questionnaire Results		11
Appendix III Major Contributors to This Report	Resources, Community, and Economic Development Division, Washington, D.C	14 14
Tables	Table 1: Production Activity During the Dairy Termination Program Table 2: Program Participants' Occupations	4 5
Figure	Figure 1: Annual Production and Demand for Milk and Dairy Products, 1974-87	3

Abbreviations

GAO	General Accounting Office
USDA	U.S. Department of Agriculture
RCED	Resources, Community, and Economic Development Division

Questionnaire Methodology

We used a mail-in questionnaire to survey successful and unsuccessful Dairy Termination Program bidders. This survey was conducted between October 1987 and January 1988.

To identify bidders, we obtained a bid file from the USDA Agriculture Stabilization and Conservation Service and used it to randomly sample 650 unsuccessful and 545 successful bids. We sent follow-up questionnaires to encourage responses from individuals not responding to the original mailing. Of those surveyed, we ultimately achieved a 73-percent response rate from unsuccessful bidders and a 77-percent response from successful bidders.

All sample surveys are subject to sampling error—that is, sample results can differ from results that would be obtained if the entire population responded to the questionnaire. We selected sample sizes large enough to ensure that sampling error for estimates of percentages did not exceed 5 percent at the 95- percent level of confidence.

Summary of Questionnaire Results

	Successful bidder	Unsuccessful bidder
Number of respondents	420	475
Question		
Was your bid submitted as a sole proprietor, partnership, or corporation? (Check one)	(percent)	(percent)
Sole proprietor	84	78
Partnership	12	18
Corporation	3	2
Did not respond	0	1
What was your lowest bid price? (in dollar amount)	(mean) \$15.49	(mean) \$38.87
Without the Dairy Termination Program, how likely is it that you would have totally quit or continued dairy operations by now? (Check one)	(percent)	N/A
Definitely would have quit anyway	9	
Probably would have quit anyway	17	
Just as likely to have quit as to have continued	13	
Probably would have continued	34	
Definitely would have continued	26	
Did not respond	1	
How much control, if any, do you have over how the land and facilities (buildings and dairy equipment) you used for dairy operations will be used in the next 5 years? (Check one for each category)	(percent)	N/A
	Land	Facilities
Little or no control	8	8
Some control	6	7
Moderate amount of control	9	7
Great amount of control	11	9
Very great or total control	65	57
Did not respond	3	11
Do you expect to ever go back to the dairy business or stay out of it forever? (Check one)	(percent)	N/A
Will definitely go back	3	
Will probably go back	9	
Just as likely to go back as not	14	
Will probably stay out	38	
Will definitely stay out	34	
Did not respond	2	

(continued)

**Appendix II
Summary of Questionnaire Results**

Question	Successful bidder	Unsuccessful bidder
Which of the following best describes your current occupation(s)? (Check all that apply)	(percent)	N/A
I farm crops for sale	48	
I have a livestock operation	44	
I work for a dairy farmer	2	
I do other farm-related work	15	
I do non-farm related work	28	
I am not currently working but am seeking work	5	
I am not currently working and not seeking work	9	
Other (specify):	8	
What was the size of the dairy herd (including cows, heifers, and calves) that you bid to terminate? (Write in numbers)	(mean)	(mean)
Milking cows	64	63
Heifers	26	32
Calves	18	21
Total	105	117
How would you describe the condition of your buildings and dairy equipment, compared with those of other dairy farmers, at the time you submitted your bid? (Check one box for each)	Buildings Equipment (percent)	Buildings Equipment (percent)
Excellent	17	16
Above average	25	31
Average	42	43
Below average	12	6
Poor	4	3
Did not respond	1	2
At the time you submitted your bid, about how long had <u>you</u> personally operated a dairy farm? (Write in total number of years)	(years) (mean)	(years) (mean)
	22	21
Approximately how old were <u>you</u> when you submitted your bid? (Write in years)	(years) (mean)	(years) (mean)
	49	47
Unsuccessful bidders only: If the USDA instituted a second Dairy Termination Program at some time in the future and you were eligible to participate, how likely would you be to submit a bid to participate? (Check one)	N/A	(percent)
Definitely would bid		47
Probably would bid		22
Just as likely to bid as not		13
Probably would not bid		8
Definitely would not bid		4
Did not respond		5
Unsuccessful bidders only: What price, if any, would you bid if USDA instituted a second Dairy Termination Program in the near future? (Enter dollar amount)	N/A	(mean) \$31.98

(continued)

**Appendix II
Summary of Questionnaire Results**

Question	Successful bidder	Unsuccessful bidder				
Do program bidders currently receive any deficiency or diversion payments in connection with federal crop support programs, but were not receiving such payments at the time of their bid?	(percent) 12	(percent) 16				
In your opinion, how much will the Dairy Termination Program reduce milk production levels in your county at the end of 5 years? (Check one)	(percent)	(percent)				
Will extremely reduce production	4	2				
Will greatly reduce production	6	6				
Will moderately reduce production	21	22				
Will somewhat reduce production	27	26				
Will have little or no effect on production	39	42				
Did not respond	4	3				
In your opinion, how much will feed costs and dairy support prices increase or decrease over the next year? (Check one box for each topic)						
	Feed costs	(percent) Support prices	(percent) Feed costs	Support prices		
Greatly increase	4	1	6	1		
Somewhat increase	27	6	38	7		
Remain about the same	52	33	44	21		
Somewhat decrease	9	41	6	44		
Greatly decrease	1	6	0	16		
Did not respond	7	14	6	11		
In your opinion, how likely or unlikely is it that government policy will shift to dairy production quotas in the next 5 years? (Check one)		(percent)	(percent)			
Very likely		14	17			
Somewhat likely		23	22			
Just as likely as not		29	30			
Somewhat unlikely		15	15			
Very unlikely		11	12			
Did not respond		7	4			
	Successful bidders (percent)					
	Very easy	Somewhat easy	Can't judge	Somewhat hard	Very hard	Did not respond
If you wanted to return to the dairy business after 5 years, how easy or hard would it be for you to recondition and/or acquire each of these items? (Check one box for each item)						
Land	68	8	6	3	7	7
Dairy equipment	33	22	16	11	11	7
Buildings	41	17	11	12	10	9
Animals	16	17	26	17	17	7

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